PREFACE

In Western industrial world, the efficacy of Cognitive Behaviour Therapy (CBT) in treating many psychological disorders is well supported by evidence-based research, and the benefits for consumers and professional bodies governing its practice are well known. While CBT is widely used in Asia, scientific evidence of its effective application in Asian cultures is still relatively limited (Oei 1998).

Several years ago, Oei and Tang established a conference to focus on the advancement of CBT in Asia. The 1st Asian CBT conference was successfully held at The Chinese University of Hong Kong (CUHK) in May 2006, sponsored by the University of Queensland and CUHK. About 400 researchers attended, most coming from Asia (i.e. Hong Kong, People's Republic of China, Malaysia, Thailand, India, Philippines, Japan, Korea, Taiwan, and Indonesia). The theme of the conference was 'Evidence-Based CBT: Assessment, Theory and Practice'. There were 70 papers presented in relation to this theme, with Professors David Barlow, Tom Sensky, and Maurits Kwee delivering keynote speeches.

A difficulty for Asian CBT practitioners is the availability and accessibility of CBT literature with Asian clients, and this edited book is an attempt to help solve this problem. Authors at the conference were asked to submit full copies of their papers, and only papers submitted were included in this book. It is acknowledge that not all papers from the conference were included. The book consists of 25 chapters split into 3 major themes: Chapters 1-8: Current Issues in Theories and Assessment, Chapters 9-14: Current Asian Psychotherapeutic Approaches and Chapters 15-25: Current Research on CBT in Asia.

We understand that the transfer of CBT technology from the Western world can be complex and full of difficulties. It is our hope that this edited book is a small step towards reducing some of these difficulties by having Asian practitioners validate the concepts and technology in Asian environments. Of course, we would hope that in the long run, Asian practitioners of CBT can establish a solid evidence based CBT for use in Asia. The ultimate goal is for mental health patients in Asia to receive scientifically valid and reliable psychotherapy, thus increasing their quality of life.
This project was made possible with the help and participation of many people, and we would like to acknowledge their contributions and thank them sincerely. We hope that readers will find this edited book useful, and that it inspires them to further examine the importance of evidence-based psychotherapy in socioculturally appropriate environments.

Tian Po Oei & Catherine So-Kum Tang

15 August 2008

CURRENT

RESEARCH & PRACTICES

ON

COGNITIVE BEHAVIOUR THERAPY

IN

ASIA

Edited by

Tian P.S. Oei

&

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First published 2008

PRINTED BY PH PRODUCTIONS PET.LTE.
1 Ubi Crescent #06-04, Number One Bldg, Singapore 408563

ISBN:

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SECTION A

Current issues on theories and assessment

CHAPTER 1:
Reliability and Validity of the Modified Japanese version of South Oaks Gambling Screen (SOGS-J).

Moritoshi Kido and Tsuneo Shimazaki

Abstract: The South Oaks Gambling Screen (SOGS) was originally developed to screen out pathological gamblers in clinical settings. Further, the use of the SOGS has been expanded to other settings, including prevalence studies of pathological gambling amongst the general population in English-speaking countries. There are, however, few studies of pathological gambling in Japan except for two studies on the translation of SOGS into Japanese. Reliability and validity of the translated version of the SOGS, however, has yet to be confirmed. The purpose of the present study was to examine the reliability and validity of the modified Japanese version of SOGS (SOGS-J) using two different groups: a university student group (N = 96) and a gambler group (N = 66). We obtained Cronbach's alpha .90 and item-total correlations .46 to .76, indicating that the SOGS-J has sufficient reliability. The t-test and the U-test indicate a significant difference of scores between two groups, which show satisfactory validity of the SOGS-J.

Introduction:

Addiction is a disease in and of itself, characterised by compulsion, loss of control and continued use of drugs or other harmful substances in spite of adverse consequences (Coombs, 1997; Smith & Seymour, 2001). Because of these characteristics, the addiction causes serious problems to an individuals daily life. Schaef (1987) classified addictions into three categories: substance addiction; process addiction and; relationship addiction. The substance addiction is the addiction of drugs, tobaccos and other harmful substances. The process addiction is an addiction to the behavior itself, such as gambling, shopping, sexual behavior, and so on. Relationship addiction refers to an addiction associated with a human relationship and sometimes covers the notion of codependency. Codependency is a technical term that is often used when discussing family therapy. The codependent person is someone trying to connect with the addicted individual to obtain personal strength (Doweiko, 1990).

Pathological gambling is categorised as a process addiction, and the criterion of the diagnosis is provided in the DSM-IV-TR (American Psychiatric Association, 2000). According to the DSM-IV-TR, the essential feature of pathological gambling is persistent and recurrent maladaptive gambling behavior that disrupts personal, family, or vocational pursuits. There have been numerous theories and studies on pathological gambling because there are many factors which have a complicated association with gambling behavior. After these studies, a vast majority of new evidences regarding the nature, etiology, and treatment of pathological gambling have been addressed (Raylu & Oei, 2002). For example,

sociology research has focused on examining the social structures within a gambling environment. Ocean and Smith (1993) examined the relationship between gamblers who regularly engage in gambling, the gambling institution, and the outside society. From a different perspective, biological researchers attribute gambling behavior to physiological conditions, or tendencies and accordingly, examine endorphin, EEG waves, uric acid levels, and brain chemical imbalances (e.g., dopamine, noradrenaline and serotonin). And there have been psychological studies that focus on the mechanism of reinforcement on gambling. For example, there are studies which explore how gambling behaviors are positively reinforced by an intermittent schedule of reinforcement (Anderson & Brown, 1984; Dickerson, 1979), and that negative reinforcement may operate via a reduction of aversive stress, that is, by escaping from problems and engaging in gambling behavior (Blaszczynski & McConaghy, 1989a; Diskin & Hodgins, 1997). Many case studies also exist, as does research focusing on treatment.

Although a large number of studies have been conducted on pathological gambling, what seems to be lacking is a sampling and grouping approach based upon definite criteria. Studies without definite criteria cannot draw comparisons directly between pathological gamblers and non-pathological gamblers. Yet, to conduct empirical studies on pathological gambling, it is important to discriminate between pathological and non-pathological gamblers. To address this issue, Lesieur and Blume (1987) developed the South Oaks Gambling Screen (SOGS).

The SOGS is a 20-item instrument used to screen for pathological gamblers. The SOGS is scored by summing the number of items endorsed from the total of 20 items. An individual scoring 5 or more is considered to be a pathological gambler. Lesieur and Blume (1987) reported that the study of development of the SOGS showed satisfactory reliability and validity. Reliability was estimated by combining Gamblers Anonymous members (N = 213), university students (N = 384), and hospital employees (N = 152) and they found a reliable internal consistency (Cronbach's alpha = .97). One-month test-retest reliability was also confirmed on the SOGS dichotomous classification of pathological gambler and non-pathological gambler with inpatients and outpatients (r = .71, n = 110). Validity was examined by correlating the SOGS with counselor's assessments, family member's assessments and proposed revision of DSM-III-R diagnostic criteria for pathological gambling. As a result, the SOGS was correlated with counselor's assessments (r = .86), family member's assessments (r = .60), and DSM-III-R diagnosis (r = .94).

Although the SOGS has been used for a variety of purposes and populations in English-speaking countries, it has not been studied widely in Japan. Given this situation, the SOGS was translated from English into Japanese by Saito (1996) and Moriyama (1994). Saito (1996) administered the translated version of SOGS to 27 participants diagnosed as pathological gamblers. All participants' SOGS scores were 5 (cut-off criterion of the SOGS) or higher, and they were screened out as pathological gamblers. Based on this result, he concluded that the translated version of SOGS was useful. Moriyama (1994) administered the translated version of SOGS for 109 participants who were diagnosed as alcohol dependent. Ten participants' SOGS scores were 5 or higher, and they were screened out as pathological gamblers. However, there appears at least two problems with both these studies. First, the participants were limited to pathological gamblers or alcoholics. Second, they did not obtain any data from non-pathological gamblers, or a control group. Thus, it is difficult to conclude that the translated version of SOGS has reliability and validity.

The purpose of the present study is to examine the reliability and validity of the modified Japanese version of SOGS (SOGS-J), and to compare data from non-pathological gamblers in Japan with two different groups, a university student group (serving as a

control group) and a gambler group. If we demonstrated that the SOGS-J has reliability and validity, the SOGS-J will be used as definite criterion to screen out pathological gamblers in Japan.

Method

Participants

There were 162 participants from Osaka and Hyogo prefecture in Japan. The participants consisted of university students (N = 96) and gamblers who usually engage in some kind of gambling behaviour (N = 66). A university student group consisted of undergraduates who were recruited from an introductory psychology course. The mean age of the university student group was 19.4, with an age range of 18 to 34 years and there were 32 females and 64 males. A gambler group consisted of people who spend endless hours on *pachinko*, which is a kind of pinball game and is an extremely popular type of gambling in Japan. The mean age of the gambler group was 29.2, with an age range of 18 to 65, and there were 12 females and 54 males.

Measures

The modified Japanese version of SOGS (SOGS-J)

A questionnaire SOGS-J was developed based on the original version of SOGS (Lesieur & Blume, 1987) and the translated version of SOGS (Saito, 1996). There were 18 items in total, with 13 screening items and 5 profile items. The contents of screening items were about gambling behavior (2 items), a feeling of guilt about gambling (2 items), debts of gambling (2 items), hours spent on gambling (1 item), human relationship and gambling (3 items) and motives and impulses to gamble (2 items). The participants were asked to rate on a 5-point Likert scale, in terms of the applicability to one self (0 = not at all applicable to 4 = very much applicable), except for Q18 which about who, or where, the participant borrows money for gambling and was a multiple choice item offering 9 alternatives and 1 point is added per choice of one alternative. The Q14 was about having arguments about money handling with people who the person lives with and was not about money for gambling. Thus, Q14 was not relevant to the SOGS-J score. The total score assigned to the 13 screening items was 53 (maximum score was 4 for 11 screening items and 9 for the item Q18). A score of 15 or more is considered to signify a pathological gambler.

Fact sheet

Another short questionnaire was included with the main items of the SOGS-J and asked participants to describe their demographic details, such as gender, age, employment status. Questions about the frequency of gambling, the amount of money spent for gambling and the age of beginning gambling, were also included in the fact sheet for the gambler group.

Procedure

The survey was administered between 22 November and 13 December 2002. The participants of a university student group were asked to participate in the present survey in class. The researcher explained to the participants about the purpose of this survey and how to respond the questionnaire. Consenting participants completed the survey anonymously at their home. Participants in the gambler group were asked to participate in this survey while waiting for the *pachinko* shop to open on a weekday morning. The researcher explained to

the participants about the purpose of this survey and how to respond the questionnaire. Consenting participants completed the survey anonymously at that instant.

Results

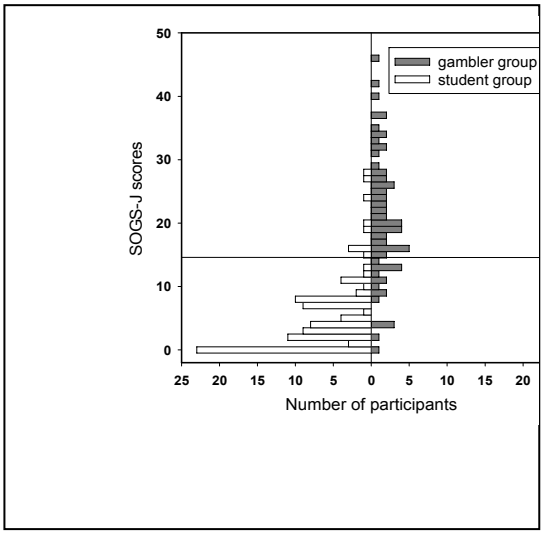
The profile of a gambler group

The data of a gambler group was gathered in front of the *pachinko* shops on a weekday morning. Data derived from the fact sheet given to the gambler group indicated that the mean number days of engaging in gambling were 3.5 days per a week. The mean hours of engaging in gambling were 19.9 hours per week. From these results and the procedure of gathering the data of a gambler group, it may safely be assumed that there were many pathological and probable pathological gamblers in this group.

The difference between two groups

Figure.1 shows the SOGS-J scores and number of participants in each group. Horizontal axis of the figure represents number of participants and vertical axis represents the SOGS-J score. The left panel of the figure represents the distribution of scores amongst the university student group, while the right panel represents the distribution of scores for the gambler group. It can be seen that while the peak of the distribution of a university student group is low, the peak of a gambler group is higher than a university student group. The horizontal line of the figure indicates the cut-off score, or 15 points.

Figure 1. Histogram of SOGS-J score for each groups. Left and right panels indicate numbers of participants for gambler and university student group, respectively. The horizontal line indicates the cut off score, 15 points.



The present setting of a cut-off point of the SOGS-J can be considered as an appropriate one. According to this cut-off criterion, the percentage of the screened out participant as a pathological gambler is 74.2% in a gambler group.

Reliability and validity of the SOGS-J

We examined the reliability and validity of the SOGS with both a university student group and a gambler group. We explored internal consistency, item-total correlations, content validity and criterion-related validity.

The reliability was examined using two indices - Cronbach's alpha and item-total correlations. The Cronbach's alpha was .90, suggesting the SOGS-J to possess good internal consistency and the item-total correlations ranged from .46 to .76. These results clearly indicate that the SOGS-J has sufficient reliability.

To investigate the content validity of the SOGS, we examined the process of the development of the original SOGS. According to this process, the SOGS has been shown to be highly correlated with DSM diagnostic criteria for pathological gambling (Lesieur & Blume, 1987). Thus, the items of the SOGS are based on DSM diagnostic criteria and therefore it is clear that the original SOGS and SOGS-J both have content validity.

The criterion-related validity can be confirmed to assess the difference of the scores of the SOGS-J between two groups, a university student group and a gambler group. To assess the group difference, the Welch's *t*-test yielded a statistically significant difference (t (97.6) = 11.08, $p < .05$). As indicated in Fig.1, the distribution patterns of the two groups were not identical. Thus, the *U*-test was conducted and revealed that there was a significant difference between two groups (U = 581.5, $p < .05$). These results clearly indicate that the SOGS-J has sufficient criterion-related validity.

Discussion

The purposes of the present study are to obtain the data from pathological and non-pathological gamblers in Japan and to examine the reliability and validity of the SOGS-J based on the obtained data. The SOGS-J reliability in this study was measured by Cronbach's alpha and item-total correlations. Cronbach's alpha is .90 and Cronbach's alpha of the SOGS in the development article (Lesieur & Blume, 1987) was .97. According to these results, the SOGS-J has sufficient internal consistency. And item-total correlations of the SOGS-J are distributed ranging from .46 to .76. From these results, it is clearly demonstrated that the SOGS-J has sufficient reliability. The test-retest reliability could not be confirmed in the present study because of the limitation of the sampling field of a gambler group. Strictly speaking, the participants of a gambler group answered the questionnaire anonymously. Accordingly, we could not make contact with the participants again. Therefore, it remains a necessary for future research to examine the test-retest reliability of the SOGS-J. This may be possible by recruiting gambler group participants from a treatment institution for pathological gambling, where it would be possible to administer the same test, to the same sample, on two separate occasions.

With respect to the validity of the SOGS-J, we examined content validity and criterion-related validity. Given the process of development for the SOGS and the high correlation with diagnostic criteria for pathological gambling, it is clear that the SOGS-J has content validity.

In relation to the selection of cut-off points of the SOGS-J, we modified the original yes/no responses to 5-point Likert scales. Thus, there was a maximum score of 53 points and we set a cut-off point 15. Comparing the screened out percentages of a university student group with that of reported in DSM-IV-TR, we can say that the setting of cut-off point of the SOGS-J is appropriate. When considering the influence that modifications in response scale and cut-off points may have on false positive and false negative classifications, it is important to discriminate between the false positive and false

negative rate in the treatment situation. Thus, it is necessary to examine the correspondence between the score of the SOGS-J and the actual diagnosis in future research. While literature on the impact of these types of modification does exist, it would be useful to obtain detailed data from pathological gamblers and non-pathological gamblers in Japan.

From these results, the following two points have been confirmed. First, the SOGS-J has sufficient internal consistency and reliability. Second, the SOGS-J demonstrated satisfactory validity to differentiate the university student group from the gambler group. The SOGS-J as a whole can be used in Japan to screen out pathological gamblers from the target population. Finally, we hope this test provides the basis for ongoing empirical research into pathological gambling in Japan.

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CHAPTER 2:
Developing a New Response Styles Scale (RSS)

Naomi Shimazu, Fusako Koshikawa and Ikuyo Kondo

Abstract: The Response Styles Theory of depression (Nolen-Hoeksema, 1987) hypothesises that people who engage in ruminative responses to depression will show longer depression than people who take action to distract themselves from their symptoms. The Response Styles Questionnaire is widely used to measure the response styles, but resent studies have pointed out the necessity to reconsider the questionnaires validity and factor structure (Treynor, Gonzalez, & Nolen-Hoeksema, 2003; Ito, Takenaka, & Agari, 2002). The purpose of this study was to develop a new Response Styles Scale (RSS). The hypothesis of this study was that both rumination and distraction have two factors: one factor that exacerbates and prolongs depression and another factor that reduces depression. The factor structure of RSS was examined via exploratory factor analysis and confirmatory factor analysis. Exploratory factor analysis revealed a four factor solution. The four factors were labeled negative rumination response, distraction response for avoidance, rumination response for problem solving, and distraction response for mood changing. Each factor consisted of seven items, thus twenty eight items were represented in a total RSS. The RSS showed high internal reliability, with Cronbach's alpha ranging from 0.82 to 0.89. Confirmatory factor analysis supported a four factor model compared to the two factor model. It indicates that RSS is four factor solution comprised of two rumination factors and two distraction factors. The concurrent validity with the Self-Preoccupation Scale and Problem-Focused Coping Scale was adequate. These results show that the RSS, as a standardised questionnaire to measure response styles of depression, has sufficient reliability and validity.

Introduction

Response Styles Theory of depression (Nolen-Hoeksema, 1987) hypothesise that people who engage in ruminative responses to depression will show longer depression than people who take action to distract themselves from their symptoms. This hypothesis was derived from observation that woman are twice more likely to become depressed than men, and its difference can be explained by the ways to respond to depressive mood which are rumination and distraction (Nolen-Hoeksema, 1987). Nolen-Hoeksema has pointed out that men are more likely to engage in distracting behaviors that diminish their depressed mood, while women are more likely to engage in ruminative behaviors that amplify their moods.

The Response Styles Questionnaire (RSQ; Nolen-Hoeksema & Morrow, 1991) is a widely used self-report instrument for measuring the response styles. The RSQ contains seventy one items measuring four subscales, which are Ruminative, Distracting, Problem-solving, and Dangerous activities. However, in this study, Nolen-Hoeksema and Morrow failed to use the Problem-solving and Dangerous activities scale in the final analysis because of unacceptably low internal consistencies (.68 and .44, respectively). Other subsequent studies have also dropped these two scales and only use ruminative and

distracting scales (e.g., Nolen-Hoeksema & Morrow, 1993; Schwartz & Koenig, 1996). Thus, Ito, Takenaka, and Agari (2002) pointed out the necessity to reconsider the validity and the factor analysis of the RSQ. A recent study by Nolen-Hoeksema herself (Treyor, Gonzalez, & Nolen-Hoeksema, 2003) has reconsidered the items of the RSQ, and the result of the exploratory factor analysis of its scale supported a two factor solution for rumination, which were reflection and brooding. Treynor et al. (2003) stated that the items on the reflection factor suggest a purposeful turning inward to engage in cognitive problem solving to alleviate one's symptoms, and the items on the brooding factor reflect a passive comparison of one's current situation with some unachieved standard, and suggested the need to differentiate these two components in rumination research. Nagura and Hashimoto (1999) also raised the question of the rumination factor of RSQ, and in their study an exploratory factor analysis revealed two components for rumination. As with distraction, it is said to reduce depression, but by distracting from a problem, one may recede from facing the problem and it may lead to postponement of the problem solving and the depression may exacerbate and prolong (Wells & Matthews, 1994). According to Oikawa (2002), distraction can be an effective strategy for reducing a depressed mood, on the other hand it can also produce a reverse effect, and dependence on distraction can become a problem.

Therefore, in the present study, we predicted that both rumination and distraction have two factors: one factor that exacerbates and prolongs depression and another factor that reduces depression. Rumination is said to exacerbate and prolong depression, but by ruminating, one may solve their problem and the depression may reduce. Likewise, distraction is said to reduce depression, but by distracting, one may defer facing and solving the problem so that the situation may get worse and deteriorate depression.

In spite of what has been said about the factor structures of the response styles, no scale has yet been developed to measure both exacerbating and prolonging aspects of ruminative and distracting responses (e.g., Ito et al., 2002; Treynor et al., 2003). To observe depression from both exacerbating and reducing aspects, developing a new scale which could measure both aspects are necessary.

Hence, the purpose of this study was to develop a new Response Styles Scale which measures both exacerbating and prolonging aspects of ruminative and distracting responses, and to examine the factor structure of RSS by exploratory factor analysis and confirmatory factor analysis, and to examine its reliability and validity.

Method

Participants

The sample consisted of 302 Japanese undergraduate and graduate students (183 females, 119 males) recruited in classes. The mean age of the participants was 21.9 years (SD = 6.53).

Materials

Basic demographic information, including participants' gender and age were collected for the purposes of sample description and supplementary analysis.

Items used to develop a new RSS:. Items were partly selected from existing measures which we assumed that have relevance to ruminative, distracting response. Five items from the Negative Rumination Scale (Ito & Agari, 2001), two items from the Japanese version of RSQ (Sakamoto, 1997), and one item from Tri-Axial Coping Scale (Kamimura, Ebihara, Sato, Togasaki, & Sakano, 1995) were used to measure rumination.

For distraction, we only used one item from the Stress Coping Scale (Sakata, 1989). We have added nineteen more items which we contrived originally, eight items for each of the four factors, producing the total of thirty two items used in this study.

Self- Preoccupation Scale (SPS; Sakamoto, 1997): The SPS is an eleven item questionnaire designed to measure the degree and duration of self-focusing. Self-focus has been thought to be an important factor in the development and maintenance of depression. This scale shows good test-retest reliability (r=0.87 over a three week test-retest interval). Thus the SPS was used to assess the concurrent validity of the new RSS.

Problem-Focused Coping Scale (PFCS; Kodama, Katayanagi, Shimada, & Sakano, 1994): The PFCS is a thirteen item questionnaire designed to measure the tendency of using the problem-focused coping strategies. It is a revised version of the Ways of Coping Check Lists (Folkman & Lazarus, 1980). The scale shows fair reliability examining Cronbach's alpha (r=0.89). The Problem-Focused Coping Scale was also used to assess the concurrent validity of the new RSS.

Procedure

Scale design and development

The instructions of the RSS stated, "Please read each of the items below and indicate whether you never, sometimes, often or always think or do when you feel down, sad or depressed. Please indicate what you generally do, not what you think you should do" by referring to the instructions used in the RSQ. The response format entailed a four-point Likert-type scale.

Scale evaluation

Participants filled out the thirty two items. Reliability and validity of the RSS were evaluated through examination of the factor structure by using exploratory factor analysis and confirmatory factor analysis as well as through examination of the correlation coefficient between the RSS and the Self-Preoccupation Scale and Problem-Focused Coping Scale.

Results

Exploratory Factor analysis

The factorial structure of the RSS was investigated with an exploratory factor analysis using principal axis factoring and promax rotation. A scree plot of the eigenvalues suggested four factors. Twenty eight items were included in these four factors, and each factor consisted of seven items. The loading of the items included was 0.39 or higher. Together, these factors accounted for a total of 57.94% of the variance in item responses (Factor 1=18.20%, Factor 2=16.45%, Factor 3=15.21%, Factor 4=8.09%). The four factors that emerged were labeled Negative rumination response, Distraction response for avoidance, Rumination response for problem solving, and Distraction response for mood changing. Table 1 presents the factor loading of each item after promax rotation.

Table 1
Items and factor loadings for RSS

Factor and Item		Loading			
		I	II	III	IV
I	**Negative rumination response (α=.88)**				
16	I often continue thinking about unpleasant things.	**0.87**	-0.03	0.01	-0.03
1	Once I have started to think about unpleasant things, I tend to keep doing it.	**0.84**	-0.04	-0.15	0.05
24	Sometimes I keep thinking of unpleasant things throughtout the day.	**0.84**	0.02	-0.05	-0.03
25	Sometimes I continue to think of unpleasant things for many days.	**0.81**	0.08	0.00	-0.03
5	I tend to think over the same unpleasant things.	**0.81**	0.00	-0.03	0.04
12	I think of all my weakpoints, failures, errors and mistakes.	**0.50**	0.02	0.29	0.02
9	I think of my fatigue and sufferings.	**0.39**	-0.02	0.10	0.10
II	**Distraction response for avoidance (α=.89)**				
20	As much as possible I don't face the problem .	0.00	**0.80**	-0.07	-0.02
18	I make every effort to avoid disagreeable things.	0.00	**0.75**	-0.03	-0.02
26	I pay less attention to bad things.	-0.02	**0.75**	0.10	0.03
8	I try not to see the uncomfortable situation.	0.02	**0.74**	-0.01	-0.02
32	I avoid unpleasant situations.	0.06	**0.73**	0.02	0.03
3	I keep away from problems.	-0.01	**0.71**	0.04	-0.03
6	I keep my mind off of the problem.	-0.04	**0.64**	-0.01	0.13
III	**Rumination response for problem solving (α=.85)**				
11	I consider the cause and think of what to do next.	-0.02	0.08	**0.90**	-0.12
17	I try to find the cause to solve the problem.	0.09	-0.04	**0.73**	0.02
10	I think about what to do in case the same things happen again.	-0.09	0.09	**0.73**	-0.10
31	I try to remember and get hold of the situation to solve the problems.	0.22	-0.04	**0.69**	-0.01
2	I consider the situation so the same things won't happen.	-0.05	0.05	**0.63**	-0.07
15	I think of what I can do in this condition.	-0.10	-0.16	**0.55**	0.17
19	I think of what I can learn from this experience.	-0.03	-0.04	**0.48**	0.25
IV	**Distraction response for mood changing (α=.82)**				
22	I do what I like for the time being.	-0.03	0.10	-0.09	**0.79**
13	I do something that makes my mood good for a while.	-0.01	-0.02	0.12	**0.72**
14	I tentatively do something that helps my feelings to calm down.	0.04	-0.10	0.06	**0.68**
7	I tentatively go outside and do something fun to change my mood.	0.02	-0.04	-0.17	**0.62**
21	I take a rest for a while.	-0.10	0.07	0.05	**0.60**
4	I do something pleasant for the time being.	0.04	0.13	-0.04	**0.52**
30	I watch TV or listen to music to change my mood.	0.14	-0.02	0.01	**0.51**

Intercorrelations of factors	I	II	III	IV
I	1			
II	0.06	1		
III	0.10	-0.21 ***	1	
IV	-0.07	0.23 ***	0.19 **	1

**p< .01, ***p<0.001

Examples of the items loading highly on the Negative rumination response factor include: “I often continue thinking about unpleasant things” (0.87) and “Once I have started to think about unpleasant things, I tend to keep doing it” (0.84). The Distraction response for avoidance factor included items such as: “As much as possible I don’t face the problem” (0.80) and “I make every effort to avoid disagreeable things” (0.75). Rumination response for problem solving factor included items such as: “I consider the cause and think of what to do next” (0.90) and “I try to find the cause to solve the problem” (0.73). The last factor, Distraction response for mood changing, consisted of items such as: “I do what I like for the time being” (0.79) and “I do something that makes my mood good for a while” (0.72).

Internal consistency

Estimates of the internal consistency of the RSS and its subscales were made by Cronbach’s alpha, and are presented also in Table 1. Cronbach’s alpha for the subscales

were adequate (0.88, 0.89, 0.85 and 0.82 for Factors 1-4, respectively). These results suggest the RSS has high internal consistency and reliability.

Confirmatory factor analysis

In this study, two factor model (rumination and distraction; see Figure 1) and four factor model (Negative rumination response, Distraction response for avoidance, Rumination response for problem solving, and Distraction response for mood changing; see Figure 2) were compared by confirmatory factor analysis and the goodness-of-fit index of the models were examined. To test the hypothesis, Structural Equation Modeling (SEM) with the Analysis of Moment Structures (Amos, Version 4.0; Arbuckle, 1997) was used. As shown on Table 2, confirmatory factor analysis supported the four factor model (GFI = 0.853, AGFI = 0.826, CFI = 0.903, RMSEA = 0.061, AIC = 852.96) in contrast with the two factor model (GFI = 0.549, AGFI = 0.475, CFI = 0.565, RMSEA = 0.128, AIC = 2181.056). It indicates that RSS is a four factor solution comprised of two rumination factors and two distraction factors.

Table 2
The goodness of fit index of the models by confirmatory analysis

	Two factor model	Four factor model
GFI	0.549	0.853
AGFI	0.475	0.826
CFI	0.565	0.903
RMSEA	0.128	0.061
AIC	2181.056	852.96

Concurrent validity

The concurrent validity of the scale was further evaluated through the examination of correlations between the Self-Preoccupation Scale and Problem-Focused Coping Scale. The results are shown on Table 3. The first factor of the RSS, Negative rumination response and Self-Preoccupation Scale showed positive and moderate correlation (r=0.65). The second factor, Distraction response for avoidance negatively correlated with the Problem-Focused Coping Scale (r=-0.28). The third factor, Rumination response for problem solving correlated positively and moderately with the Problem-Focused Coping Scale (r=0.64). The last factor, Distraction response for mood changing was positively correlated with the Problem-Focused Coping Scale (r=0.24).

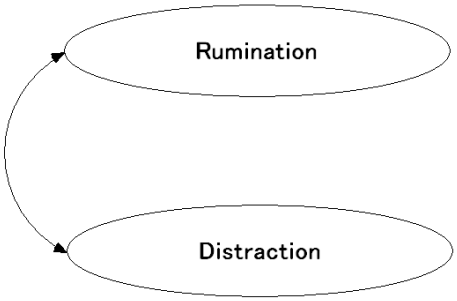

Figure 1
The two factor model

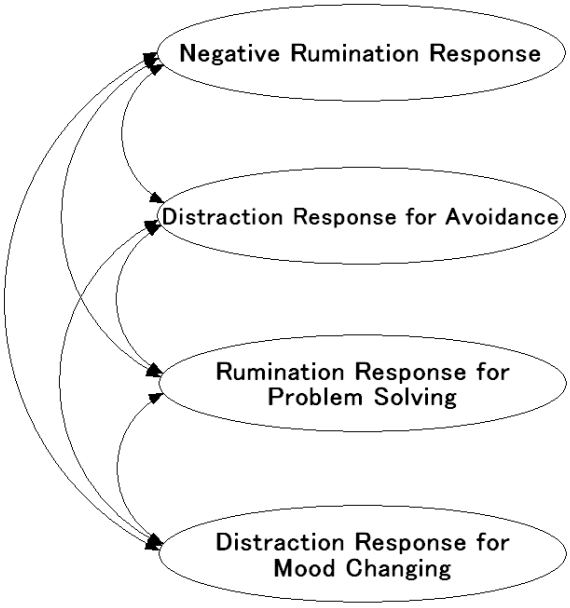

Figure 2
The four factor model

Table 3
Correlations between the RSS and other measures

Measures	SPS	PFCS
NRR	**0.65****	**-0.14***
RRPS	**0.02**	**0.64****
DRA	**0.13***	**-0.28****
DRMC	**-0.01**	**-0.24****

**P<.05, **p<.01, ***p<.001*
Note. NRR = Negative rumination response
RRPS = Rumination response for problem solving
DRA = Distraction response for avoidance
DRMC = Distraction response for mood changing
SPS = Self-Preoccupation Scale
PFCS = Problem-Focused Coping Scale

Discussion

The purpose of this study was to develop a new Response Styles Scale (RSS). The hypothesis of this study was that both rumination and distraction have two factors; one factor that exacerbates and prolongs depression and another factor that reduces depression. The factor structure of RSS was first examined by exploratory factor analysis and revealed a four factor solution. The four factors were labeled Negative rumination response, Distraction response for avoidance, Rumination response for problem solving, and Distraction response for mood changing. Each factor consisted of seven items, twenty eight items as a total RSS. The RSS showed high internal reliability, with Cronbach's alpha ranging from 0.82 to 0.89. Then, by confirmatory factor analysis, the four factor model was supported compared to two factor model by examining the goodness of fit index. These results indicate that RSS is a four factor solution comprised of two rumination factors and two distraction factors. The concurrent validity with the Self-Preoccupation Scale and Problem-Focused Coping Scales was adequate. These results show that the RSS, as a standardised questionnaire to measure response styles of depression, has sufficient reliability and validity.

Consequently, this research indicated the possibility of measuring both exacerbating and prolonging aspects of ruminative and distracting responses with a single scale, the Response Styles Scale. In the same way as the other research has pointed out (e.g., Nagura & Hashimoto, 1999; Ito et al, 2002; Treynor et al, 2003; Wells & Matthews, 1994), the result from this study indicates the necessity to evaluate rumination and distraction in more detail (i.e., Negative rumination response factor, Distraction response for avoidance factor, Rumination response for problem solving, and Distraction response for mood changing). Moreover, this scale may be beneficial in dealing with ones' tendency to become more/less depressed by clarifying the response styles one regularly use.

The findings of this study need to be discussed in light of several limitations. The first of these limitations is that this research employed a student sample, as opposed to a sample of clinically depressed individuals. Therefore, one suggestion for future research is that it examines the factor structure. reliability and validity of the RSS in clinical sample and compares these results with the findings of this study. The second limitation is its cross-sectional design. It would be beneficial in future research to examine how response styles relate to depression by adopting longitudinal design.

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CHAPTER 3:
Attentional Control with Social Anxiety

Jun Moriya and Yoshihiko Tanno

Abstract: Aims and objectives: It is well-established that social anxiety is associated with selective attention to social threat stimuli. However, it is still unclear why socially anxious people direct attention to threat stimuli. Recent researches suggest that attentional control regulates the attentional bias. **Hypothesis:** We hypothesised that in social anxiety, the selective attention to threat may be based on the dysfunction of attentional control. That is, the degree of social anxiety may be associated with dysfunction of attentional control. **Method:** This study examined the relationship between social anxiety and attentional control using questionnaires. To assess attentional control, we focused on Effortful Control scale. Social anxiety was assessed with Social Phobia Scale. Questionnaires measuring social anxiety and effortful control were administered to 77 undergraduate students. **Results:** A significant negative correlation was obtained between social anxiety and effortful control scale. Attentional control, (a subscale of the effortful control scale), was negatively correlated with social anxiety. This correlation was significant even when other effortful control subscales were adjusted for. **Conclusion:** These results provided evidence that social anxiety was associated with impaired attentional control. In social anxiety, the dysfunction of attentional control may affect the selective attention to threat stimuli.

Introduction

Socially anxious people feel anxious in social situations, for example, when making a speech, or when interacting with friends (APA, 2000). In situations where a large number of people are angry with a person, it is hardly surprising that the person will get anxious. However, it is unlikely that all the people involved in the situation will be angry with the person, making it is possible for the person to attend to other neutral faces. But if the person only attends to the angry, threatening, and negative faces, and cannot direct his/her attention away from these faces, the person may feel very anxious. We assume that this attentional mechanism applies to socially anxious people. In other words, such people may have the tendency to more frequently attend to threatening stimuli.

Previous research has suggested that selective attention to socially threatening stimuli is associated with social anxiety. Socially anxious people become aware of negative faces in a crowd of other neutral or happy faces rapidly (Eastwood et al., 2005; Gilboa-Schechtman, Foa, & Amir, 1999). When neutral and threat stimuli are presented simultaneously, socially anxious people attend to the threat stimuli (Bögels & Mansell, 2004; Mogg & Bradley, 2002; Mogg, Philippot, & Bradley, 2004), and they do not disengage their attention from the threat (Amir, Elias, Klumpp, & Przeworski, 2003; Moriya & Tanno, 2007). Trait anxious people, including socially anxious people, also attend to threatening stimuli (Bradley, Mogg, Falla, & Hamilton, 1998; Mogg et al., 2000), and they do not disengage their attention from the stimuli (Fox, Russo, Bowles, & Dutton, 2001; Fox, Russo, Dutton, 2002; Georgiou et al., 2005; Koster, Crombez, Verschuere, & de

Houwer, 2004; Yiend & Mathews, 2001). Given that attention accelerates visual information processing (Carrasco & McElree, 2001), socially anxious people may actively process threatening faces.

MacLeod, Rutherford, Campbell, Ebsworthy, and Hoker (2002) showed that attention to threatening stimuli made people anxious. In their study, some participants were required to involuntarily attend to threatening words, and others were required to involuntarily attend to neutral words. All the participants were exposed to a stressful situation in which they were videotaped while attempting to complete different anagrams; following this, they received failure feedback. Participants who attended to the threatening stimuli fell into a more dysphoric mood than the other participants who did not attend to the threatening stimuli (for a review, see Kindt & van den Hout, 2001).

Attention also affects emotional expression processing (Holmes, Kiss, & Eimer, 2006), and excessive responses to emotional expression are associated with social anxiety (Clark & McManus, 2002). When emotional stimuli are adequately attended to, they activate brain regions, particularly the amygdala (Pessoa, 2005; Pessoa, McKenna, Guiterrez, & Ungerleider, 2002). The amygdala has consistently been associated with emotional processing (Dolan, 2002; Phillips, Drevets, Rauch, & Lane, 2003). Increased activation in the amygdala is strongly associated with social anxiety. When socially anxious people attend to threatening faces, they exhibit a significant increase in the amygdala activity (Killgoe & Yurgelun-Todd, 2005; Stein, Goldin, Sacreen, Zorrilla, & Brown, 2002). Amygdala activity in response to threat can be specifically linked to the severity of the social anxiety symptoms (Phan, Fitzgerald, Nathan, & Trancer, 2006). Thus, even if the anxiety in socially anxious people is eliminated by treating them in a certain way, attention to threat stimuli may make them anxious again.

Why do socially anxious people attend to threatening stimuli so frequently? We suppose that because of the dysfunction of attentional control, socially anxious people are unable to voluntarily shift their attention away from threatening stimuli. Attentional control is similar to executive attention or executive function (Raz & Buhle, 2006). Executive attention involves the top-down control of attention and is used in conflict resolution and for monitoring and controlling of information processing (Fernandez-Duque, Baird, & Posner, 2000; Raz & Buhle, 2006; Rueda, Posner, & Rothbart, 2004). Executive attention is commonly measured using tasks in which there is an incompatibility between the stimulus and the response, for example, Stroop tasks, flanker tasks, and Simon tasks (Eriksen & Eriksen, 1974; Simon, 1969; Stroop, 1935). When performing such tasks, people who have disability of executive attention are unable to resolve the conflict between the stimuli and the responses. We suppose that socially anxious people have little ability to exert attentional control, and thus, cannot control their attention. It has been widely reported that threatening stimuli attract visual attentive processing (Williams, Watts, MacLeod, & Mathews, 1997); therefore, people direct attention to threatening stimuli. Socially anxious people cannot direct attention away from the stimuli because of their dysfunctional attentional control, and consequently, cannot disengage their attention from the stimuli.

In the present study, to measure executive attention, we used the Effortful Control Scale (Rothbart, Ahadi, & Evans, 2000; Rothbart, Ahadi, Hershey, & Fisher, 2001). Effortful control is often related to executive attention; in fact, they are almost the same concept (Posner & Rothbart, 2000; Posner et al., 2003). Effortful control reflects the efficacy with which executive attention operates in naturalistic settings (Rueda et al., 2004). In fact, in the Effortful Control Scale, executive attention has been related to individual differences (González, Fuentes, Carranza, & Estéves, 2001; Rothbart, Ellis, Rueda, & Posner, 2003; Yamagata, Takahashi, Shigemasu, Ono, & Kijima, 2005). In the laboratory

conditions, Yamagata et al. (2005) investigated the relationship between the Effortful Control Scale and the Stroop task. The result provided evidence suggesting that scores on the effortful control questionnaire were negatively correlated with scores on the Stroop task.

Effortful control has three subscales (Rothbart et al., 2000; Yamagata et al., 2005). The first scale is inhibitory control, which refers to the capacity to suppress inappropriate approach behavior. The second scale, active attention, refers to the capacity to perform an action when there is a strong tendency to avoid it. Finally, the third scale, attentional control, refers to the capacity to focus, or shift attention, as desired.

In the present study, based on our assumption that socially anxious people have little ability to exert executive attention, our hypothesis was that social anxiety was negatively correlated with effortful control. In particular, social anxiety may be negatively associated with attentional control in the Effortful Control Scale.

Method

Participants

Participants were 77 (51 males and 26 females) undergraduate students at the University of Tokyo. Their average age was 19.2 years (*SD* = 1.17).

Measures

Social anxiety was measured by the Social Phobia Scale (SPS; Mattick & Clarke, 1998). In the present study, the Japanese version of the SPS was used (Kanai et al., 2004). The scale comprises the same 20 items as those included in the original SPS, and uses a 5-point Likert scale to assess fear of being scrutinised during performance in the presence of others. This Japanese version has high internal consistency (Cronbach's alpha was .91). The scores of SPS in social phobia were significantly higher than those of undergraduate students (Kanai et al., 2004).

Effortful control was measured by the Japanese version of the Effortful Control Scale (EC; Yamagata et al., 2005), included in the Adult Temperament Questionnaire (Rothbart et al., 2000). The scale comprises 35 items and has three subscales: inhibitory control (11 items), activation control (12 items), and attentional control (12 items). The items were answered on a 7-point Likert scale. The EC, inhibitory control, activation control, and attentional control have high internal consistency (Cronbach's alpha for the four scales was .90, .74, .83, and .84, respectively) as well as test-retest reliability, which was measured with a 2-week interval (r = .88, .79, .89, and .81, respectively). Attentional control also has four subscales: attentional switching from punishment (3 items), attentional switching from reward (3 items), concentration (3 items), and attentional switching (3 items).

Results

Correlations between all the subscales are presented in Table 1. SPS had a significant negative correlation with EC. Social anxiety was also negatively correlated with the effortful control subscales: attentional control.

Table 1
Correlations Between the Social Anxiety, Effortful Control, and Effortful Control Subscales

	EC	IC	AcC	AtC
SPS	–.32**	–.11	–.20	–.41**
EC	_	.73***	.81***	.84***
IC		_	.38**	.53***
AcC			_	.48***
AtC				_

Note. IC, AcC, and AtC are subscales of the EC. SPS = Social Phobia Scale; EC = Effortful Control Scale; IC = Inhibitory Control; AcC = Activation Control; AtC = Attentional Control. **$p < .01$, ***$p < .001$.

Correlations among subscales of EC were significant. These correlations might affect the negative association between SPS and attentional control. To examine the unique relationship between SPS and attentional control, we measured the partial correlation between them and removed the effects of EC and the other subscales. The partial correlation between SPS and attentional control, after adjusting for EC, inhibitory control, and activation control, was significant (adjusted for EC: $r = –.33$, $p < .01$; inhibitory control: $r = –.44$, $p < .01$; activation control: $r = –.39$, $p < .01$). In contrast, the partial correlation between SPS and EC, after adjusting for attentional control, was not significant ($r = –.11$, *ns*).

The correlation between SPS and the four subscales of attentional control are presented in Table 2. SPS had a significant negative correlation with all subscales of attentional control: attentional switching from punishment; attentional switching from reward; attentional switching and; concentration.

Table 2 Correlations Between the Social Anxiety and Attentional Control Subscales

	ASP	ASR	C	AS
SPS	–.28*	–.26*	–.29*	–.27*
ASP	_	.32**	.29*	.44**
ASR		_	.45**	.14
C			_	.40**
AS				_

Note. SPS = Social Phobia Scale; ASP = Attentional Switching from Punishment; ASR = Attentional Switching from Reward; C = Concentration; AS = Attentional Switching. *$p < .05$, **$p < .01$.

Discussion

Social anxiety was negatively correlated with effortful control, particularly with attentional control. The relationship between social anxiety and attentional control was not affected by other subscales of EC. EC reflects the attentional control in naturalistic settings, whereas the visual experiments, which are used by personal computers, measure temporal attentional control on account of the short presentation time of the stimuli. The result

suggests the possibility that socially anxious people are unable to control their attention not only in the laboratory settings but also in naturalistic social situations.

In the previous studies on social anxiety, researchers investigated the relationship between attentional control and selective attention to emotional stimuli, and not to non-emotional stimuli. In EC, attentional control is not associated with emotional processing. The results suggest that it is possible that the selective attention of social anxiety is not only associated with emotional threat stimuli but also neutral, non-emotional stimuli. Thus, it is necessary to investigate selective attention to non-emotional stimuli in order to reveal the nature of selective attention in social anxiety. Compton (2000) and Compton, Wirtz, Pajoumand, Claus, and Heller (2004) revealed that an impairment in the ability to disengage attention from normal stimuli was positively correlated with negative affect and negatively correlated with positive affect. Dysfunction of attentional control with regard to normal stimuli may also be related to social anxiety.

Rueda et al. (2004) proposed that the score of effortful control was associated with the activities of the anterior attentional system, which consists of dorsal anterior cingulate cortex (dACC) and lateral prefrontal cortex (PFC). Some studies showed that effortful control was associated with the dACC (Fan, McCandliss, Fossella, Flombaum, & Poner, 2005; Raz & Buhle, 2006). Therefore, low effortful control in social anxiety might be related with the reduced activation of the dACC. In fact, when socially anxious people attend to threatening stimuli or anticipate anxious situations, there is less activity in the dACC (Lorberbaum et al., 2004).

To provide socially anxious people with the ability to exert attentional control, it is necessary to develop executive attention. During childhood, education for the development of executive attention is very useful and it improves children's ability for executive attention (Posner & Rothbart, 2005; Rueda, Rothbart, McCandliss, Saccomanno, & Posner, 2005). It should elucidate whether the progress of effortful control is useful in reducing negative emotions.

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CHAPTER 4:
Highly schizotypal students have a weaker sense of self-agency

Tomohisa Asai and Yoshihiko Tanno

Abstract: Aims and Objectives- The objective of the present study was to investigate the relationship between schizotypy and the sense of self-agency. Schizotypy can be seen as an indicator of a predisposition to schizophrenia. **Hypothesis-** It is possible that schizotypal people have an abnormal self-consciousness, especially with regard to the sense of self-agency. **Method-** Students were rated with the Schizotypy Traits Questionnaire (STA). They were asked to press a button, which generated a tone after some delay. They were then required to judge whether they felt they or someone else had generated the tone. **Results-** The results showed that the high schizotypy group had a weaker sense of self-agency than the low schizotypy group. **Conclusion-** This study used an experimental method to show that schizotypal traits are correlated with an abnormal sense of self-agency.

Keywords: schizotypy, sense of self-agency, schizophrenia,

Introduction

Schizophrenic patients are impaired in perceptual as well as cognitive functions. In the past dozen years, several theoretical models of schizophrenic symptoms have been proposed, often inspired by advances in cognitive neuroscience. It was recently suggested that these models of schizophrenia may also apply to schizotypal traits. Schizotypal people may be seen as indicating a predisposition to schizophrenia (Cyhlarova & Claridge, 2005). Schizophrenic traits probably exist on a continuum. Relatives of schizophrenic patients score significantly higher on measures of schizotypal personality, which suggests that within the spectrum of schizophrenic disorders there is a range in which schizotypal traits may be expressed and that this range is at least partly genetic (Kremen, Faraone, Toomey, Seidman, & Tsuang, 1998; Plated & Gallup Jr., 2002).

It has been suggested that people with schizophrenia have an abnormal self-consciousness or self-awareness; people with schizotypal traits might also have an abnormal self-consciousness. One study showed that schizophrenia spectrum disorder in a nonclinical population might involve self-face recognition (Plated & Gallup Jr., 2002). Another examined the relationship between schizotypal personality traits and deception, which are correlated with a theory of mind and self-awareness (Barnacz & Johnson, 2004). Although these studies suggested that schizotypal traits are correlated with an abnormal self-consciousness, they did not focus on self-consciousness directly.

It has been proposed that self-consciousness can be divided into two important aspects: the “minimal self,” a self devoid of temporal extension, and the “narrative self,” which involves personal identity and continuity across time (Gallagher, 2000). The minimal self includes the sense of self-agency, i.e., that “I am the one who is causing my own

action" and the sense of self-ownership, i.e., that "I am the one who is undergoing an experience." In the normal experience of voluntary or willed action, the senses of self-agency and self-ownership coincide and are indistinguishable. In the case of involuntary action, however, it is quite possible to distinguish between the senses of agency and ownership.

The abnormal self-consciousness that is correlated with schizophrenia and schizotypal personality traits appear to involve problems with the sense of self-agency. Phenomena such as delusions of control, auditory hallucinations, and thought insertion experienced by patients with schizophrenia may be caused by an abnormal sense of self-agency (Sato & Yasuda, 2005). Two studies reported that when required to make judgments about the origin of an action while being presented biased feedback, patients with schizophrenia tended to feel that they had reached the origin more than did normal controls (Daprati et al., 1997; Franck et al., 2001).

The relationship between schizotypal personality traits and the sense of self-agency has not been examined previously, although highly schizotypal people are likely to have an abnormal sense of self-agency. This study examined the relationship between schizotypal personality traits and the sense of self-agency, using the paradigm of a previous study (Sato & Yasuda, 2005).

Method

Participants

Two hundred and twenty-four students (age range: 18–27; mean = 19.8) including 128 men and 96 women were rated using the Schizotypal Traits Questionnaire (STA; Claridge & Broks, 1984; Gregory, Claridge, Clark, & Taylor, 2003) and a brief version of the Fear of Negative Evaluation Scale (FNEB; Leary, 1983; Watoson & Friend, 1969), which essentially served as a negative control. The STA is a 37-item, true-false, self-report questionnaire based on the DSM-III diagnostic criteria for schizotypal personality disorder. It measures schizotypal traits, especially perceptual aberration, which are analogous to positive symptoms including auditory hallucinations, thought insertion, and delusions of control. FNE is a widely used measure that assesses various dimensions of social-evaluative anxiety and its validity is well established. An FNEB is available that contains 12-items from the original 30-item scale, with responses based on a 5-point Likert metric rather than the original true-false format.

Ten students from the top 25% (the high schizotypy group) and eight students from the bottom 25% (the low schizotypy group) participated in the experiment. We sent an e-mail that simply explained the experimental procedures; subjects applied of their own will. All were right-handed. None had a history of mental disease or hearing difficulties, nor did they report any hearing problems at the time of the experiments. We obtained informed, written consent from all of the participants before the experiments were undertaken. The experiments were conducted in a silent and dark room. The auditory stimuli were created and the experiments conducted using MATLAB (Mathworks, Natick, MA, USA) and Psychophysics Toolbox (Brainard, 1997; Pelli, 1997).

Design and Procedure

The participants made self-paced key presses with their right index finger and a 1000-Hz tone was generated on a personal computer and presented through headphones for

200 ms after a temporal delay of 0, 15, 30, 45, 60, 75, 90, 105, 120, or 135 ms (Sato & Yasuda, 2005).

In the sense of self-agency block, the subjects were required to judge whether they felt that they had originated the tone. In the perception of temporal delay block, they were asked to judge whether there was a temporal delay. Instructions were given as follows:

"There are two cases. In one case you might hear the tone as a result of your key pressing, but in another case the experimenter (PC) might have made the tone. All you have to do is to judge whether the tone you heard on the headphone exactly corresponded to that which you have made with your finger without regard for its causative agent (perception of the bias task), or whether you were the one who made the tone you heard on the headphone without regard for its correspondence to what you did (the sense of self-agency task)." The participants completed 60 trials per block. Both blocks were counterbalanced and the ten temporal delay stimuli were presented in random order. None of the subjects became ill during the experiments.

The design had two within-participants factors: type of judgmental block (the sense of self-agency and the perception of delay blocks), and temporal delay (0-, 15-, 30-, 45-, 60-, 75-, 90-, 105-, 120-, or 135-ms delays from the timing predicted) in each high and low schizotypy group.

To control for the increase in Type I error in repeated measurements, the degrees of freedom were adjusted using the Greenhouse-Geisser coefficient when appropriate. The protocol of the present study was approved by the local ethics committee.

Results

STA scores ranged from 0 to 31 with a mean of 13.2±6.6, and FNEB scores ranged from 12 to 60 with a mean of 42.8±9.8, across the entire sample. The two scores were significantly correlated ($r = .35$, $p < .05$). The high schizotypy group (ages 18–22; mean = 19.8; five men and five women) had a mean STA score of 21.7±3.3 (18–28) and a mean FNEB score of 47.5±6.8 (34–57). The low schizotypy group (age 19–21; mean = 20.0; four men, four women) had a mean STA score of 5.9±1.9 (2–8) and a mean FNEB score of 40.4±4.8 (32–46). The two groups differed significantly in both scores (STA, $p = .0000$; FNEB, $p < .05$).

We examined the difference between the sense of self-agency and perception of temporal delay within each group (Fig. 1). Repeated measures using analysis of variance (ANOVA) with temporal delay and the two judgmental blocks as the within-subject variables revealed that only the main effect of temporal delay was statistically significant ($F_{3.13, 28.20} = 20.9$, $p < .001$) in the high schizotypy group. By contrast, in the low schizotypy group, the main effects of temporal delay ($F_{3.10, 21.73} = 47.6$, $p < .001$) and of the difference between two judgmental blocks ($F_{1.00, 7.00} = 7.83$, $p < .05$) were significant. These results mean that while the high schizotypy group judged the sense of self-agency closely according to their perception of the temporal delay, the low schizotypy group sometimes felt a sense of self-agency despite a perceived temporal delay.

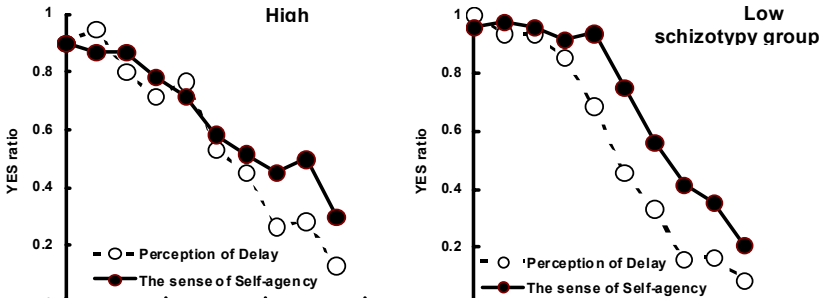

Figure : The relationship between the perception of delay and the sense of self-agency within both schizotypy groups

In the perception of delay block, the participants responsed 'YES' when they didn't perceive the temporal delay. In the sense of self-agency block, the participants responsed 'YES' when they felt
they were at the origin of the tone.

Discussion

Although this study produced some interesting results, the small number of participants indicates that the findings should be regarded as preliminary. We found that the more distinct the temporal bias became, the more accurately participants could perceive it. However, the more distinct the bias became, the less they felt a sense of self-agency. Although previous studies have suggested that the sense of self-agency becomes weaker as bias becomes more distinguishable (Daprati et al., 1997; Franck et al., 2001; Sato & Yasuda, 2005), they did not distinguish between the sense of self-agency and the perception of the bias. We showed that there might be a difference between the sense of self-agency and the perception of the bias.

According to Sato and Yasuda (2005), this illusionary phenomenon, that the sense of self-agency becomes weaker as bias becomes more distinguishable, is caused by the existence of a discrepancy between the predicted and actual sensory consequences. We measured the perception of delay as the actual sensory consequence and showed that there may be a difference between the sense of self-agency and the actual sensory consequence. This suggests the importance of prediction of consequences in the sense of self-agency. A developmental study showed that 4-year-olds were successful at self-recognition tasks involving delayed video feedback (Miyazaki & Hiraki, 2006). The results indicated that 4-year-olds, but not 3-year-olds, are able to identify themselves in delayed feedback when they are cognizant that the feedback is presented with short temporal delays. Four-year-olds may thus be able to predict the consequences of their own actions.

Furthermore, we showed that the high schizotypy group tended to judge that they had not originated the tone, meaning that this group has a weaker sense of self-agency. The highly schizotypal people did not feel a sense of self-agency when they perceived the bias, while the low schizotypal people did feel a sense of self-agency, even when they perceived the bias to some extent. This suggests that the highly schizotypal people were more realistic in judging the origin of the action. An abnormal sense of self-agency, which characterizes people with schizophrenia, may be due to abnormal prediction of their own actions

(Blakemore, Wolpert, & Frith, 2002; Frith, Blakemore, & Wolpert, 2000a; 200b). Our results may also be caused by the subjects' abnormal prediction of their own actions.

It has been shown that schizotypal people may have compromised self-face recognition, which could be correlated with a weaker sense of self-agency (Plated & Gallup Jr., 2002). People with schizotypal traits possibly have a lower degree of self-consciousness or self-awareness. The present study focused on the sense of self-agency, which is a component of self-consciousness (Gallagher, 2000).

Although the finding that high schizotypal students have a weaker sense of self-agency is consistent with the idea that schizophrenic experiences, including auditory hallucinations, thought insertion, and delusions of control, could occur because of the feeling that one is not at the origin of one's own acts (Frith, Blakemore , & Wolpert, 2000a; 2000b), two previous studies have reported that patients with schizophrenia tended to feel that they were at the origin more than did normal controls (Daprati et al., 1997; Franck et al., 2001). This may suggest that schizophrenia is correlated with a stronger sense of self-agency. If schizophrenics have a stronger sense of self-agency, why do schizotypal people have a weaker sense of self-agency?

There is the possibility that the results of previous studies (Daprati et al., 1997; Franck et al., 2001) simply reflect the abnormal perception of people with schizophrenia; they might have perceived the bias less. In particular, in the paradigm of Franck et al. (2001), the instruction was, "Did the movement you saw on the screen exactly correspond to that which you made with your hand?" The present study focused on schizotypal people, who may be seen as having a predisposition to schizophrenia (Cyhlarova & Claridge, 2005). It is highly likely, however, that they have normal perception, since schizotypal traits are part of their personality and they do not take medication that could disturb their perception. Focusing on schizotypal people can be an effective way of studying the process of schizophrenia while avoiding the problems that can arise when conducting experiments with schizophrenic patients (Williams & Beech, 1997). We found that highly schizotypal people have a weaker--not stronger--than normal sense of self-agency. Further research should examine this difference in the disorders of schizophrenia.

A recent study showed that the anxiety component of schizotypy accounted for the intentional dysfunction in a latent inhibition task (Braunstein-Bercovitz, 2000). The statistically significant correlation between the STA and the FNEB scores, along with the statistically significant difference in the mean FNEB scores between the high and the low schizotypy groups suggest that this result may to a degree be confounded by other psychological factors. Further research should examine which components in schizotypy account for the weaker sense of self-agency.

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CHAPTER 5:
Negative life events and obsessive-compulsive symptoms: Moderating role of obsessive beliefs.

Tomoko Sugiura and Yoshinori Sugiura

Abstract: Aims and objectives: This study examined the effects of negative life events on obsessive-compulsive (OC) symptoms among college students, using a longitudinal (quasi-experimental) design. It also explored whether obsessive beliefs, which represent widely studied cognitive vulnerability to obsessive-compulsive disorder (OCD), moderate the stressor effects. **Hypothesis:** Negative life events and obsessive beliefs have causal effects on OC symptoms. It was also explored whether obsessive beliefs moderate the effects of stressors. **Method:** One hundred and eighty-nine students completed the Obsessive-Compulsive Inventory-Revised (OCI-R; Foa et al., 2002) twice, one month apart. They also responded to a questionnaire that measured negative life events during the preceding month (Takahira, 1998) for the second administration. The Obsessive Beliefs Questionnaire 44-item version (OBQ-44; Obsessive Compulsive Cognitions Working Group, 2005) was also completed. **Results:** Hierarchical regression analyses predicting Time 2 OCI-R were conducted. Time 1 OCI-R was a covariate, followed by main effects (life events and obsessive beliefs) and an interaction term. No significant effects emerged from life events, obsessive beliefs, or their interaction. Post hoc regressions were conducted by dividing the participants using Time 1 OC symptom level to differentiate the change of OC symptoms into onset and worsening. Achievement-related stressors exacerbated the symptoms when combined with inflated responsibility among those with high-baseline OC symptoms. **Conclusion:** Results indicate that negative life events can exacerbate OC symptoms among originally obsessive people, even within a relatively short period. Inflated responsibility, a well-studied cognitive vulnerability to OCD, may be the prerequisite for deterioration of OC symptoms by achievement-related stressors.

Introduction

Obsessive-compulsive disorder (OCD) is one of the most debilitating and chronic psychological problems. Obsessive-compulsive symptoms are not confined to OCD patients but can be found among the nonclinical population (Muris, Merckelbach, & Clavan, 1997; Rachman & de Silva, 1978). OC symptoms are known to fluctuate over time. One candidate factor behind this fluctuation is stressful life events.

Many types of life events are implicated in the pathogenesis of various emotional disorders (e.g., Hankin & Abela, 2005). However, few systematic studies have been conducted with OCD (McLaren & Crowne, 2003). Rheaume, Freeston, Leger, and Ladouceur (1998) and de Silva and Marks (1999) presented case illustrations that depicted

the role of specific life events (e.g., an accident, serious mistakes, and traumatic events) in the development of OCD.

McLaren and Crowne (2003) determined the effects of common life events on OC symptoms. Specifically, low perceived control over stressful life events was associated with a heightened OCD score. In addition, Gethelf, Aharonovsky, Horesh, Carty, and Apter (2004) reported that children with OCD experienced more total and negative life events in the year prior to onset and had more lifetime negative life events than normal controls. OCD children also perceived these events as being more serious than did the normal controls.

The uniqueness of McLaren and Crowne (2003) is the inclusion of an individual difference factor. They reported that a high level of thought suppression was also associated with an elevated OCD score. Thought suppression has been repeatedly demonstrated to be a counterproductive cognitive control strategy (Wenzlaff & Wegner, 2000). Muris, Merckelbach, and Horselenberg (1996) used a longitudinal design (12 weeks interval) within a nonclinical sample to demonstrate that individual differences in thought suppression are predictive of the frequency of intrusive thoughts.

The present study sought to extend the McLaren and Crowne (2003) study in two ways. First, a longitudinal (quasi-experimental) design was used to derive stronger inferences about the causal role of life events. Second, obsessive beliefs were introduced as a predisposing factor instead of thought suppression.

The longitudinal design has been successfully applied to studies investigating the relation between stressors and psychopathology (e.g., Metalsky, Joiner, Herdin, & Abramson, 1993). These studies examine whether preceding stressors were predictive of subsequent symptoms even after controlling for the former symptom level. This framework is analogous to an experimental setting in which researchers observe changes in the dependent variable from the baseline as a result of some intervention. The experience of life events is considered to be a naturally occurring intervention. Therefore, such longitudinal design is also referred to as a quasi-experimental design. Studies also typically employ a stressor-vulnerability framework within which combinations of stressors and individual differences predict the symptoms.

In this regard, the inclusion of vulnerability factors is important in studies of stressors. Another unique aspect of this study is the introduction of obsessive beliefs. Based on the finding that normal people also experience intrusive thoughts similar in content to clinical obsessions (Rachman & de Silva, 1978), Salkovskis (1985, 1999) proposed that (meta)cognitive appraisals of the occurrence of intrusions or their contents can determine the progress of normal intrusions into clinical obsessive-compulsive symptoms. Salkovskis (1985, 1999) postulated that inflated responsibility is the prominent theme in cognitive appraisals by OCD patients, while other researchers emphasized the role of other beliefs, such as perfectionism (Frost, Martin, Lahart, & Rosenblate, 1990).

An international group of experts studying OCD was formed in 1995 in response to an increase in research into cognitive models of OCD. This group is the Obsessive Compulsive Cognitions Working Group (OCCWG) and seeks to integrate and clarify the consensus dimensions of cognitive beliefs and appraisals relevant to OCD. Their discussions resulted in the 87-item questionnaire that measures obsessive-compulsive beliefs, called the Obsessive Beliefs Questionnaire (OBQ), and the 31-item semi-idiographic questionnaire to measure online meta-appraisals of a specific experience of unwanted intrusive thoughts, called the Interpretation of Intrusions Inventory (III) (Obsessive Compulsive Cognitions Working Group, 2001). OBQ has six subscales (control of thoughts; importance of thoughts; responsibility; tolerance for uncertainty;

overestimation of threat; perfectionism). A subsequent factor analysis (OCCWG, 2005) revealed the following three factors comprised of 44 items: (1) responsibility and threat estimation, (2) perfectionism and intolerance for uncertainty, and (3) importance and control of thoughts. We used this 44-item version of the OBQ in this study.

Hypotheses

It was predicted that both negative life events and OC beliefs had causal effects on Time 2 OC symptoms, even after controlling for Time 1 OC symptoms as a covariate. The presence of any interaction between negative life events and OC beliefs was an exploratory issue.

This is the first study (to the authors' knowledge) that involves both life events and obsessive beliefs in longitudinal prediction of OC symptoms. As noted above, studies of the role of life events on OCD are sparse. Longitudinal studies of the relation between obsessive beliefs and OCD are also limited in number. The notable exception is Abramowitz, Nelson, Rygwall, and Khandker (in press), who revealed that negative interpretation of unwanted intrusive thoughts mediates the relationship between the obsessive beliefs assessed earlier and subsequent OC symptoms.

Method

Participants

One hundred and eighty-nine Japanese college students (47% women), with a mean age of 19.46 years (*SD* = 1.70), completed questionnaires in exchange for a partial course credit.

Design

A stressor-vulnerability model with a quasi-experimental design was employed. Participants completed OC symptom measurements twice, one month apart. They also responded to a questionnaire that measured negative life events during the preceding month for the second administration. In addition, students completed a measurement of obsessive beliefs at Time 1. Time 2 OC was the dependent variable, predicted by negative life events and OC beliefs and their interaction. Time 1 OC symptoms served as a covariate.

Materials

Obsessive-Compulsive Inventory-Revised (OCI-R; Foa et al., 2002). The OCI measures the distress caused by a wide range of obsessive-compulsive symptoms. The revised version used here includes three items for each of the following symptoms: checking, hoarding, neutralizing, obsessing, ordering, and washing. A validation study by Foa et al. (2002) revealed that the OCI-R is useful for differentiating individuals with and without OCD. OCI-R was carefully translated into Japanese by the second author. The Japanese translation of OCI-R evidenced good internal reliability in this study (α = .84, Time 1; α = .86, Time 2).

Negative life events (Takahira, 1998). This scale was developed to measure college students' experiences of negative life events in interpersonal and achievement domains (each included 15 items). Both subscales were correlated with depression and indices of a lower level of well-being. Both subscales demonstrated acceptable internal consistency in the present sample (α = .72, interpersonal; α = .65, achievement).

Obsessive Beliefs Questionnaire 44-item version (OBQ-44; Obsessive Compulsive Cognitions Working Group, 2005). The OBQ was designed to measure cognitive beliefs relevant to the pathogenesis of OCD. This study used the newer 44-item short version with three subscales (alphas in parentheses): (1) Responsibility and threat estimation (α = .89), (2) Perfectionism and intolerance for uncertainty (α = .89), and (3) Importance and control of thoughts (α = .87). The OBQ was translated into Japanese by Sugiura et al. (2004). Back-translation was performed to ensure the accuracy of the translation. Sugiura et al. confirmed the internal consistency and the convergent and divergent validity of the full version of the OBQ among college students. Forty-four items out of 87 were selected and completed by the present participants. Each subscale showed good reliability in this sample, as indicated in the parentheses.

Procedure

Questionnaires were completed in the classroom.

Results

Simple statistics of each study variable are presented in Table 1. Each scale indicated acceptable to good internal reliability, as stated in the method section. None had skewness or kurtosis that exceeded the absolute value of |1|; therefore, the use of parametric tests seems appropriate. Table 2 depicts the correlation matrix of the study variables. Three OBQ-44 subscales and negative life events (interpersonal and achievement) were positively related to the OCI-R scores (both Time 1 and 2).

A series of hierarchical regression analyses were conducted to test the hypothesis using a quasi-experimental design. The basic schema of the analyses was the following: Time 2 OCI-R served as a dependent variable. Independent variables were entered in the following order: (1) Time 1 OCI-R as a covariate, (2) main effects of beliefs and life events, and (3) interaction term of beliefs X negative life events. The OBQ-44 has three subscales and negative life events have two subscales; therefore, six regressions in total were run.

No significant results involving life events or obsessive beliefs emerged in six regressions; negative life events, obsessive beliefs, and their interaction did not predict OC symptoms after controlling for the baseline (Time 1) OC symptoms ($p > .05$). Therefore, although both life events and obsessive beliefs were positively correlated with OC symptoms (Table 2), their effects disappeared in the more stringent test employed in this study.

The lack of significant effects of obsessive beliefs conflicts with the influential cognitive models (Salkovskis, 1985, 1999). The failure to find a stressor effect also contradicts existing observations (Gethelf et al., 2004; McLaren & Crowne, 2003). However, the above analyses did not discriminate the two types of pathological processes: onset and maintenance (or worsening). An unanswered question remains regarding whether stressors and/or obsessive beliefs cause OC symptoms among originally non-obsessives (onset) or exacerbate OC symptoms among already obsessives (worsening). Post hoc regressions were conducted to answer this question by dividing the participants by Time 1 OC symptoms using a mean split. An analysis of the low-baseline OC group was intended to be the analogue of the onset of OC symptoms. In contrast, analysis of the high-baseline OC group may be the analogue of worsening of OC symptoms.

The effect of stressors was significant when we combined achievement-related life events and responsibility in the low-baseline OC group ($p < .05$) (Table 3). Thus, achievement-related life events enhanced the OC symptoms.

In contrast, the interaction involving achievement-related stressors X responsibility was significant for the high-baseline OC group, ($p < .01$; Table 4). Figure 1 illustrates this interaction. It is apparent that achievement-related stressors exacerbated OC symptoms when combined with inflated responsibility among those with high-baseline OC symptoms. This can be interpreted as indicating that inflated responsibility advances the deterioration of OC symptoms by achievement-related stressors.

Table 1

Simple statistics of the study variables

	M	*SD*
Obsessive Beliefs Questionnaire (44 items)		
(1) Perfectionism and intolerance for uncertainty	56.76	16.44
(2) Importance and control of thoughts	34.40	11.95
(3) Responsibility and threat estimation	57.47	15.69
Negative life events		
(4) Interpersonal	5.16	3.00
(5) Achievement	6.42	2.81
Obsessive-compulsive inventory (Revised)		
(6) Time 1	20.74	10.17
(7) Time 2	19.12	10.46

Table 2

Correlations among the study variables

	(2)	(3)	(4)	(5)	(6)	(7)
Obsessive Beliefs Questionnaire (44 items)						
(1) Perfectionism and intolerance for uncertainty	.67 ***	.71 ***	.14	.29 ***	.47 ***	.38 ***
(2) Importance and control of thoughts	1.00	.74 ***	.30 ***	.32 ***	.43 ***	.38 ***
(3) Responsibility and threat estimation		1.00	.27 ***	.32 ***	.53 ***	.46 ***
Negative life events						
(4) Interpersonal			1.00	.40 ***	.18 *	.24 ***
(5) Achievement				1.00	.37 ***	.35 ***
Obsessive-compulsive inventory						
(6) Time 1					1.00	.84 ***
(7) Time 2						1.00

* $p<.05$; *** $p<.001$.

Table 3

Hierarchical Regression Analysis Predicting Time 2 OC Symptoms by Achievement Related Stressors and Responsibility among Those with Low Baseline OC symptoms.

Steps	Predictors	ΔR^2	β
1	Time 1 OCI-R	.41 ***	.65 ***
2	Achievement Stressors	.05 *	.57 *
	OBQ-44 Responsibility		.04
3	Stressors X Responsibility	.01	-.47

Note. OCI-R = Obsessive-Compulsive Inventory (Revised); OBQ-44 = Obsessive Beliefs Questionnaire (44 items); Responsibility = Responsibility and threat estimation.

* p<.05; *** p<.001.

Figure 1. Interaction of achievement-related stressors and responsibility in predicting obsessive-compulsive symptoms among those with high-baseline OC symptoms.

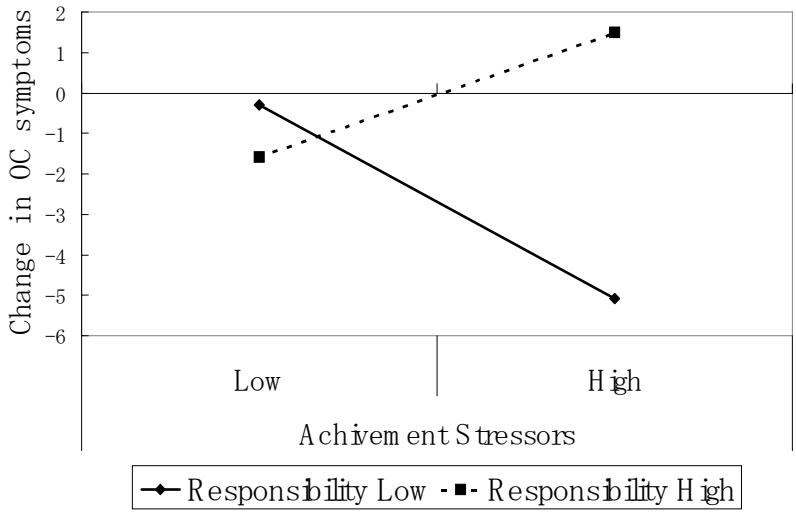

Table 4

Hierarchical Regression Analysis Predicting Time 2 OC Symptoms by Achievement Related Stressors and Responsibility among Those with High Baseline OC symptoms.

Steps	Predictors	ΔR^2	β
1	Time 1 OCI-R	.45 ***	.56 ***
2	Achievement Stressors	.03	-.87 **
	OBQ-44 Responsibility		-.35
3	Stressors X Responsibility	.05 **	1.15 **

Note. OCI-R = Obsessive-Compulsive Inventory (Revised); OBQ-44 = Obsessive Beliefs Questionnaire (44 items); Responsibility = Responsibility and threat estimation.

** $p<.01$; *** $p<.001$.

Discussion

This study used a quasi-experimental design, which revealed: (1) Achievement-related stressors enhanced OC symptoms in a low-baseline OC group. (2) Achievement-related stressors exacerbated the symptoms in a high-baseline OC group when combined with inflated responsibility.

Although achievement-related stressors predicted OC symptoms in the low-baseline OC group, a post hoc calculation of the subgroup means revealed that this effect may be clinically negligible. The participants with low-baseline OC symptoms who experienced an above-average level of achievement-related stressors had a mean Time 2 OCI-R score of 15.63 (*SD* = 8.16); those with a below-average level scored 11.77 (*SD* = 7.45). Both of these means were less than the overall group Time 2 OCI-R mean of 19.12 (*SD* = 10.46).

We also examined relations among high-baseline OC symptoms group. The y-axis of Figure 1 plots the relative change in OC symptoms in the high-baseline OC group but does not reveal the absolute level of obsessions and compulsions of those with inflated responsibility and experienced achievement-related stressors in the preceding month. Therefore, we calculated the mean Time 2 OCI-R scores (raw) of subgroups among the high-baseline OC group, i.e., those with above/below the mean level of responsibility and those who experienced more/less than the average amount of achievement-related stressors. The results are presented in Table 5. The mean Time 2 OC symptoms for inflated responsibility and the high stressor group (*M* = 33.21, *SD* = 9.23) was about 1 *SD* greater than the overall group Time 2 OCI-R (Table 1; *M* = 19.12, *SD* = 10.46), and even greater

than that of the high-baseline OCI-R group as a whole (M = 26.47, SD = 9.02). The scores for other groups were not at such a high level.

Table 5

Means and SD (in parentheses) of Time 2 OCI Scores among High Baseline OC Symptoms Group by Responsibility and Stressor Level

	Responsibility			
	High		Low	
Achievement related stressors				
High	33.21	(9.23)	22.06	(7.28)
Low	27.27	(8.92)	23.00	(6.48)

Time 2 OCI within high baseline OC group M = 26.47, SD = 9.02.

Time 2 OCI within whole sample M = 19.12, SD = 10.46.

Note. Responsibility = Responsibility and threat estimation.

The above analysis revealed that the combination of these two factors resulted in a fairly high level of OC symptoms among a nonclinical population with an above-average level of baseline OC symptoms. Therefore, our discussion will focus on the interaction of achievement stressors X responsibility. The emergence of stressor effects in the high-baseline OC group was consistent with the previous finding that stressors are related to a worsening of OC symptoms (Rasmussen & Eisen, 1991). The emergence of the stressor effect under specific conditions enhanced our knowledge regarding the role of common daily stressors in the pathogenesis of OC symptoms. A key strength of this study was employment of the longitudinal design, which enabled us to obtain a finding regarding the causal role of stressors, which previous studies had not directly examined (e.g., McLaren & Crowne, 2003).

Our results also help clarify the role of obsessive beliefs. The effect of responsibility is basically consistent with the central tenet of the cognitive model of OCD (OCCWG, 2001, 2005; Salkovskis, 1985, 1999), but suggests some modification: Responsibility may be involved in the deterioration of OC symptoms, not the onset. In addition, responsibility does not work alone, but in conjunction with certain types of stressors. Many etiological models with a certain level of empirical support presently exist

in the field of OCD (Maj, Sartorius, Okasha, & Zohar, 2000). Therefore, it is mandatory to determine where a given predictor should be placed in the pathological process of OCD. The present result suggests that inflated responsibility is involved in the maintenance or deterioration of OCD but not in the onset.

How can we explain the joint effect of achievement-related stressors and responsibility? One intriguing possibility comes from the mood-as-input model (Martin, Ward, Achee, & Wyer, 1993). MacDonald and Davey (2005) presented stimulating results that indicated that the joint effect of negative mood and responsibility lead to perseverative checking. MacDonald and Davey (2005) had their nonclinical participants read a proof of a given text. Some participants were instructed to correct as many errors as possible, while others were instructed to check until they felt they did not want to continue. Those in the "as many as possible" condition did persistent checking under an induced negative mood. The negative mood may be mistaken as a sign that the goal of checking as many as possible had not been met. The "as many as possible" stop rule is clearly similar to inflated responsibility (e.g., Startup & Davey, 2003).

The following interpretation may be possible if we apply MacDonald and Davey's (2005) framework to the present findings. (1) Negative life events cause a negative mood. (2) This negative mood is misinterpreted as an indicator of unsatisfactory task performance (e.g., rituals) by those who have set a high standard (those with inflated responsibility). The strength of the mood-as-input hypothesis is that it does not require a logical relation between the stressors causing the negative mood and the content of the OC symptoms. The mood-as-input hypothesis postulates that the background mood, not related to the present tasks, erroneously affects the judgment regarding the ongoing process. This mechanism is in contrast with the role of semantically related life events in OC symptoms (see Rheaume et al., 1998).

The proposed focus of therapy based on the synergic effect of life events and responsibility includes: (1) reducing inflated responsibility through cognitive techniques, and (2) detaching general distress (caused by negative life events) from the ongoing project. The latter may be accomplished by mindfulness training.

A limitation of the present study was the use of a nonclinical population. Future research is required to clarify whether responsibility and life events are involved in worsening of clinical levels of OC symptoms. In addition, the one-month interval between the two measurements of OC symptoms lacks theoretical or empirical rationale. The lack of previous evidence prevented us from determining the appropriate interval; future studies must vary the interval between the two OC symptom measurements and also between the occurrences of life events and changes in OC symptoms. The mood-as-input hypothesis posits a somewhat immediate effect of life events on OC symptoms. However, other mechanisms may link distal life events to changes in obsessions and compulsions.

Conclusions

In summary, the contribution of this study is the demonstration of possible causal effects of life events on OC symptoms, even within a relatively short period. More specifically, it was suggested that inflated responsibility, a well-studied cognitive vulnerability to OCD boosts the deterioration of OC symptoms by achievement-related stressors.

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CHAPTER 6:
Simultaneous Measurement of Attentional Bias and Interpretative Bias on Social Anxiety.

Yuri Igarashi and Hironori Shimada

Abstract: Previous studies indicate that interpretative and attentional biases affect the maintenance of social anxiety disorder. This study aimed to measure both biases together and examine their relationship. Thirty two undergraduate students—categorised into high, medium and low social anxiety groups—participated in this experiment. Attentional bias was measured by the dot-probe task with two types of stimuli: threat and neutral words. The results of an ANOVA, social anxiety × stimuli, revealed no significant effect. Interpretative bias was measured by a video task. The results of an ANOVA, social anxiety × situation revealed a significant main effect of social anxiety in the depression-anxiety score, thus confirming the occurrence of interpretative bias in social anxiety. Finally, the relationship between interpretative and attentional biases are discussed.

Introduction

Recently, a large number of studies examining maladaptive actions have been conducted using the cognitive approach; this is because various cognitive investigations contribute greatly to the understanding and prediction of action. Various studies have been conducted on the maintenance of social anxiety disorder. In particular, these studies have yielded detailed knowledge about the distortion of cognition in social anxiety. The mechanism which functions for the maintenance of social anxiety disorder has been revealed by a previous study (Clark & Wells, 1995; Rapee et al., 1997). Clark & Wells (1995) suggested that the information processing bias plays an important role in the maintenance of social anxiety. Additionally, recent research has demonstrated the cognitive model.

In particular, it has been reported that social phobia is characterised by an interpretative bias, which is the tendency to interpret social events in a negative fashion. For example, Stopa & Clark (2000) and Voncken et al. (2003) examined the interpretative bias in social anxiety.

Previous examinations of interpretative bias have employed three methods. Among these, the first is the task of homonyms related to threats (for example, Mathew et al., 1989). In this task, the reaction to ambiguous words is measured by using homonyms, for example, the words die and dye. The next task is the word decision task. In this task, participants are presented a word after an ambiguous sentence and are asked to judge whether it is meaningful or not with regard to the task. The third method is the questionnaire method, which was used by Amir et al. (1998), Stopa & Clark (2000) and Voncken et al. (2003). Stopa & Clark (2000) examined the interpretative bias in social anxiety by using the Ambiguous Social Situation Interpretation Questionnaire (ASSIQ). In the ASSIQ, the respondent was provided with ambiguous sentences, and each situation was followed by the question ‘why?’ (Open question) and three alternative rank-ordered

questions (provided by the experimenter). The participants were instructed to choose the alternative that was most likely to occur to them.

However, these methods have some flaws. First, the conventional learning contents in everyday life may affect responses. Second, there is the possibility that the contents actually interpreted by a participant are not included in the interpretation provided by the investigator. Moreover, it is difficult to state that the methods of these studies reflect the situations encountered in daily life. These studies reflect knowledge of interpretation; however, the methods they adopted suffered from flaws with regard to ecological validity. Therefore, it is necessary to measure the interpretative bias in social anxiety by using a more precise method.

In addition to interpretative bias, attentional bias is also nominated as one of the information processing biases (Clark & Beck, 1988). Attentional bias involves the distortion of the perception of negative stimuli due to high social anxiety. The studies that examine attentional bias typically involve an experiment in which a comparison of the reactions to negative and neutral words is performed. As a result, the attentional bias in social anxiety, in which attention is diverted to negative words, is confirmed. Additionally, it is assumed that this bias is a maintenance factor for social anxiety (Clark & Wells, 1995).

Interpretative bias and attentional bias were studied separately in previous studies. However, they are generated together in an information processes. Therefore, there will be interaction between both biases. It is necessary to clarify the nature of the relationship between them, because this knowledge would help construct more detailed information processing process model and suggest more effective intervention methods. It is first necessary to confirm that interpretative bias coexists with attention bias in an individual. Thus, the purpose of this study was to measure both biases simultaneously and examine the relationship between them. In addition, we aimed to use a more precise method for measuring interpretative bias in social anxiety.

Method

Participants

Thirty-two Japanese undergraduate students participated in this experiment. They were asked to complete the Fear of Negative Evaluation (FNE) scale. The students were categorized into three groups (low, medium and high social anxiety) based on the FNE scores. Both the low social anxiety and the medium social anxiety groups consisted of 11 students. The high social anxiety group consisted of 10 students. Their demographics are showed in Table 1.

Table 1: *Participant Demographics*

Variable	Group		
	High social anxiety	Midddle social anxiety	Low social anxiety
Age	18.33 (3.89)	20.38 (1.65)	20.38 (1.58)
Fear of Negative Evaluation (FNE)	25.18 (2.72)	14.70 (1.91)	4.60 (2.37)
Beck Depression Inventory (BDI)	12.15 (4.27)	10.23 (6.48)	9.65 (5.89)

( ) =*SD*

Interpretative Bias.

The participants were asked to perform the task that measures interpretative bias by using a more precise method. Stopa & Clark (2000) used the Ambiguous Social Situation Interpretation Questionnaire (ASSIQ) to measure interpretative bias. The task was based on the ASSIQ. Four interpersonal and four non-interpersonal situations were selected by the ASSIQ; the questionnaire contained 14 interpersonal and 10 non-interpersonal situations often experienced by undergraduate students (Table 2). Following this, scenarios of each situation were obtained through preliminary investigation. The participants were presented filmed scenarios. These videos were shot from the participants' perspectives, as if they were themselves witnessing the scenes. The participants were asked to report the feelings that they would experience if they were faced by such situations. The content of their narrative responses were recorded.

Table 2 Situations Used in the Video Task

Interpersonal situations
· Some people whom you know are looking in your direction and talking.
· A stranger approaches you on the street'.
· You have made a tentative arrangement to go to the cinema with some friends and then they tell you that they cannot make it.
· You ask some friends to go out for a meal with you in a couple of days' time and they refuse.
Non-interpersonal situations
· You experience a sudden pain in your stomach.
· Your appetite has been normal but you have recently lost some weight.
· A letter marked 'URGENT' arrives.
· You wake up with a start in the middle of the night, thinking that you heard a noise but all is quiet.

Attentional Bias.

In this study, attentional bias was measured by using a dot-probe task. The task had two types of stimuli: social threat words and neutral words. The difference between the reaction time of these two types of words was used as a score of attentional bias. The dot-probe task is a paradigm that is often used to investigate the selective attention to threats. A facilitated response to probes that appear at the same location as threat information in comparison with responses to probes that appear at the opposite location of the threat information is interpreted as vigilance for threats. The participants indicated the probe location by pressing one of two keyboard buttons as quickly and accurately as possible.

Design

Measuring Interpretative Bias by a Video Task.

The independent variables were social anxiety (high social anxiety group, middle social anxiety group, low social anxiety group) and situation (interpersonal situation and non-interpersonal situation). The 'third person' role was fulfilled by three undergraduate students who measured participants' narrative responses by using five items that show the depression-anxiety factor. This factor was chosen from a multiple mood scale (Terasaki et al., 1991) that contains eight factors. The factor score was used as a dependent variable.

Measuring Attentional Bias by the Dot-probe Task.

The type of word (threat word, non-threat word) was the independent variable in the dot-probe task. The difference between the reaction time between the threat and neutral words was used to measure "attentional bias". The dependent variable was the difference score calculated as the absolute value of non-social RT–social RT.

Procedure

The experiment was carried out discretely. After the participants were guided to the laboratory, the task was explained to them. First, the participants performed the dot-probe task. Then, they were required to complete the video task that measured interpretative bias. The instructions stressed that the participants were expected to view the video from a first-person perspective—as if they were taking part in those situations. They were then asked to describe their thoughts as if they had just experienced those situations. While the participants worked on the task, the experimenter left the laboratory and the narrative responses were recorded on a MiniDisk. After they had completed the task, the participants were asked to fill out the Japanese version of the Beck Depression Inventory (BDI).

Result

Manipulation check

It was checked whether the words used in the dot-probe task had negative feeling values for a participant. As a result of the ratings of threat words from 1 to 7, they were rated negatively ($M = 2.36$, $SD = 0.77$).

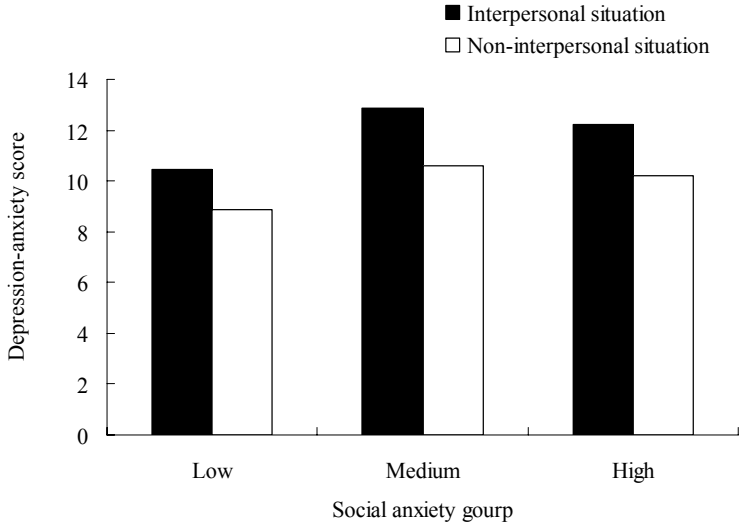
To confirm that the interpretative bias measured in this experiment was related to social anxiety, and not depression, the participants were asked to complete the BDI. The results of the ANOVA between depression and the group variable (high, medium, low group) revealed that there was no significant main effect ($F [2, 29]) = 0.66$, ns.).

Participants were asked to rate the effectiveness with which they were able to view the video from the perspective that they were themselves experiencing those situations. They rated that degree as $M = 3.86$, $SD = 0.95$.

Interpretative Bias Score

The depression-anxiety factor score result of the ANOVA, social anxiety (high group/medium group/low group) × situations (interpersonal situation/non-interpersonal situations: repeated), revealed that there was a significant main effect of social anxiety and situations ($F [2, 24] = 3.85$, $p < .05$: Fig.1). By conducting a multiple comparison, it was revealed that participants with high and medium social anxiety were more likely to interpret situations in a negative fashion than those with low social anxiety. However, the main effect of the situation was not significant.

Figure 1. Depression-anxiety score in each group and situation



Attentional Bias Score

The results of an ANOVA, social anxiety (high, medium and low) × stimuli (social threat, neutral), revealed that there was no significant effect.

Correlation

A significant positive correlation was found between the interpretative bias score and the attentional bias score ($r = .50$, $p < 01$).

Discussion

The results will be discussed here in relation to the two questions raised in the introduction. First, are we able to reconfirm the occurrence of interpretative bias in social anxiety in a more precise manner? Second, do interpretative bias and attentional bias exist together in an individual?

With respect to the first question, the result of the video task provides evidence that individuals with high social anxiety are more likely to interpret situations in a negative fashion. As noted earlier, the methods that previous studies used were flawed with respect to ecological validity. Therefore, this study employed the video task. In other words, the

result is consistent with those of previous studies and shows that the interpretative bias in social anxiety was reconfirmed in a more precise manner.

Another point that experimenters should focus on is to not differentiate between the high and medium social anxiety groups. In contrast, there was a significant difference between the medium and low social anxiety groups. The reason for this could be that interpretative bias may occur only in some individuals with social anxiety. Previous explanations of the interpretations of social anxiety were provided by the comparison of high and low social anxiety. This finding is extremely interesting. It is necessary to examine this result, using detailed comparisons of more three-group studies, in future research. Previous studies on interpretative bias revealed that there exists a relationship between depression and interpretative bias as well. In this study, it was confirmed that the three groups did not have different BDI scores. Therefore, the results show that the interpretative bias measured in this experiment was related to social anxiety. Moreover, the participants viewed videos from the perspective that they themselves were experiencing those situations. Thus, the result attests to the ecological validity of the method used in this study. It seemed that this method of measuring interpretative bias is effective.

Regarding the second question, attentional bias was not reconfirmed, however there are possible alternative accounts for the study's findings. The main effect of the situation was not significant in the analysis of interpretative bias. And the significant difference in the score of attentional bias was not shown. These results are not consistent with those of previous studies. However what we should pay attention to is the covariance of both biases. Therefore, the findings that showed no significant difference in these biases will not affect the examination of study purpose. Suffice to say that the types of anxiety other than social anxiety were not measured. In this study, types of anxiety other than social anxiety were not measured. There exists the possibility that these factors influenced our findings. A limitation of this study is that other types of anxiety, not just social anxiety, should have been accounted for and examined in detail.

However, the attentional bias scores were significantly correlated with the interpretative bias ratings. That is to say the result has shown that the interpretative bias and the attentional bias might change simultaneously. This is a significant finding that the relevance of interpretation bias and attentional bias was shown. Although, interpretative bias and attentional bias have been presumed to be referential, the previous studies have not measured two biases simultaneously and examine the relations. In this study, a significant positive correlation was found between the interpretative bias score and the attentional bias score. This result shows the possibility that both biases co-vary. For instance, people who indicate high attentional bias score have a tendency to show the interpretative bias.

Therefore, the result suggests that the interaction of these two biases need to be considered and examined. When clinicians attempt to intervene in either bias, the change in the other bias is a matter to be reckoned with. Some questions are raised here. For instance, if either bias was manipulated will the other bias co-vary? Which bias plays a role in the reduction of social anxiety symptom? However, because this study is only an examination that showed the correlation of two biases, it will be necessary to perform further examination.

Moreover, present study suggests the importance of consideration for attentional and interpretative biases in the clinical application. At first, I describe about attentional bias. Clark & Wells (1995) suggested that when high social anxiety individuals enter the feared social situations they tend to shift attention inward, toward themselves. This is helpful for identifying attentional bias in the actual treatment where a therapist carefully listens to the client's story in terms of perspective taking. Are the details about the social

situation and information about the external world included in the social situation that the client is talking about? Isn't it inclined to reflect only one's internal state and physical reaction? Moreover, the method of Wells & Papageorgiou (1999) will give us some help. This study investigated the specificity of observer's perspective among the patients with social phobia. In this study, the extent to which subjects' images of the situation were from an observer or a field perspective was assessed by using a seven-point bipolar rating scale ranging. On the other hand, to identify the interpretative bias, it is important for a therapist to get the information out of a client, separately from client's story. In these ways specifying the both biases and implementing the intervention in consideration of co-variance of these two biases will help provide case formulation.

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CHAPTER 7:
Perfectionism, Academic Burnout and Engagement among Chinese College Students: A Structural Equation Modeling Analysis

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Abstract: This study aims at identifying the association between perfectionism, academic burnout and engagement in college students. A dual-process model was tested in which negative perfectionism (doubts about actions, concerns over mistakes, et al.) were related to burnout symptoms while positive perfectionism (personal standards and organization) to engagement. A sample of Chinese undergraduates (N=482) completed a battery of questionnaires including the Frost Multidimensional Perfectionism Scale (FMPS), the Maslach Burnout Inventory-Student Survey (MBI-SS), and the Utrecht Work Engagement Scale for Students (UWES-S). Results confirm our hypothesis by indicating that: (1) burnout and engagement were moderately and negatively correlated conceptions, with efficacy, the positively worded subscale of MBI, better loaded as an extended engagement dimension; (2) maladaptive aspects of perfectionism were mainly correlated with burnout, whereas positive perfectionism with engagement; (3) the dual-process model fitted well to the data, with cross links identified. Implication of the current study for school counseling was also proposed.

Key words: perfectionism, burnout, engagement, structural equation modeling (SEM)

Introduction

Job burnout is an important index of psychological well-being among working people, defined by the three dimensions of exhaustion, cynicism, and inefficacy (Maslach, Schaufeli, & Leiter, 2001). Following a booming perspective of positive psychology, work engagement was subsequently proposed as a positive, fulfilling, work-related state of mind opposite to burnout, defined by vigor, dedication and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002b). For a purpose of prevention and intervention, a large body of burnout and engagement studies have focused on identifying antecedents, including environmental and individual (Maslach et al., 2001; Schaufeli & Bakker, 2004; Langelaan, Bakker, Van Doornen, & Schaufeli, 2006). Taking the latter perspective, the current study attempts to answer the question about who experiences burnout, or engagement, in college.

Academic burnout and engagement

Burnout was initially found in professions interacting with people, like human service workers, with an emphasis on the interpersonal relationship between provider and recipient (Freudenberger, 1974; Maslach et al., 2001). However, with the growing body of empirical research, this concept was extended into professions less people-oriented, like

technique staff, as well. A generic measurement emphasizing task instead of interaction with recipients, the Maslach Burnout Inventory General Survey (MBI-GS), was widely used across occupations and cultures (Maslach et al., 2001). Researchers even observed burnout symptoms in non-occupational contexts, such as marriage, sports and college study (Pines & Nunes, 2003; Gold, Bachelor, & Michael, 1989; Schaufeli, Martinez, Marqués-Pinto, et al, 2002a). Academic burnout among college students refers to feeling exhausted because of study demands (exhaustion), having a cynical and detached attitude towards one's schoolwork (cynicism), and feeling incompetent as a student (reduced efficacy). In contrast, academic engagement refers to high level of energy and mental resilisence when studying (vigor); deriving a sense of significance, enthusiasm and inspiration from study (dedication); and being fully concentrated and happily engrossed in one's study (absorption) (Schaufeli et al., 2002a).

Burnout has been conceptualised as an erosion of engagement (Maslach et al., 2001). In particular, vigor and dedication are directly opposite to exhaustion and cynicism, spaning two underlying core dimensions (named activation and identification), whereas absorption was found a unique component of engagement (Schaufeli & Bakker, 2004). As for efficacy measured by MBI without reversely recoding, several studies have suggested it being an extended engagement factor, leaving exhaustion and cynicism as "a core of burnout" (Schaufeli et al., 2002b; Schaufeli & Bakker, 2004).

Maladaptive and adaptive perfectionism

Decades of empirical studies have demonstrated perfectionism as a complex phenomenon closely linked with normal psychological functioning, as well as emotional and behavioral difficulties (Blatt, 1995; Shafran & Mansell, 2001; Chang, Watkins, & Banks, 2004). Hamachek (1978) first distinguished normal (adaptive) perfectionists, those who derive a sense of pleasure from painstaking efforts, from neurotic (maladaptive) perfectionists, who have never experienced such a feeling of satisfaction in their journey of striving (reviewed in Blatt, 1995). Differed somehow in theoretical conceptualizations, two teams of researchers independently developed two sets of Multidimensional Perfectionism Scale (FMPS & HMPS) to tap different aspects of this phenomenon (Frost, Marten, & Lahart, et al, 1990; Hewitt & Flett, 1991). Factor analysis over the nine subscales of both measures revealed a solution with two higher-order factors. One was termed maladaptive evaluative concerns, which was positively associated with depression symptoms and negative affects. The other was termed positive striving, significantly related to positive affect (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993). Other psychologists have found similar results indicating such a conceptual distinction of perfectionism (Terry-Short, Owens, Slade, & Dewey, 1995; Bieling, Israeli & Antony, 2004).

Perfectionism is prevalent among college students, for whom academic performance is crucial to one's personal development. Castro and Rice (2003) have found that perfectionism significantly predicted the self-reported academic achievement (assessed by Grade Point Average) among Asian and African American students, with some characteristics beneficial and others impedient. Chang and his colleagues (2004) assessed racial variation of white and black college females in how adaptive and maladaptive perfectionism related to psychological functioning, and found the latter, not both, associated with stress (Chang et al, 2004). Rice and Dellwo (2002) differentiated maladaptive perfectionists, adaptive perfectionists and non-perfectionists in college by conducting cluster analysis over FMPS subscales. Their results indicated that maladaptive perfectionists evidenced the poorest emotional well-being and college adjustment. All of

these empirical studies evidenced the necessity to see perfectionism as a complex phenomenon in college.

Perfectionism in Chinese educational settings has also attracted the attention of local scholars. A revised translation of FMPS was proposed and validated among Hong Kong adolescents, with items of a maladaptive dimension, parental criticisms, unable to converge as an independent dimension (Cheng, Chong & Wang, 1999). Zhang and Gan (2006) tested a full version of FMPS among college students in Beijing, which also turned out to have lost that very dimension. They derived a similar higher-order structure of perfectionism through factor analysis, and also found that maladaptive perfectionistic traits directly predicted depression symptoms, whereas the association between positive perfectionism and depression was moderated by a personality trait of cooperativeness.

Perfectionism, burnout, and engagement

Freudenberger (1974), one of the pioneering researchers of burnout, once commented: "burnout, with the cardinal symptom of exhaustion, was more likely to occur in perfectionists. The inability to reach previously high standards was seen to exacerbate distress, leading to greater fatigue." (reviewed in Magnusson, Nias, & White, 1996). However, very few empirical studies in the following decades have been carried out to test the above hypothesis. Mitchelson and Burns (1998) found exhaustion and cynicism positively related to socially prescribed perfectionism (a maladaptive dimension of HMPS, Hewitt & Flett, 1991) among career mothers. White and Schweitzer (2000) identified concerns over mistakes and doubts about actions (two maladaptive dimensions of FMPS, Frost et al, 1993) as perfectionistic personality factors that influence the development and perpetuation of chronic fatigue syndrome. But high personal standards in their study were not significantly correlated with fatigue as the way Freudenberger hypothesized. So the specific characteristics of perfectionists that are associated with burnout remain ambiguous. Based on previous studies, we anticipate positive correlations between maladaptive aspects of perfectionism and academic burnout symptoms.

Then what does positive perfectionism do in this issue? In Mitchelson and Burns' study (1998), no significant relations were detected between burnout and two positive dimensions of HMPS. Is adaptive perfectionism "useless" for people's well-being in the workplace or at school? We hardly believe so since it was shown to be an antecedent of many important positive outcomes, including life satisfaction and positive affect (Chang et al., 2004). It is quite likely that their insignificant function was due to the absence of appropriate measures of positive mental states comparable to burnout, such as engagement. Oettingen and her colleagues (2001) stated that mentally contrasting a desired future with aspects of less satisfactory reality led to engagement to goals, with consecutive goal striving and goal attainment. Hart and colleagues (1998) found that the Burns Perfectionism Scale, a single factor instrument measuring neurotic perfectionism, as well as total score of HMPS, failed to discriminate high and low perfectionism scorers on self-efficacy, but the three subscales of HMPS did, with two adaptive ones related to self-efficacy positively, and the maladaptive one negatively. Therefore, we anticipate that adaptive aspects of perfectionism, especially high personal standards, may facilitate academic engagement (including efficacy), a unique role different from that of the maladaptive ones.

The present study

Based on the above discussion, a model containing both negative and positive processes in the association between perfectionism and study-related mental states were

hypothesized as follows. As it is the first time that burnout and engagement are measured together in a Chinese student sample, their structure validity is tested in advance.

H1. Academic burnout and engagement are two latent structures rather than a single one of well-being, with "efficacy" better included as an engagement dimension than a reversely coded burnout one.

H2. For zero-order correlation analysis, maladaptive aspects of perfectionism are all positively correlated with burnout symptoms; adaptive aspects of perfectionism are all positively correlated with engagement dimensions.

H3. A dual-process model with maladaptive perfectionism predicting burnout, and adaptive perfectionism predicting engagement will be a good fit for the data.

Method

Participants

A total of 482 undergraduates (258 men, 212 women; 12 people did not report gender information) from a comprehensive university in mainland China participated in the study. There were 167 freshmen (34.6%), 101 sophomores (21.0%), 106 juniors (22.0%) and 103 seniors (21.4%), with 5 people (1.0%) missing their grade information.

Measures

Perfectionism was measured by a Chinese translation of Frost Multidimensional Perfectionism Scale (FMPS) (Cheng, Chong & Wang, 1999), with some expressions used in the items slightly modified in order to adjust to the language used in Mainland China. 31 items measuring five subscales (excluding Parental Criticism) were scored on a 5 point Likert Scale ranging from 1(totally disagreed) to 5 (totally agreed). Subscales of Concerns over Mistakes (CM), Doubts about Actions (DA), Parental Expectations (PE) were characterised as maladaptive, and those of Personal Standards (PS) and Organisation (OR) as adaptive (Chang et al., 2004; Zhang & Gan, 2006).

Burnout was assessed with a validated Chinese version of Maslach Burnout Inventory-Student Survey (MBI-SS), a modified version of MBI-GS adapted for use in student samples (Schaufeli et al., 2002a; Zhang, Gan, & Zhang, 2005). Items of three subscales, i.e. Exhaustion (5 items), Cynicism (5 items) and Efficacy (6 items), were all scored on a 7-point frequency rating scale ranging from 0 (never) to 6 (always).

Engagement was assessed with a validated Chinese version of the Utrecht Work Engagement Scale (UWES), with items refer to *work* or *job* replaced by *studies* or *class* (refer to UWES-Student version in Schaufeli et al., 2002b; Zhang & Gan, 2005). Similarly scored, items of the three subscales, (i.e. Vigor (6 items), Dedication (5 items) and Absorption (6 items)), were randomly merged with those of MBI-SS to avoid answering bias (Schaufeli et al., 2002b).

Procedures

Firstly, descriptive statistics and zero-order correlations were computed for all the subscales. Secondly, several confirmatory factor analyses (CFA) were performed to select measurement models best fit to the data. Finally, the hypothesized structure equation model (SEM) was tested, as well as other alternative solutions.

Maximum likelihood estimation methods and covariance matrix of the items were used in each analysis. The goodness-of-fit of the models was evaluated using the following absolute and relative indices: (1) the χ^2 goodness-of-fit statistic; (2) the Goodness of Fit Index (GFI); (3) the Adjusted Goodness of Fit Index (AGFI); (4) the Root Mean Square

Error of Approximation (RMSEA); (5) Comparative Fit Index (CFI). Measures of parsimony that assess the efficiency of models fit to a particular sample were used in CFA, including Aikaike Information Criteria (AIC) and Consistent Aikaike Information Criteria (CAIC) (Hao, Wen, & Cheng, 2004).

Methods of CFA and SEM were implemented by LISREL 8.20, and other statistical procedures by SPSS 13.0.

Results

Preliminary analysis

Item analyses as well as reliability and validity tests were carried out on each subscale. Two items of *Concerns over Mistakes*, one item of *Parental Expectations* and two items of *Personal Standards* revealed unsatisfactory discriminating indexes (less than 0.3, see Peng, 1989). Items mentioned above were excluded from further analyses. Subscales of MBI-SS and UWES-S, as well as the revised FMPS, all had sufficient reliability and validity (see Table 1).

Descriptive statistics and zero-order correlations

Means, standard deviations, and also the zero-order correlations of conceptions were calculated for each subscale, as shown in Table 1. Scores of two burnout subscales and three maladaptive perfectionism subscales were all significantly positively correlated. So were those of three engagement subscales plus efficacy and two positive perfectionism subscales. Our first hypothesis was firmly substantiated. Besides, cynicism was also significantly, but negatively correlated with the two positive perfectionism sub-conceptions, and so were dedication and efficacy with doubts about actions. Scores of burnout and engagement subscales were moderately negatively correlated (the Pearson *r* coefficients ranged from -.187 to -.417).

Burnout and engagement

Three models were compared regarding burnout and engagement: Model 1 assumed a single factor solution of the two measures, named study-related wellbeing; Model 2 assumed the original construct of MBI-SS and UWES-S, (i.e., Exhaustion, Cynicism and Efficacy) loaded on a latent burnout variable, whereas Vigor, Dedication and Absorption loaded on a latent engagement variable; Model 3 assumed an alternative two-factor solution shown in Table 3, with Efficacy loaded on engagement instead of burnout. The fit of the above measurement models were listed in Table 2.

Since these measurement models were not nested to one another, measures of parsimony were used here to evaluate and compare the efficiency of them, instead of χ^2-difference tests (Hao et al., 2004). The lower value of χ^2, RMSEA, AIC and CAIC, as well as higher value of GFI, AGFI, and CFI, all revealed that Model 3 was best fit to the data.

Research models

In order to test our research hypothesis, a dual-process structural model (M1) was first fitted to the data, with maladaptive perfectionism linked to burnout, and adaptive perfectionism linked to engagement. As can be seen in Table 3, the hypothesized dual-path model fitted well, with χ^2 /*df* less than 5, all fit indices greater than or very close to 0.9, and RMSEA less than 0.08.

Table 1 Means (M), standard deviations (SD), Pearson correlations and Internal consistency of study variables (N=482)

Variables	**M**	**SD**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1 Doubts about actions	12.3	3.2	**0.726**										
2 Concerns over mistakes	17.9	5	.377**	**0.812**									
3 Parental expectations	12	3.7	.158**	.245**	**0.786**								
4 Personal Standards	12.8	3	-0.012	.297**	.143**	**0.731**							
5 Organization	21.9	4.6	0.077	0.005	0.051	.248**	**0.851**						
6 Vigor	16.6	5.3	-0.048	0.064	0.039	.375**	.188**	**0.792**					
7 Dedication	17.4	5	-.096*	-0.008	0	.391**	.218**	.760**	**0.795**				
8 Absorption	13.9	4.4	-0.009	0.024	-0.007	.263**	.148**	.753**	.707**	**0.742**			
9 Efficacy	15.3	5.8	-.146**	-0.051	0.008	.402**	.195**	.680**	.762**	.600**	**0.804**		
10 Exhaustion	12.4	5.5	.390**	.242**	.108*	-0.065	-0.069	-.218**	-.271**	-.187**	-.316**	**0.788**	
11 Cynicism	10.3	5.1	.264**	.192**	.104*	-.182**	-.128**	-.384**	-.437**	-.315**	-.417**	.587**	**0.8**

Notes: (1) the Cronbach α of each subscale was listed in the diagonal in boldface type.
(2) * indicates $p<0.05$, ** indicates $p<0.01$

Table 2 the fit of second-order factor models of burnout and engagement (n=482)

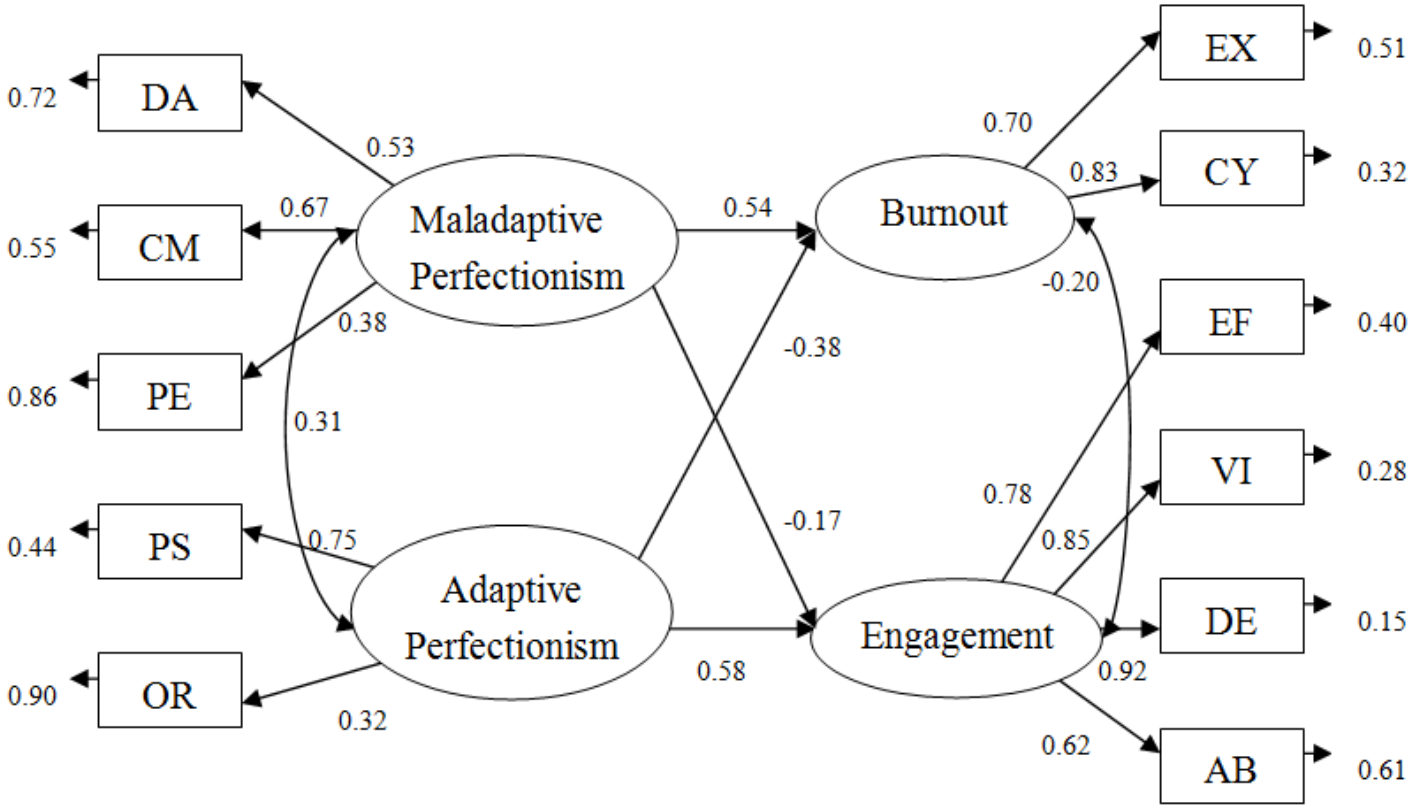
	χ^2	*df*	GFI	AGFI	CFI	RMSEA	AIC	CAIC
Model 1	146.59	9	.91	.78	.89	.18	170.59	232.72
Model 2	129.69	8	.92	.80	.91	.17	148.00	215.32
Model 3	46.25	8	.97	.92	.97	.08	72.25	139.56
Null model	1487.43	15	——	——	——	——	——	——

Table 3 the fit of the research models (n=482)

	χ^2	*df*	GFI	AGFI	NNFI	CFI	RMSEA
M1	193.81	40	.93	.89	.91	.93	.078
M2	128.12	39	.95	.92	.92	.95	.069
M3	122.63	38	.96	.92	.92	.95	.068
Null	1836.02	55	——	——	——	——	——

However, according to the correlation matrix and modification indices provided by the software, cross-links might exist as well. Thus two alternative models were fitted to the data: M2 assumed an additional path between adaptive perfectionism and burnout on the basis of M1; M3 assumed another additional path between maladaptive perfectionism and engagement on the basis of M2. χ^2-difference tests of the above three nested model revealed that solution with both cross-links identified (M3) fitted better than M1 ($\Delta\chi^2(2)$=71.17, p<0.001) and M2 ($\Delta\chi^2(1)$=5.49, p<0.05). Accordingly, M3 was made our final research model, with standardised paths and error coefficients listed in Figure 1. No errors of indicators were allowed to correlate in the above models.

Figure 1 the research model (standardized path and error coefficients)



Notes: DA, Doubts about actions; CM, Concerns over mistakes; PE, Parental expectations; PS, Personal standards; OR, Organization; EX, Exhaustion; CY, Cynicism; EF, Efficacy; VI, Vigor; DE, Dedication; AB, Absorption.

Discussion

The aim of the present study was to examine the association between perfectionism and study-related mental states among Chinese college students. Two unique processes were hypothesised, a negative one linking maladaptive perfectionism to academic burnout, and a positive one connecting adaptive perfectionism to engagement.

The hypothesis about structures of burnout and engagement was fully confirmed. Consistent with results in western occupational and student samples (Schaufeli et al, 2002a, Schaufeli & Bakker, 2004), burnout and engagement were negatively and moderately correlated conceptions, with efficacy, the positively worded subscale of burnout, better loaded on engagement instead. These findings showed that the higher-order structures of conceptions in our study were cross-culturally invariant.

The relationships between maladaptive perfectionism and burnout, as well as adaptive perfectionism with engagement were confirmed.

Compared to Freudenberger's theory that perfectionists were vulnerable to burnout due to their incapacity to achieve personal high standards, our study offers a different and more comprehensive view regarding this issue. A high standard someone sets themselves does not necessarily lead to negative outcomes. Firstly, goals are not always unrealistic and inaccessible, like what the neurotic perfectionists set themselves. In normal cases, they could be achieved through constant physical or intellectual efforts. Therefore, instead of distress and various negative emotions generated by failures, proper high personal standards may be accompanied by positive affect, such as joy, pride etc. from success most of the time (Frost et al, 1993; Chang et al, 2004), Secondly, even if the preliminary standard was beyond one's ability, it would not cause mental weariness as long as it was flexible and could be readjusted to a proper level. Though striving to excel, people own the natural ability to regulate their thoughts and actions according to previous errors or failures. Furthermore, a desire to keep organised may provide students a sense of clarity and effiency, plus a tidy physical environment, which might contain less distracting stimulus when students were trying to concentrate on their schoolwork (Bell, 1996). Labeled positive strivings by Frost and his colleagues (1993), adaptive perfectionism in our study significantly predicted academic engagement.

However, things were not always that perfect. An alternative cognitive and behavioural style of perfectionists is the pervasive concern of being imperfect. In college, feedbacks of one's academic performance are various and frequent, such as weekly or monthly quiz, mid-term and final-term examinations, annual competition for scholarships, etc. So the flawless self images that students hold in their minds are easily challenged, either by careless mistakes or true difficulties on certain subjects. In our study, concerns over such evidences of imperfection were found strongly related to exhaustion and cynicism. So were doubts about actions, the behavioral intention generated by the fear of undesired results. Perceived expectations from parents also acted as a maladaptive property, which could be categorised as introjection, a kind of extrinsic motivation that focused on gaining approval from others (Ryan & Deci, 2000). In an integrative model developed by Miquelon and colleagues (2005), socially-prescribed perfectionism enhanced extrinsic academic motivation, which led to higher level of psychological adjustment difficulties. In turn, self-oriented perfectionism facilitated self-determined academic motivation, which was linked to lower level of adjustment difficulties. Though students might have internalized their parents' expectations on their academic performance, the regulated thoughts and behaviors were not experienced as fully part of self, and might subsequently

point toward burnout. The different positions of "Parental Expectations" and "Personal Standard" in the latent structure of perfectionism corresponded to the self-determination theory of human motivation (Ryan & Deci, 2000).

Several practical implications relevant to theory could be made according to our research model and other findings. Firstly, perfectionism, as an individual attribute, is closely associated with academic burnout and engagement among Chinese college students. Therefore, it should be taken into consideration when implementing various cognitive and behavioral therapeutic techniques in school counseling, either to prevent or intervene burnout, or to facilitate engagement. Secondly, perfectionism has been demonstrated to be a complex attribute which is multidimensional. So practitioners should avoid automatically categorising students who exhibit perfectionistic characteristics into malfunctioning. Instead, specific assessment of those characteristics, especially whether there are self-critical concerns about imperfection which impede making efforts and thus progress, should be included in the evaluation process before jumping to a diagnosis. Thirdly, given that personal standards and organization in the current study were proved to facilitate academic engagement, some practical counseling strategies, like career planning and time management, should be especially beneficial for perfectionists in college. However, it is noticeable that previous studies concerning the consequences of setting goals have proved that learning goals are more conducive to excelling than performance goals (Elliott & Dweck, 1999). Since universities can be characterised as learning-oriented environments, and most workplaces as performance-oriented ones, whether the strong correlation between adaptive perfectionism and engagement in our study applies to occupational samples is still in need of further examination.

Limitations and future directions

Results of the current study might be limited for its cross-sectional design. The life rhythm for students is typically periodical, with a short cycle from every beginning of a new semester to its final examination, and a long cycle from orientation to graduation. Individual's level of academic burnout and engagement may vary regularly within the above periods. Future investigations should include longitudinal approaches into this issue, and test the function of perfectionism across time. Approaches that capture variation over multilevel time periods, such as hierarchical linear modeling (Chang, Lei, & Guo, 2003), or observing time variations intensively within a certain period (e.g., the diary method (Bolger, Davis, & Rafaeli, 2003), should be considered.

In addition, despite our hypothesis that maladaptive and adaptive perfectionism predict academic burnout and engagement respectively, the effects partly overlap. The cross links were significant, albeit much weaker than the hypothesised paths. The unclear boundary between adaptive and maladaptive perfectionism may account for this situation. The two latent variables of perfectionism were moderately positively related in the structural model. Together with maladaptive and adaptive perfectionists, there are non-perfectionists, who might score lowly on both latent dimensions (Rice & Dellwo, 2002). This could cause disturbing correlations among indicators in the measurement model, and could therefore affect relationships among latent variables. It might also undermine the fit of measurement models if correlation between errors of indicators was not allowed, as in the current study. Furthermore, deleted items and less satisfactory fit indices of FMPS may reveal a need for further revision of the measure, as well as bottom-up development of culturally appropriate instruments. In addition, other psychological variables might have involved in the relationship between perfectionism and study-related well-being, like stress (Chang et al, 2004) and academic motivation (Miquelon et al, 2005). More investigations

should be conducted to identify possible moderators or mediators under the current framework.

Conclusions

The current study has shown the relations of maladaptive and adaptive perfectionism with burnout and engagement in Chinese college students. It appears that high personal standards and desire to be organised serve as positive strivings and facilitate academic engagement. But evaluative concerns over mistakes, doubts about one's actions and expectations from parents act as maladaptive characteristics for students, and lead to burnout symptoms.

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CHAPTER 8:
Parenting Efficacy and Adolescent Self-Esteem in Chinese Families

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Abstract: Objective: The purpose of the study is twofold: (1) to examine the differential association of maternal and paternal parenting self-efficacy with adolescent self-esteem; (2) to examine the interaction of parenting self-efficacy and parenting behaviour across parents in association with adolescent self-esteem. **Method**: Self-report questionnaires on parenting self-efficacy, parental psychological control, parental coercive control, parental responsiveness, and adolescent self-esteem were collected from 156 families. **Results**: Fathers in general reported higher levels of parenting self-efficacy than mothers. Although parents within the same family reported similar parenting characteristics, the association of mother's and father's characteristics with adolescent self-esteem was different. Father's parenting self-efficacy was correlated with adolescent academic competence, whereas mother's responsiveness was correlated with adolescent global sense of self-worth. Parenting self-efficacy and parenting behavior across parents also interacted in explaining adolescent self-esteem. In general, when a parent was high on parenting self-efficacy, a psychologically controlling spouse was associated with poorer adolescent self-esteem. However, when a parent was low on parenting self-efficacy, a controlling spouse was associated with better self-esteem in the adolescent. **Discussion**: The association of psychologically controlling parenting behaviour with adolescent self-esteem was dependent on the other parent's level of parenting self-efficacy. Implications of findings are discussed.

Introduction

Parenting self-efficacy has been identified as a powerful predictor of parenting behaviors and child outcome (for a review, see Coleman & Karraker, 1997). Although the importance of parental cognitions in understanding parenting and child development has gained unprecedented attention in recent developmental research, a close examination of existing studies revealed several limitations. In particular, fathers are under-represented in existing studies. It is unknown whether fathers' and mothers' efficacy beliefs have differential association with adolescent adjustment outcomes. It also remains uncertain of how the interaction of father's and the mother's parenting characteristics relates to adolescent outcome. Furthermore, most studies on the impact of parenting self-efficacy on child outcome have been conducted in Western societies. There is a paucity of research in this area in the Chinese context. The current study attempts to redress the above knowledge gaps by examining the differential association of father's and mother's parenting self-efficacy with adolescent self-esteem in Chinese families.

Parenting self-efficacy

Parenting self-efficacy is defined as one's perceived capability to perform the various tasks associated with the parenting role and to impose positive influence on the development of children (Coleman & Karraker, 1997). It reflects parent's estimation of the degree to which he or she is able to function effectively and competently as a parent and to handle child problems (Mash & Johnston, 1990; Teti & Gelfand, 1991). According to Bandura's (1989) self-efficacy theory, parenting self-efficacy beliefs are comprised of both knowledge in childrearing and the degree of confidence in implementing behaviors associated with this demanding role. It plays a central role in determining adaptational outcome and role performance. Indeed, an expanding body of research has suggested a linkage between parenting self-efficacy and parenting behavioral competency. Mothers who report higher levels of self-efficacy beliefs are found to be more responsive, stimulating and non-punitive (Donovan & Leavitt, 1985), to be more accepting of their children (Dumka et al., 1996), and to have a higher ability to attend to and comprehend signals by infants (Donovan, Leavitt, & Walsh, 1990). In contrast, low parenting self-efficacy has been correlated with maternal control and defensiveness (Donovan et al., 1990), maternal depression (Teti & Gelfand, 1991), and the tendency to use harsh and coercive tactics to discipline the child (Bugental, Blue, & Lewis, 1990; Bugental & Cortez, 1988; Bugental & Shennum, 1984). Therefore, it is not surprising that parenting self-efficacy is associated with positive child outcomes and less problematic behaviors (Halpern, Anders, Coll, & Hua, 1994; Johnston & Mash, 1989). Although parental cognitions and their importance in understanding child outcomes have gained increasingly more attention over past decades, there is limited research in this area in the Chinese context. The role of the father's self-efficacy in explaining adolescent adjustment has likewise received little attention as most studies have exclusively examined mothers.

Differential roles of mother and father in Chinese culture

Fathers were under-represented in studies that examine the impact of parenting characteristics on adolescent developmental outcome (Paulson & Sputa, 1996; Phares & Compas, 1992), despite the fact that father is an important socializing agent who plays a different role than the mother in the socialization processes (Lamb, 1975, 1987; Lewis, 1986). In Chinese societies, differential roles of mothers and fathers are captured in the traditional cultural notion of "strict father, kind mother" (Wilson, 1974). The father is primarily responsible for training the child to achieve academically, to acquire societal values, and to learn appropriate behaviors by means of stern discipline (Ho, 1986, 1987). If a child fails to achieve to the highest level, the reputation of the family would be seriously impaired, and it is the father who is blamed (Mo, 1996). Therefore, the father is the authority figure in the family who is granted the legitimate power to administer punishment for correcting the child (Ho, 1986, 1987). The father is someone to be feared by the child, whereas the mother is regarded as warm, responsive, affectionate, and even indulgent (Ho, 1987). The mother is primarily responsible for the caretaking and nurturing of the child. Mothers in the Chinese societies are expected to provide warmth to the child and to assist children to develop adaptive interpersonal skills (Ho, 1987). Given differential roles of mothers and fathers, it is reasonable to expect that the father's parenting self-efficacy may be associated with adolescent adjustment in a differential manner than that of the mother. In particular, it is hypothesised that father's parenting self-efficacy will correlate with adolescent academic competence and behavioral control, whereas mother's parenting self-efficacy will correlate with adolescent social competence and global self-worth.

In addition, it is well established that the quality of parenting behavior is associated with adolescent adjustment, such as higher academic achievement, better

psychological well-being (Paulson, 1994; Steinberg, Elmen, & Mounts, 1989), higher social competence, and lower aggressiveness with peers (Harrist, Pettit, Dodge, & Bates, 1994; Kahen, Katz, & Gottman, 1994; Mize & Pettit, 1997). It is possible that the parenting behaviour of one parent may interact with the level of parenting self-efficacy of the other parent in explaining adolescent self-esteem.

For example, the presence of a high level of responsiveness in one parent may be associated with better adolescent adjustment when the other parent also reports a high level of parenting self-efficacy. On the other hand, high levels of psychological or coercive control may be associated with poorer adolescent adjustment when the other parent also reports a low level of parenting self-efficacy. Therefore, we also hypothesise that parenting self-efficacy and parenting behaviour across parents will interact in accounting for adolescent self-esteem.

Purposes and hypotheses of the current study

Given that fathers were underrepresented in developmental research, the association of paternal parenting self-efficacy with adolescent adjustment in the Chinese context remains uncertain. A more intriguing question that awaits scientific research to be answered is how the level of parenting self-efficacy in one parent interacts with the parenting behaviours of the other parent in accounting for adolescent adjustment. The current study attempts to redress the paucity of research by testing the following hypotheses:

Hypothesis 1: Father's parenting self-efficacy will correlate with adolescent academic competence and sense of behavioral control, mother's parenting self-efficacy will correlate with adolescent social competence and global self-worth.

Hypothesis 2: Parental psychological control will correlate with poorer adolescent self-esteem when the other parent reports a low level of parenting self-efficacy than when the other parent reports a high level of parenting self-efficacy.

Hypothesis 3: Parental coercive control will correlate with poorer adolescent self-esteem when the other parent reports a low level of parenting self-efficacy than when the other parent reports a high level of parenting self-efficacy.

Hypothesis 4: Parental responsiveness will correlate with better self-esteem when the other parent reports a high level of parenting self-efficacy than when the other parent reports a low level of parenting self-efficacy.Method

Sample and recruitment procedures

The data for the present study were part of a longitudinal study on parenting stress and adolescent developmental outcomes in Hong Kong. Invitation letters were sent to parents of all Secondary 1 (equivalent to Grade 7) students of a local high school. Parents were invited to complete self-report questionnaires concerning parenting self-efficacy, parenting behaviours, and demographic information. Adolescent children were also invited to separately complete questionnaires concerning self-esteem in four dimensions, including academic competence, sense of behavioural control, social competence, and global self-worth. Informed consent was also solicited from both parents. Completed questionnaires of parents and their children were then returned to the school in sealed envelopes to ensure confidentiality.

Of the 206 families invited to participate, data were collected from 156 adolescents (93 male and 63 female) and their parents, thus yielding a response rate of 75.7%. All families in the current study were intact families (i.e. both parents resided with

the adolescent child). The mean age of the present sample was 46.24 ± 6.83 for fathers, 41.66 ± 4.82 for mothers, and 12.28 ± 0.71 for the adolescent child.

Measurements

Parenting self-efficacy. The *self-efficacy subscale* of Gibaud-Wallston and Wandersman's (1977) Parenting Sense of Competence Scale was used in the present study. It measures parents' perceived capability to deal with various demands in the parenting domain and perceived familiarity with the parental role. This scale has demonstrated good reliability with Cronbach's alpha ranging from .79 to .82 (Cutrona & Troutman, 1986; Kwok & Wong, 2000; Wong, Lam, & Kwok, 2003). Construct validity was established by factor analysis and concurrent validity was established with efficacy score being correlated with general self-esteem (Cutrona & Troutman, 1986). Participants were to indicate their responses on a 7-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree). A higher score indicates perceived higher self-efficacy in parenting.

Parental psychological control, coercive control, and responsiveness. Parent's responsiveness, psychological control and coercive control were assessed by selecting appropriate items from the Parenting Practices Questionnaire (Robinson, Mandleco, Olsen, & Hart, 1995) as suggested by Hart and Nelson (1998). *Psychological control* is defined as parental behaviours that are psychologically intrusive with the attempt to manipulate, constrain, or invalidate children's psychological experience and to inhibit individuation (Barber, 1996). This form of covert manipulation involves the use of love withdrawal (e.g. ignoring child when he or she fails to meet parental expectations), guilt induction (e.g. telling child that he or she is inferior to other children), judging, devaluation, and withholding information (Bronfenbrenner, 1970; Peterson & Hann, 1999). *Coercive control* refers to overt verbal or physical attempts to exert control without rational reasons (Hoffman, 1980; Rothbaum & Weisz, 1994). *Responsiveness* refers to being sensitive and responsive to the child's needs and treating the child in a loving and caring way. Parents were to rate their parenting behaviors on a 5-point Likert scale with a higher score indicating a higher level of its respective dimension of responsiveness, psychological control, and coercive control. Hart and Nelson (1998) reported satisfactory reliability for the three subscales with Cronbach alpha values being .71, .73, and .76 respectively.

Adolescent self-esteem. The Self-Perception Profile for Children (Harter, 1985) was administered to measure adolescent self-esteem in four domains: *academic competence, social competence, behavior control, and global self-worth*. Each subscale comprised of six items, with each item comprising of two opposite statements (e.g. "Some children don't have very many friends" but "Other children have a lot of friends"). Participants have to choose which of the two opposite statements best describes them and then indicate whether the statement is *sort of true* or *very true* of them. Accordingly, this constitutes a 4-point Likert scale with a higher score indicating a higher self-esteem. Sample items were "Some children feel that they are very good at their school work but other children worry about whether they can do the school work assigned to them" for the *academic competence subscale*; "Some children find it hard to make friends but other children find it's pretty easy to make friends" for the *social competence subscale*; "Some children usually do the right thing but other children often don't do the right thing" for the *behavior control subscale*; "Some children are very happy being the way they are but other children wish they were different" for the *global self-worth subscale*. A Chinese version of the scale is available with satisfactory internal consistency (Chen, Liu, Rubin, Cen, Gao, & Li, 2002).

Demographic information. Parents were asked to provide information regarding age, education level, and family monthly income. Adolescents were asked to indicate their age and sex.

Statistical Analyses

Descriptive statistics including the mean, standard deviation, and reliability coefficient were analyzed. Paired-sample T-tests were conducted to compare the mean levels of parenting self-efficacy and each of the three types of parenting behavior between mothers and fathers. Bivariate correlation analyses were conducted to examine association among variables of parenting self-efficacy, parenting behavior, and adolescents' self-esteem. The influence of parenting self-efficacy and its interaction with the other parent's parenting behaviour on adolescent self-esteem were analyzed using hierarchical multiple regression analyses. The four criterion variables of adolescent self-esteem were academic competence, social competence, behaviour control, and global self-worth. Demographic variables including the parent's education level, family income, and the adolescent's sex were entered first to serve as control variables. In the next step, parenting self-efficacy and the three dimensions of parenting behavior: psychological control, coercive control, and responsiveness of each parent were forced into the regression model. In the final step, the interaction terms between parenting self-efficacy and parenting behaviour (mother's parenting self-efficacy x father's parenting self-efficacy, mother's parenting self-efficacy x father's psychological control, mother's parenting self-efficacy x father's coercive control, mother's parenting self-efficacy x father's responsiveness, father's parenting self-efficacy x mother's psychological control, father's parenting self-efficacy x mother's coercive control, father's parenting self-efficacy x mother's responsiveness) were entered freely into the equation using stepwise. Regression analyses and tests for interaction effects were conducted according to the procedures recommended by Aiken and West (1991): continuous predictor variables were standardized to eliminate the problem of multicollinearity and to make the first-order effects interpretable. When a significant interaction was detected, we used median-split to dichotomize continuous variables and plotted the pattern in graphs.

Results

Paired-sample T-Test revealed that fathers reported a higher level of parenting self-efficacy than mothers ($M = 3.72 \pm .63$ and $3.61 \pm .64$ respectively, $t = -1.98$, $p<.05$). Mothers and fathers did not differ in the mean levels of psychological control, coercive control, and responsiveness.

The Pearson correlation coefficients and descriptive statistics were presented in Table 1. Parenting self-efficacy and parenting behaviors were not significantly correlated with any of the four dimensions of adolescent self-esteem ($p > .05$). However, parenting characteristics across parents were significantly correlated. In particular, mother's parenting self-efficacy was positively correlated with father's parenting self-efficacy ($r = .35$, $p <.01$) and negatively with father's coercive control ($r = -.20$, $p <.05$). Mother's psychological control was correlated with father's psychological control ($r = .53$, $p <.01$) and coercive control ($r = .31$, $p <.01$). Similarly, mother's coercive control was correlated with father's psychological control ($r = .36$, $p <.01$) and coercive control ($r = .46$, $p <.01$). Mother's responsiveness were also positively correlated with father's responsiveness ($r = .60$, $p <.01$) and parenting self-efficacy ($r = .18$, $p <.05$).

To test the interaction between parenting self-efficacy and parenting behavior, a series of hierarchical multiple regression analyses were performed separately for the four domains of self-esteem. For academic competence, significant correlates were father's parenting self-efficacy (B = -.14, t = -2.16, p <.05) and its interaction with mother's psychological control (B = -.12, t = -2.10, p <.05; Table 2). To examine the interaction, we performed median splits on the scores of father's parenting self-efficacy and mother's psychological control to form four groups. The means of the four groups on academic competence were calculated and the pattern of interaction was depicted in Figure 1. When the father was high on parenting self-efficacy, a psychologically controlling mother was associated with poorer adolescent academic competence. However, when the father was low on parenting self-efficacy, a psychologically-controlling mother was associated with better adolescent academic competence.

For social competence, no one variable emerged as significant (Table 3). For behaviour control, the interaction term between mother's parenting self-efficacy and father's psychological control interaction term was the only significant correlate (B = -.13, t = -2.64, p <.01; Table 4). The pattern of interaction was depicted in Figure 2. When the mother was high on parenting self-efficacy, a psychologically controlling father was associated with poorer adolescent social competence. However, when the mother was low on parenting self-efficacy, a psychologically controlling father was associated with better adolescent social competence.

For global self-worth, the interaction term between mother's parenting self-efficacy and father's psychological control was the only significant correlate (B = -.11, t = -2.01, p <.05; Table 5). The pattern of interaction was depicted in Figure 3. When the mother was low on parenting self-efficacy, father's psychological control was not correlated with adolescent global self-worth. However, when the mother was high on parenting self-efficacy, a psychologically controlling father was associated with poorer global self-worth as perceived by the adolescent. In addition, mother's responsiveness was positively associated with adolescent global self-worth (B = .13, t = 2.02, p <.05).

Discussion

We obtained some interesting results of parenting in the current study. First, fathers on average reported a higher level of parenting self-efficacy than mothers.

Second, parenting self-efficacy and parenting behaviour of mothers and fathers were significantly correlated with one another. This suggested that parents within the same family displayed very similar characteristics of parenting. Third, the different domains of adolescent self-esteem were correlated with different parenting characteristics. Adolescent academic competence was correlated with father's parenting self-efficacy, whereas a global sense of self-worth was associated with mother's level of responsiveness. Fourth, the interaction of parenting self-efficacy and parenting behaviour across parents accounted for adolescent self-esteem. In particular, the influence of a parent's psychological control was qualified by the other parent's level of parenting self-efficacy.

We found that fathers relative to mothers in the present study generally perceived themselves as more efficacious in the parenting role. Goodnow (1985) postulated that actual experiences of childrearing and feedback from parent-child interactions were the major determinants of parents' perceived efficacy in overcoming challenges of parenting. During the transition to adolescence, mothers tend to report more conflictual relationships and negative affect with adolescent children than fathers, perhaps due to their greater involvement in the childcaring task (Collins & Russell, 1991; Montemayor, Eberly, &

Flannery, 1993). Researchers have also found that relationship with mother was ranked the most conflictual than other types of interpersonal relationships in adolescence (Laursen, 1995). The negative feedback and conflict experienced in parent-child interaction may render mothers to be less confident in dealing with challenges of the parenting tasks.

In our study, we found that although parents in the same family tended to display very similar parenting characteristics, their influence on adolescent self-esteem was different. We noted that father's parenting self-efficacy was associated with adolescents' academic competence, whereas mother's responsiveness was associated with adolescent global sense of self-worth. What is more interesting is that parenting self-efficacy interacted with psychological control across parents in accounting for adolescent self-esteem. Although the exact interactions differed across different dimensions of self-esteem, a general pattern emerged: When a parent had a high level of parenting self-efficacy, a psychologically controlling spouse was associated with poorer adolescent self-esteem. However, when a parent had a low level of parenting self-efficacy, a psychologically controlling spouse was associated with better adolescent self-esteem. It may be that when a parent perceives him/herself as inefficacious in the parenting role, he/she is not confident and unmotivated in bringing about positive influences on the development of their children (Coleman & Karraker, 2000). A controlling spouse may then compensate for this lack of parenting self-efficacy by actively disciplining the child for positive adjustment outcome. A recent study of Chinese parents (Shek, 2006) also found that parental psychological control was associated with parental discipline. However, at high levels of parenting self-efficacy, the beneficial effect of a controlling spouse not only disappears, but may even be detrimental to adolescent development. This is consistent with previous findings that psychological control undermines a child's psychological well-being (Smetana & Daddis, 2002). In other words, the influence of a parent's psychological control with adolescent self-esteem is dependent on his or her spouse's level of parenting self-efficacy. In view of the paucity of research on parenting self-efficacy in the Chinese context, this speculation is pioneering and awaits further research to be supported.

Findings of the current study should be interpreted with caution given the following limitations. First, the study was cross-sectional, implying that no causal relationship can be drawn. A prospective longitudinal study will provide a more rigorous investigation of the hypotheses. Second, the sample was comprised of Chinese participants who were of normal functioning. It is unknown whether the results can be generalised to clinical samples and samples in Western societies. Third, we relied solely on self-report questionnaires for data collection. Therefore, this data may be subject to bias and it is unknown whether similar findings would be obtained if other methods were used, such as behavioral observation, (Forehand & Nousiainen, 1993). Indeed, the inclusion of behavioral observation in real-life settings would be desirable.

Despite the above limitations, findings of the current study have significant implications for the field. Attention should be given to parents who are low in parenting self-efficacy, particularly to mothers who generally report being less efficacious than fathers. It is uncertain why mothers, who are more involved in the everyday caring of the adolescent child, are less confident in dealing effectively with challenges in the parenting role. The understanding of what contributes to the formulation of parenting self-efficacy is of paramount importance as low levels of parenting self-efficacy may be detrimental to adolescent self-esteem. Another interesting finding is that parenting characteristics across parents interact to account for adolescent self-esteem. There are two implications to this finding. First, fathers should be included in developmental research as they play a significant role in explaining the adjustment of adolescents. This emphasis has been

stressed a decade ago by Phares and Compas (1992), but unfortunately fathers remain under-represented in research. Second, developmental researchers and family therapists should not restrict their focus on the parenting characteristics of a particular parent, but instead on the interplay between parents in influencing the child. This is reasonable as the family is a unit within which dynamics among its members continuously act upon each other. Further research is necessary to explore the extent to which other dimensions of parenting characteristics interact to contribute to adolescent development.

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Table 1. Bivariate Correlation Matrix of Parenting Self-efficacy, Parenting Behavior, and Adolescent Self-esteem (N= 156)

	1	2	3	4	5	6	7	8	9	10	11	12
1. Mother's parenting self-efficacy	-	.01	-.15	.19*	.35**	-.08	-.20*	-.03	-.01	-.08	-.06	-.04
2. Mother's psychological control		-	.47**	.06	.00	.53**	.31**	.03	.05	.07	.05	.06
3. Mother's coercive control			-	-.04	-.06	.36**	.46**	.05	-.05	-.05	-.10	-.01
4. Mother's responsiveness				-	.18*	-.01	-.13	.60**	.05	-.03	.05	.11
5. Father's parenting self-efficacy					-	.11	-.06	.33**	-.14	-.10	-.02	-.01
6. Father's psychological control						-	.65**	.00	.07	.08	.05	.05
7. Father's coercive control							-	-.05	.02	.00	-.01	.03
8. Father's responsiveness								-	.01	-.01	.06	.01
9. Adolescent academic competence									-	.41**	.23**	.20*
10. Adolescent social competence										-	.42**	.34**
11. Adolescent behavior control											-	.62**
12. Adolescent global self-worth												-
Alpha value	.74	.80	.66	.81	.76	.82	.80	.82	.43	.58	.49	.54
Mean	3.61	2.16	2.20	3.17	3.72	2.12	2.16	3.08	2.36	2.22	2.22	2.37
Standard Deviation	.64	.64	.86	.76	.63	.65	.73	.77	.55	.53	.52	.52

* p<05; ** p<0.01.

Table 2. Results of Hierarchical Multiple Regression Analyses of the Association between Parenting Characteristics and Adolescent Academic Competence.

	Unstandardized Beta	t	R Square	F Value
Model 1			.02	.433
Mother's education attainment	-.05	-.91		
Father's education attainment	.04	.67		
Family income	-.05	-.85		
Adolescent sex	.01	.10		
Model 2			.14	1.30
Mother's education attainment	-.09	-1.50		
Father's education attainment	.08	1.20		
Family income	-.08	-1.31		
Adolescent sex	.01	.13		
Mother's parenting self-efficacy	.04	.67		
Mother's psychological control	.00	-.01		
Mother's coercive control	-.10	-1.15		
Mother's responsiveness	.09	1.45		
Father's parenting self-efficacy	-.16	-2.55*		
Father's psychological control	.01	.06		
Father's coercive control	.11	1.30		
Father's responsiveness	.03	.40		

Note: *p <.05, **p<.01

[1] Dependent variable = Adolescent academic competence

[2] Interaction terms that failed to enter the equation using stepwise regression analysis: mother's parenting self-efficacy x father's parenting self-efficacy, mother's parenting self-efficacy x father's psychological control, mother's parenting self-efficacy x father's coercive control, mother's parenting self-efficacy x father's responsiveness, father's parenting self-efficacy x mother's coercive control, father's parenting self-efficacy x mother's responsiveness

Figure 1. The interaction between father's parenting self-efficacy and mother's psychological control in association with adolescent academic competence.

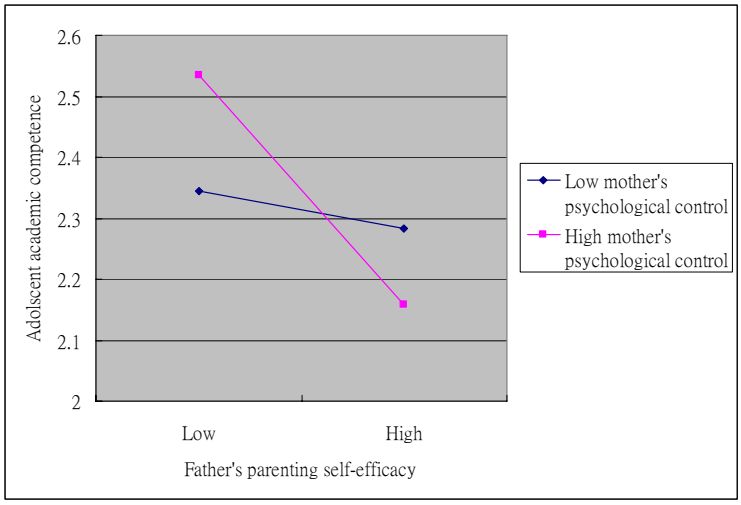


Table 3. Results of Hierarchical Multiple Regression Analyses of the Association between Parenting Characteristics and Adolescent Social Competence.

	Unstandardized Beta	t	R Square	F Value
Model 1			.03	.93
Mother's education attainment	.00	-.01		
Father's education attainment	-.07	-1.12		
Family income	.00	-.07		
Adolescent sex	.14	1.36		
Model 2			.11	.96
Mother's education attainment	-.02	-.31		
Father's education attainment	-.05	-.84		
Family income	-.02	-.34		
Adolescent sex	.15	1.41		
Mother's parenting self-efficacy	-.08	-1.31		
Mother's psychological control	.03	.41		
Mother's coercive control	-.04	-.51		
Mother's responsiveness	.01	.20		
Father's parenting self-efficacy	-.09	-1.48		
Father's psychological control	.06	.68		
Father's coercive control	-.05	-.65		
Father's responsiveness	.04	.67		

Note:
[1] Dependent variable = Adolescent social competence
[2] Interaction terms that failed to enter the equation using stepwise regression analysis: mother's parenting self-efficacy x father's parenting self-efficacy, mother's parenting self-efficacy x father's psychological control, mother's parenting self-efficacy x father's coercive control, mother's parenting self-efficacy x father's responsiveness, father's parenting self-efficacy x mother's psychological control, father's parenting self-efficacy x mother's coercive control, father's parenting self-efficacy x mother's responsiveness

Table 4. Results of Hierarchical Multiple Regression Analyses of the Association between Parenting Characteristics and Adolescent Behavioral Control.

	Unstandardized Beta	t	R Square	F Value
Model 1			.03	.94
Mother's education attainment	-.02	-.41		
Father's education attainment	-.01	-.22		
Family income	.10	1.91		
Adolescent sex	-.03	-.32		
Model 2			.07	.63
Mother's education attainment	-.02	-.38		
Father's education attainment	.00	-.06		
Family income	.10	1.76		
Adolescent sex	-.03	-.27		
Mother's parenting self-efficacy	-.07	-1.22		
Mother's psychological control	.07	.94		
Mother's coercive control	-.09	-1.03		
Mother's responsiveness	.02	.28		
Father's parenting self-efficacy	-.03	-.42		
Father's psychological control	.01	.09		
Father's coercive control	.00	.03		
Father's responsiveness	-.04	-.60		
Model 3			.13	1.15
Mother's education attainment	-.01	-.22		
Father's education attainment	-.02	-.40		
Family income	.09	1.51		
Adolescent's sex	-.01	-.05		
Mother's parenting self-efficacy	-.08	-1.30		
Mother's psychological control	.11	1.46		
Mother's coercive control	-.08	-.98		
Mother's responsiveness	.01	.11		
Father's parenting self-efficacy	-.02	-.32		
Father's psychological control	-.06	-.68		
Father's coercive control	.00	.04		
Father's responsiveness	-.04	-.60		
Mother's parenting self-efficacy x Father's psychological control	-.13	-2.64*		

Note: *p <.05, **p<.01

[1]Dependent variable = Adolescent behavior control

[2] Interaction terms that failed to enter the equation using stepwise regression analysis: mother's parenting self-efficacy x father's parenting self-efficacy, mother's parenting self-efficacy x father's coercive control, mother's parenting self-efficacy x father's responsiveness, father's parenting self-efficacy x mother's psychological control, father's parenting self-efficacy x mother's coercive control, father's parenting self-efficacy x mother's responsiveness

Table 5. Results of Hierarchical Multiple Regression Analyses of the Association between Parenting Characteristics and Adolescent Global Self-Worth.

	Unstandardized Beta	t	R Square	F Value
Model 1			.01	.28
Mother's education attainment	-.03	-.54		
Father's education attainment	.01	.14		
Family income	.05	.90		
Adolescent sex	.02	.20		
Model 2			.10	.85
Mother's education attainment	-.02	-.35		
Father's education attainment	.02	.32		
Family income	.03	.43		
Adolescent sex	.04	.37		
Mother's parenting self-efficacy	-.047	-1.10		
Mother's psychological control	.10	1.27		
Mother's coercive control	-.13	-1.37		
Mother's responsiveness	.14	2.13*		
Father's parenting self-efficacy	.00	.04		
Father's psychological control	-.07	-.78		
Father's coercive control	.12	1.44		
Father's responsiveness	-.10	-1.52		
Model 3			.13	1.12
Mother's education attainment	-.01	-.23		
Father's education attainment	.00	.06		
Family income	.01	.22		
Adolescent's sex	.06	.54		
Mother's parenting self-efficacy	-.07	-1.11		
Mother's psychological control	.13	1.64		
Mother's coercive control	-.12	-1.33		
Mother's responsiveness	.13	2.02*		
Father's parenting self-efficacy	.01	.13		
Father's psychological control	-.12	-1.34		
Father's coercive control	.12	1.46		
Father's responsiveness	-.10	-1.53		
Mother's parenting self-efficacy x Father's psychological control	-.11	-2.01*		

Note: *p <.05, **p<.01

[1] Dependent variable = Adolescent global self-worth

[2] Interaction terms that failed to enter the equation using stepwise regression analysis: mother's parenting self-efficacy x father's parenting self-efficacy, mother's parenting self-efficacy x father's coercive control, mother's parenting self-efficacy x father's responsiveness, father's parenting self-efficacy x mother's psychological control, father's parenting self-efficacy x mother's coercive control, father's parenting self-efficacy x mother's responsiveness

Figure 2. The interaction between mother's parenting self-efficacy and father's psychological control in association with adolescent behavior control.

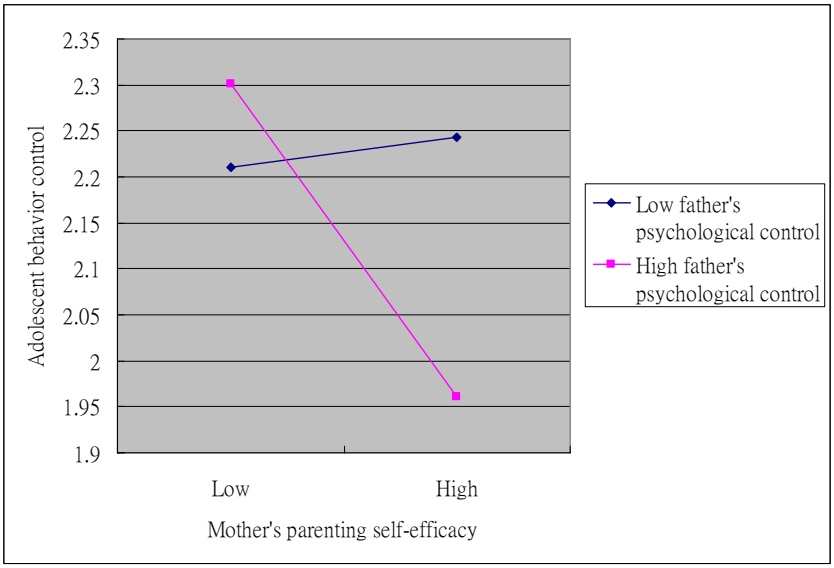
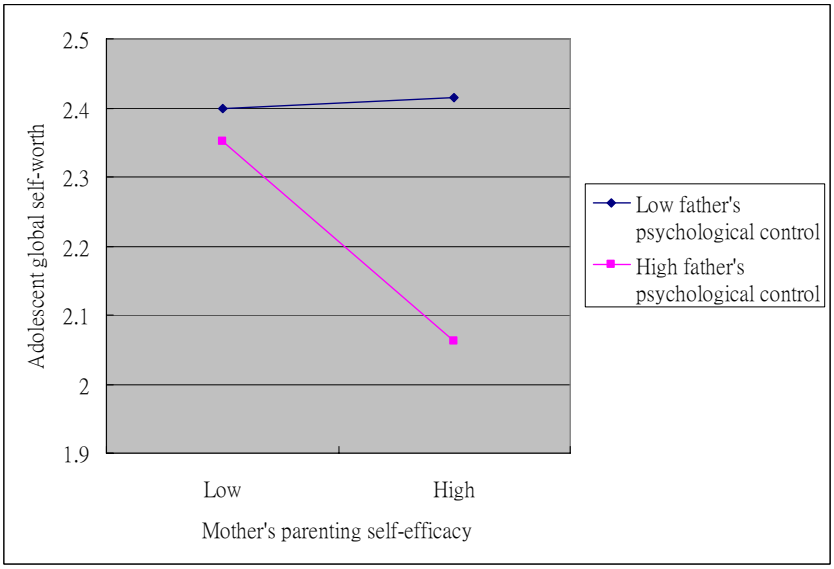


Figure 3. The interaction between mother's parenting self-efficacy and father's psychological control in association with adolescent global self-worth.



SECTION B

Current Asian Psychotherapeutic Approaches

CHAPTER 9:
Buddhist Psychotherapeutic Approach to Depression

Ming Lee and David Geffen

Abstract: More than 120 million people currently suffer from depression. Although the economic cost for the treatment of this disorder is high, the cost in human suffering is beyond estimation. Appropriate treatment, however, can help most patients with this disease. A number of treatment modalities have been applied to the patients with depression and their efficacies have been extensively studied. It is now generally believed that antidepressant medications, short-term psychotherapies, especially cognitive-behavioral therapy and interpersonal therapy, and a combination of the two have proven effective for depression. The evidence regarding prevention of depression from initially occurring, or recurring, however, is less conclusive.

This paper proposes an alternative model, named Buddhism-informed cognitive-behavioral therapy, which integrates Buddhist concepts and practices with cognitive-behavioral interventions. The model is developed in the hope that this new psychotherapeutic approach will be effective not only in the treatment but also prevention of depression so that more human suffering may be alleviated.

Introduction

Depressive disorders are the most common forms of mental disorders in community and health care settings (Weissman, Bland, Canino, et al., 1996). According to the Global Burden of Disease study conducted by the World Health Organization and the World Bank (Murray & Lopez, 1996), depression was the leading cause of years lived with a disability (YLDs) and the fourth leading contributor to the global burden of disease measured by disability-adjusted life years (DALYs). Disability associated with depression is greater than that reported for other chronic diseases such as hypertension, diabetes, arthritis and back pain. Under the most conservative estimates, the burden of depressive disorders will increase by at least 50% by 2020 to become the second leading cause of disability measured by DALYs calculated for all ages and both sexes (Murray & Lopez, 1997; World Health Organization [WHO], 1999).

With a tradition overwhelmingly concerned with human well-being and alleviation of suffering, Buddhism has presented itself as a rich source of psychological theories and practices. A number of researchers have already examined the psychotherapeutic applications of Buddhist psychology (e.g., Goleman, 1985; Loy, 1992; Mruk & Hartzell, 2003). Mindfulness, for example, a type of traditional meditation training in Buddhist practice, has received broad attention and applications among Western psychotherapists (e.g., Baer, 2003; Germer, 2005; Kabat-Zinn, 2003). Many Western therapists have adopted meditation or Buddhist philosophy as a way to cultivate their own mind and improve their own well-being before beginning their professional careers (Germer, 2005).

In 1977, the American Psychiatric Association even called for an investigation of the clinical effectiveness of meditation. In 1979, Jon Kabat-Zinn established the Center for Mindfulness at the University of Massachusetts Medical School to treat individuals with chronic conditions for which their physicians could not offer further help. The Center has provided its mindfulness-based stress reduction (MBSR) program to over 15,000 patients, not including participants in over 250 MBSR programs around the world (Davidson & Kabat-Zinn, 2004).

A number of psychotherapists have also applied mindfulness to the treatment of depression and demonstrated its efficacy and effectiveness (e.g., Lynch, Morse, Mendelson, & Robins, 2003; Segal, Williams, & Teasdale, 2002). Mindfulness is a key component of acceptance and commitment therapy ([ACT] Hayes, Strosahl, & Wilson, 1999), which focuses on full acceptance of present experience and mindfully letting go of obstacles. Preliminary research using randomised, controlled trials shows evidence for the efficacy of this modality in treating depression (Zettle & Raines, 1989).

Another treatment approach that uses mindfulness training, dialectical behavior therapy ([DBT] Linehan, 1993), is designed to train patients to regulate their emotions, including the emotions and behaviors associated with depression. DBT therapists use techniques to help patients accept their emotions and then to change their emotional experience. Mindfulness is the technique they use to reduce avoidance of negative emotions through awareness of their existence. Although DBT has scientifically demonstrated its efficacy mainly in the treatment of borderline personality disorder, one study has also shown that DBT is effective for treating depression in old age (Lynch, Morse, Mendelson, & Robins, 2003).

Segal, Williams, and Teasdale (2002) combined mindfulness practice with cognitive therapy to treat individuals who had recently recovered from depression with the aiming of preventing relapse. They designed an 8-session program, followed by four follow-up meetings in the year after the program. When comparing the patients going through this program with those in a "treatment as usual" control group, they found that in patients with three or more depression episodes, the mindfulness-based cognitive therapy (MBCT) significantly reduced relapse within the full 60-week study period by showing a 37% relapse of the experiment group, compared with a 66% relapse of the control group. In patients with two or fewer previous depressive episodes, however, there was no significant treatment effect. As the intervention was delivered in a group setting to eight patients simultaneously, the researchers claimed that MBCT demonstrates more cost-effective benefits than conventional, individual cognitive therapies, especially for recurrent patients.

Although various treatment interventions have proved effective in the treatment of depression, the relapse (or recurrence) rate is still a major concern for mental health care providers. The recurrence rates estimated in the United States show that at least 50% of patients who recover from an initial episode of depression will have at least one subsequent depressive episode, and those with a history of multiple episodes will have a 70-80% likelihood of recurrence in their lives (Consensus Development Panel, 1985). In approximately 20% of depressive patients the illness develops into a chronic problem with no remission (Thornicroft & Sartorius, 1993). These statistics indicate that relapse and recurrence following successful treatment of depression are common, and, hence, more effective treatment modalities with long-term effect need to be developed. An alternative model of mindfulness-based treatment approaches is proposed below, which integrates insights derived from Buddhist philosophy and therapeutic applications with cognitive-behavioral interventions and psycho-educational concepts.

Buddhism-Informed Cognitive-Behavioral Therapy: A Proposed Model

The proposed Buddhism-informed Cognitive-Behavioral Therapy (BCBT) consists of several major components. A brief description of these components and the rationale for their inclusion in the model is provided as follows.

Concentration Meditation

Meditation practiced by Buddhists can generally be classified into two categories: concentration and mindfulness (or insightfulness) meditation. Although the two are frequently practiced simultaneously or interchangeably, concentration meditation is usually considered the fundamental training for the practice of mindfulness meditation. It is through concentration meditation that the mind will become tamed and focused, based on which mindfulness will become easy and manageable to practice. Both types of meditation can be practiced in either a sitting position or daily activities. The former practice, in a sitting position, is usually learned first to be skillful enough before the latter practice, in daily activities, can be effectively performed. When mindfulness is applied in moment-to-moment daily life as adopted by all mindfulness-based psychotherapies, a focused mind is especially needed and functions as a prerequisite for an effective mindfulness practice. It is therefore suggested that at least two sessions devoted to teaching and practicing concentration meditation in a sitting position be incorporated into BCBT before the launch of the mindfulness practice.

Counting one's own breath repeatedly from 1 to 10 is a recommended method for this training as it is at remains neutral in religious or cultural affiliation. Patients are encouraged to practice concentration meditation on a daily basis, beginning with 10 minutes each time and gradually extending to at least 30 minutes. They need to keep this practice even after they are taught to practice mindfulness. The purpose of this training is mainly to prepare patients for moment-to-moment mindfulness practice.*Moment-to-*

Moment Mindfulness Practice

Mindfulness is generally considered an enhanced attention to and moment-by-moment awareness of current experience or present reality (Brown & Ryan, 2003). Mindfulness applied in every moment of daily life has been shown to be an effective means of treating depression. Mindfulness helps the depressed to be aware of their feelings, thoughts, and physical discomforts, and hence to come to terms with these states. With the preliminary training in concentration meditation, (as described above), it is believed that mindfulness will be more effectively practiced by, and hence more beneficial to, the depressed.

After the suggested two sessions on the instruction and practice of concentration meditation, the training is recommended to be followed by at least two sessions on the training of mindfulness. The training can start with meditating in a sitting position (mindfulness meditation) by attentively observing breathing and other physical and mental experiences through the five sensory organs and the mind. Patients should be instructed to pay attention to the arisen feelings and thoughts but not to be "trapped" in these experiences nor critical or judgmental about the experiences. Their minds should focus on the here and now without ruminating over any arising thoughts. Other strategies used by mindfulness-based therapists, such as observing and tasting a raisin (Segal, Williams, & Teasdale, 2002), may also be adapted as initial training methods.

During and after the two-session training in mindfulness meditation, patients are encouraged to practice mindfulness in their daily activities and share their experience either through writing or oral conversation with the therapist. The purpose of this training, as

elaborated by other mindfulness-based therapists, is to focus the patient's mind on his/her present experience so that an authentic sense of reality may be developed and illusory thoughts can be avoided.

There are, however, warnings by some practitioners who had a depressive experience against practicing either concentration or mindfulness meditation when the depression is too severe as the depressed may not be able to handle the strong destructive emotions, thoughts or traumatic experiences at the time (Moon, 2006; Tan, 2006). Therapists should therefore carefully examine the patients to determine the right timing for the above two practices, and closely monitor the progress of the patients during the treatment.

Mental Transformation

Many mindfulness-based therapies do not blend into their treatment a vigorous psycho-educational component with the goal of transforming the false reasoning and cognition to a more rightful one. A cognitive domain is normally included in cognitive-behavioral therapies (CBTs) or cognitive therapies (CTs), which features a variety of cognitive restructuring techniques aimed at correcting patients' maladaptive cognitive patterns and negatively distorted thoughts (Sanderson & McGinn, 2001). These approaches, although usually incorporating an educational session to explain the rationale for introducing the technique, emphasise methods for symptom alleviation rather than an education to guide the development of proper views of life and life-related issues that go beyond the immediate symptom-related problems. It is believed that the lack of this latter component in CBTs and CTs significantly limits the long-term effect of these approaches in preventing depressive symptoms from relapse or recurrence, despite strong empirical evidence supporting its efficacy in treating initial depression.

It is to correct this shortcoming of CBTs and CTs that the proposed BCBT incorporates the following concepts and techniques based on Buddhist teachings.

Concepts:

1) *Everything is impermanent:* Nothing in this world will exist forever without changes, including depressive states. Everything arises when the right causes and conditions are there; everything extinguishes when the causes and conditions that support its existence are not there any longer. This impermanent nature of existence applies to everything in our life and this world, including our body, mind, mental states, relationships with others, all of our material possessions, and everything in our environment. The nature of impermanence will not only bring hope to depressive patients about curing their illness, decrease their attachment to any adored things or persons, but also help them to accurately analyse and understand their life and circumstances to prevent depression from relapse or recurrence. The understanding of impermanence will also facilitate the depressed to focus on the present moment, as nothing in the past or future can be adhered to, hence indirectly enhancing their mindfulness practice.
2) *Every experience is suffering in nature:* Although some of our experiences in this life may feel joyful and enjoyable, they are subject to change. The discontinuation of these pleasant experiences will then bring us agony or miserable feelings. The Buddha did not deny that there is happiness in life, but he pointed out that happiness does not last forever and when one loses it, there is suffering. The suffering experiences are classified into eight categories: birth, old age, illness, death, being apart from those we love, being with those we dislike, not getting

what we want, and the constant interaction between our body and mind. The teaching of this concept to the depressed will help them to face their own depressive feelings with a more peaceful mind after they understand life is pain in nature, and accept their feelings so that they will be capable of analyzing the causes of their suffering and working on ways to end it. The ways to cease suffering, as taught by the Buddha, are to follow the steps of the Noble Eightfold Path, which will be discussed below.

3) *Everything has no self nature:* As everything is constantly changing, there is no permanent self nature that can be ascribed to, including self characteristics so frequently identified by the depressed as self-inadequacy, self-worthlessness and hopelessness. The self is but a convenient name for a collection of factors. So long as we cling to this notion of an independent self and develop a strong self identity, we will always act to defend ourselves, including our opinions, preferences, prestige, possessions, and even our feelings and words. This self identity, or belief in a set of characteristics that we use to identify, imagine, or conceive of ourselves as a permanent entity, immediately separates ourselves from other human beings and our surrounding environment. It hinders our interactions and relationships with others, and becomes the source and cause of all suffering. Depression, like all the other things with or without a substantial form, depends on many causing conditions to arise, such as those biological (e.g., genetic predisposition, biochemical imbalance), psychological (e.g., low self-esteem, poor adaptive skills), and social (e.g., urbanisation, poverty) factors identified by researchers (e.g., NIMH, 2000; Swartz, 2006). Contemplating on the true nature of no-self will not only re-direct the depressed from their ruminated negative thoughts but guide them toward an enlightened state to end the haunting of depression in their lives.
4) *Nothing ever happens to us without ourselves as a cause:* This law of cause and effect, called karma, is another core concept in Buddhism. Karma refers to the total effect of a person's actions and conducts on his/her subsequent phases of existence. Buddhists believe that karma explains the differences between living beings and the circumstances living beings find themselves in. Our wholesome actions will produce wholesome karma (e.g., happiness), whereas our unwholesome actions will produce unwholesome karma (e.g., suffering). The notion of karma, or the law of cause and effect, helps individuals to refrain from unwholesome acts and stops us from blaming others for our own mistakes. This concept should also help the depressed closely watch their thoughts, cease rootless ruminated ideas they have toward themselves or their circumstances, and develop positive, realistic, and rational thinking.

Techniques:

1) *Positive Thinking: Th*e cognitive therapy is based on the premise that an individual's perception of the self and life experience determines his/her emotional states, physical conditions, and behaviors (Beck, et al., 1979). This conceptual framework is adopted by BCBT as it is also taught in Buddhism, especially the Yogacara, or Mind-Only, School of Buddhism. As a major symptom of depressed patients is a negative view of themselves (e.g., worthless, inadequate, unlovable, deficient), their environment (e.g., overwhelming, filled with obstacles and failure), and their futures (e.g., hopeless, impossible to change) (Beck, 1983), it is imperative to educate patients to think positively and realistically. Patients need to

know that there is always an alternative way of perceiving things. For example, depression may not be a pleasant experience, but it enriches our life experience and enables us to help those who are in a depressive state. Through positive thinking, patients will be able to keep their mind in a state of calmness, and the suffering they experience from depression may be transformed into happiness.

2) *Compassionate Thoughts toward Others:* The thoughts and emotional states that depressed patients experience tend to be narcissistic in nature; that is, they are self-centered, self-cherished, and exclusive from outside reality. Self-obsession smothers consideration for the needs of others and withdraws patients into their own world. Therefore, one way to transform this narcissism is to switch the focus of attention from self to others by attending to others' feelings and needs and helping them to solve their problems. Encouraging the depressed to cultivate compassion and loving kindness may make them realise that there are people who are even more unfortunate than they and that they could be very valuable to those in need of help. Several techniques may be used to instruct depressed patients how to cultivate compassion, such as (1) including good wishes to others in their mind or daily prayer; (2) always returning merits of their wholesome conduct to others, especially those in pain; and (3) keeping a record that shows daily compassionate actions, including thoughts, performed toward others.
3) *Thinking from Others' Perspectives*: Compassionate thoughts and actions can be deepened and expanded if one can think from the perspectives of those who are suffering. As the causes of depression are frequently rooted in interpersonal relationships, the development of an other-centered thinking style will help improve the relationships with others and stop one from pointing the finger of blame at others. Through the practice of thinking from others' perspectives, the depressed may eventually realise the cause of depression is in their own mind, and hence the cure is also embedded in their own mind.

Behavioral Self-Regulation

Following the Buddhist tradition that emphasises both cognitive understanding and physical practice in an effort to alleviate suffering, the BCBT is also comprised of both aspects of mental control and transformation as well as behavioural restriction. To achieve the latter goal, the following two approaches are proposed:

1) *Observing the Five Precepts*: As described above in the concept of karma, everything that we experience in our life has its causes rooted in our own conduct. To prevent unwholesome karma from negatively affecting our life, we will need to actively cultivate our mind and regulate our behavior. The five precepts include no killing, no stealing, no sexual misconduct, no lying, and no use of intoxicants to maintain careful consciousness. The five precepts are considered five gifts which bring freedom from oppression to the one observing them and to the limitless numbers of beings this person interacts with (Access to Insight, 2005). It should be noted that the rule of no intoxicants can be extended to no unrealistic negative thoughts as these thoughts also contaminate the mind and prevent it from staying in the state of careful consciousness.
2) *Following the Noble Eightfold Path*: The Noble Eightfold Path is an extension of the five precepts as the former encompasses the latter. The Noble Eightfold Path depicts eight steps in the path that will lead to liberation from the suffering of human beings. These eight steps include:

- *Right View*: Right view refers to the right way to view the world; that is, seeing things simply as they really are, instead of as what they appear to be or are perceived or expected to be by the individual. The core Buddhist concepts described above, including the notions that everything is impermanent, every experience is pain (or suffering) in nature, everything has no self nature, and nothing ever happens to us without ourselves as a cause, are all right understanding of the world.
- *Right Thought*: Right thought refers to the thought produced by a pure mind; that is, thinking things without desire, ill-will, and ignorance. Right view removes ignorance, whereas right thought removes desire and ill-will. The two practices therefore work to remove the causes of suffering and lead to enlightenment.
- *Right Speech*: Right speech refers to saying what needs to be said and in a genuine way; that is, avoiding lying, slander, harsh speech, and idle talk. One should also actively say kind, compassionate, and helpful words to others to bring them happiness.
- *Right Action*: Right action refers to the action that entails respect for others, respect for life, respect for property, respect for the environment, and respect for personal relationships.
- *Right Livelihood*: Right livelihood refers to the right way of making a living in a society. Following the same principle under right speech and right action, one ought not to earn a living in such a way that will bring harm to other beings, property, or our environment.
- *Right Effort*: Right Effort is defined fourfold, including the effort to prevent unwholesome thoughts and actions from arising, the effort to eliminate unwholesome thoughts and actions that have arisen, the effort to cultivate wholesome thoughts and actions that have not yet arisen, and the effort to maintain wholesome thoughts and actions that have arisen. To every step of the Eightfold Path, this effort should always be applied.
- *Right Mindfulness:* Right mindfulness refers to the right way of being aware of our thoughts, feelings, and actions at every moment in our daily life.
- *Right Concentration:* Right concentration refers to focusing the mind single-pointedly upon one thought or object at a time. When total single-pointedness of the mind upon a single object is achieved through concentration, the mind is totally absorbed in the object to the exclusion of all distractions, rumination, agitation, or drowsiness.

Through observing the five precepts and practicing the eight steps of the Noble Eightfold Path in daily life, depressed patients will be engaged in moral conduct, stay in a calm and clear mind, and develop realistic and positive thoughts and ideas about their life. These qualities will ensure them a life free of depression.

There is no firm timetable proposed for the model. The implementation of each component mainly depends on the progress of each patient. Nonetheless, a sequential process with a rough timeline may be suggested as follows, assuming a total of 10 1-hour therapy sessions:

- Begin the treatment with two sessions on the instruction and practice of concentration meditation;

- Follow by two sessions on the instruction and practice of mindfulness and mindfulness meditation;
- Use one session each to teach the four Buddhist concepts; in the meantime, introduce the three thinking techniques using examples that correspond with each concept;
- Use one session each to teach the two approaches to behavioral self-regulation.

Each of the therapy session should be followed by sitting meditation and mindfulness practice at home. A report, written or oral, should be required to be due at the next session about practicing experience and reflection on the learned concepts. The therapy may be conducted either in a group or individually.

Conclusion

Literature shows an increasing prevalence of depressive disorders across the world. The treatment of the illness and the loss in the workforce and personal life as a result of this illness has become a substantial economic burden for humankind. A variety of treatment modalities have demonstrated that depression is treatable, and the psychotherapy focusing on cognitive-behavioral changes or interpersonal relationship improvement is as effective as medication for (at least) those patients with a mild or moderate degree of severity. All the existing treatment approaches, however, still cannot effectively and completely prevent the illness from relapse or recurrence.

A cognitive-behavioral psychotherapeutic model based on Buddhist concepts and practices, named Buddhism-informed Cognitive-Behavioral Therapy (BCBT), is proposed. The model is designed based on several hypotheses: (1) a treatment of depression as symptom management is not enough; (2) an effort on transforming the patient's mind is necessary for preventing relapse or recurrence; and (3) a few sessions of education and practice based on Buddhist teachings need to be incorporated into psychotherapy for the purposes of inducing mental transformation and long-term treatment effect.

The proposed BCBT consists of the following components: (1) concentration meditation; (2) moment-to-moment mindfulness practice in daily life; (3) mental transformation – through the teaching of Buddhist concepts of the three characteristics of existence (impermanence, suffering, and selflessness) and the law of cause and effect, as well as using the techniques of positive thinking, compassionate thoughts towards others, and thinking from others' perspectives; (4) behavioral self-regulation – through observing the five precepts and following the eight steps of the Noble Eightfold Path.

As mindfulness has been proven effective in treating depression and is originated in Buddhism, it is included in the BCBT model. Concentration meditation can help facilitate and enhance the practice of mindfulness. The introduction of both concentration meditation and mindfulness into the treatment course should be monitored closely. Literature has shown that if depression is too severe or involves traumatic experiences, meditation may be detrimental to the patient. Lack of mental transformation in patients is believed to be the major reason for relapse and recurrence. Many Buddhist concepts challenge and contradict ordinary beliefs and thoughts, and are therefore useful for educating the depressed to perceive things differently. The four concepts included in the model are the core Buddhist teachings and are believed to be particularly helpful for treating the depressed mind. The proposed three techniques for changing thinking style and content are designed to accompany the teaching of the Buddhist concepts so that mental

transformation may be strengthened. As the name of the model indicates, solely managing the cognitive domain is not enough for treating patients and sustaining a long-term treatment effect. Depressed patients also need to regulate their actions to both correct their past mistakes and prevent new mistakes from being produced again. Observing the five precepts will passively prevent wrongful actions, whereas practicing the eight steps of the Noble Eightfold Path will actively produce wholesome actions and thoughts. By understanding the Buddhist teachings and practicing them in daily life, depressed patients are expected to be mentally and behaviourally transformed.

The proposed model is subject to modifications after implementation and scientific examination. It is, however, proposed in the hope that by adding the component of Buddhist teachings to the traditional cognitive-behavioral therapies, the problem of relapse and recurrence in the treatment of depression may be reduced and prevention of depression from happening in the first place may be possible.

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CHAPTER 10:
A Cognitive-Behavioural Approach To Karma Modification

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Abstract: In a "New Buddhist Psychology" meaning is derived from the compassion and care for relationship with others in harmony with ourselves. A cognitive-behavioural approach adds an extra dimension by its evidence-based standard as a criterion to apply interventions. Both Cognitive-Behaviour Therapy and pan-Buddhist principles share the centrepiece that it is not the things that emotionally upset us, but our own perceptions, beliefs, and attitudes about those things. On the surface, neither of the two practices endorses a "ghost in the machine". However, CBT is not meditation. Whereas cognitive restructuring aims at changing mind's content, mindful awareness meditation neutrally observes the momentary processes of thinking-feeling-behaving, while radically allowing whatever passes the space of body/mind to be there. As a technique, mindful awareness seems to have gained momentum to become an indispensable component of mainstream therapeutic procedures that is capable of expediting salubrious clinical outcomes. The successful inclusion of meditation invites further exploration of whether other Buddhist practices can be applied in a cognitive-behavioural context. This culminated in a cross fertilisation of the two change methods. "Karma modification" puts affect in the centre of a functional analysis on how intentional (cognitive) activities (behaviours) relate to emotional disturbance and all its ramifications. These are cyclical in nature and need to be broken up in order to alleviate psychological suffering. If the fusion of Buddhist essentials and cognitive-behavioural practice is accepted by mainstream professionals, a Kuhnian paradigm shift is presently taking place, not only in clinical psychology, but in buddhology as well. The latter implies that at this juncture in history the Buddhist heritage is on the cutting edge moving away from religion, metaphysics, and philosophy toward an applied science of contemporary professional psychology.

Introduction

There is a growing interest, worldwide, amongst scientists-practitioners in the Buddhist Teachings (Dharma/Dhamma) as an applied science of psychology and a means to guide peoples' ways of living toward emotional balance (e.g., Docket, Dudley-Grant, & Bankart, 2003; Kwee, Gergen, & Koshikawa, 2006; Wallace & Shapiro, 2006). Up until today, the Dharma is considered by many, Buddhists and non-Buddhists, to be a religion and a philosophy. However, because these two words/concepts do not exist in the pristine Buddhist languages, it is neither. Siddhartha Gautama, the Buddha – who lived around 563-483 Before Common Era – never claimed to be an intermediary between human beings and the beyond, a messiah, a prophet, or anything else other than a human being who just happens to be "awake". The Dharma's quintessence is the practice of meditation, a day-to-day application, which offers the foundation to ground a this-worldly and down-to-earth

way of living toward contentment. Right from the start, the Buddha discouraged metaphysical musings, ritualistic cults, and other sidetracks that do not contribute to liberation from "existential suffering". Dissatisfaction, distress, and disarray – inherent in life that decays from birth on – continue to appear as a result of the universe's impermanence and the human neurotic predicament to long for unattainable perfection. Sooner or later life's vicissitudes might set off "existential neurosis" due to our own choices and the three poisons: greed ("musts") and hatred ("must not"), mostly led by ignorance on how the psyche functions. If not handled well, suffering may cycle viciously into a full-fledged psychopathology: a clinical depression, anxiety disorder, or some other emotional disturbance.

If the Dharma is neither a religion, nor a philosophy, the incorrect 19th century western invention "Buddh-*ism*" that enforces misguided western semantics, is advisably banned from our vocabulary. When two centuries ago curious colonial scholars tried to catch the meaning of the Dharma into a convenient category, this eastern mode of understanding and dealing with mind/cognition and body/behaviour was twisted by moulding it into the unfortunate Eurocentric container concept with theistic and metaphysical overtones. It seems to be an arduous challenge to – on the one hand – un-learn the use of "Buddhism", and by so doing to correct the ingrained false notions and all ramifications implicated by the term, and to – on the other hand – substantiate the thesis that the Dharma is an applied science of contemporary psychology. Both are necessary to eventually show the compatibility of Buddhist psychology and particularly Cognitive-Behaviour Therapy (CBT), and to thus provide the CB-practice of Buddhist psychology a state-of-the-art rationale. CBT has recently profited from the Dharma by having incorporated mindful awareness meditation under the accommodative name of "mindfulness-based" interventions and might possibly profit even more from other practical guidelines that the Buddha offered humanity. Although these were meant to liberate from "dis-ease" nobody can escape from, which we call here "existential neurosis" due to "existential suffering", it is likely that their application might augment the treatment of neuroticism, including the emotional disorders targeted in clinical psychology and CB-practice.

The science and practice of psychology is defined as the study of mind and behaviour and endeavours to use methodologies to minimise cultural flaws. This discipline embraces all aspects of the human experience, from consciousness and brain function to human mental development, excellence, health and disease, to the social interactions within societies and between nations. The enterprise of psychologists, being to gain understanding on the human mind, experience and concomitant behaviours, is to date the best fitting description of what Buddhist practitioners strive for. This is to responsibly watch over "karma" – intentional (cognitive) action (behaviour) – how this came about (i.e., which factors were functional in contributing to its multimodal and multi-causal originating, arising, subsiding, and ceasing), and what remedy is prescribed to alleviate psychological suffering (i.e., which intervention or technical procedure needs to be implemented). Thus, the Dharma is a way (Tao) modelled by the Buddha, who guides the practitioner into a self-quest to find out for oneself what is wholesome and unwholesome to think/feel/do in daily life. Wholesomeness is a relative concept – it differs depending on person, place, and time – which one needs to uncover in meditation. This is much more difficult than to blindly follow a moralising finger pointing at what is good or bad. The journey is to discover how and why the Buddha aims at aggrandizing the "Brahmaviharas" (i.e., kindness, compassion, joy, and equanimity), and at overcoming greed, hate, ignorance by understanding how karma works in the mind, its illusions/delusions, and by cultivating: "right" effort,

concentration, mindfulness, understanding, intention, speech, action, and livelihood.CB-Practice and the Dharma: Shifting Paradigms

Our studies in the past two decades show that contemporary psychology is able to provide complementary, evidence-based, data to substantiate existing Buddhist guidelines and to point out that between CBT and a contemporary or "New Buddhist Psychology" (NBP) lies a two way street (Kwee, 1990; Kwee & Holdstock, 1996; Kwee & Ellis, 1998; Kwee & Taams, 2006). We have observed congruence between these approaches in practice as well as two major differences that are paradigmatic, but on the verge to shift. Firstly, psychology could only develop as a science because it endorses the Cartesian purview that separates body/mind. The mind could only be an object of research, because it is considered, artificially, to be split from the body as an isolated entity. From an eastern perspective this is unheard of. In the Buddhist point of view there is a primacy of the body, without which there is no mind and no consciousness. Furthermore, the mind is projected in the heart rather than in the head. Western psychology emphasises too much what is inside the head/mind (i.e., mental activity between the ears), rather than on what is felt in the heart/body. According to the Buddha, the unity of the two is bridged by speech – that includes the social dimension – hence the standpoint is often reflected in his expression: Body/Speech/Mind (BSM). Such understanding of the human being as a discernable but inseparable tri-partition has been developed not so long ago in the West (Engel, 1977). The Bio/Psycho/Social paradigm stems not from philosophy, but grew out of the reality of clinical practice by psychiatrists and psychologists. This wholistic idea had been embraced by the World Health Organization.

Secondly, the Dharma started a paradigm shift in the 20th century by gradually becoming a psychology, a development that has gained momentum since research on mindful awareness accrued salubrious results in the past decade. According to the American Psychological Association's standard, the status of Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT) – eight week intensives – is "probably efficacious" (Baer, 2003; Grossman, Niemann, Schmidt, & Walach, 2004; Germer, Siegel, & Fulton, 2005). MBSR is capable to reduce distress in fibromyalgia, psoriasis, cancer, coronary disease, hypertension, HIV/AIDS, and to alleviate various types of chronic pain, anxiety and eating disorders (Kabat-Zinn, 2003). In two consecutive controlled studies MBCT reduces relapse into depression up to a half in those who have suffered three or more depressive episodes before (Segal, Williams, & Teasdale, 2002; Ma & Teasdale, 2004). Despite this research and although it was already noticed that the Dharma contains a psychology in 1900 by C. Rhys Davids, a systematic psychological account of the Dharma has only been presented recently (Kwee & Taams, 2006). In order for a Kuhnian psychological revolution to take place, it is necessary to overturn the paradigm of religion and to transmute the paradigm of philosophy. While the shift from philosophy to psychology symbolically took place when Wundt opened his laboratory in 1879, the Dharma seems to have made a kindred step in 2005 when A.T. Beck had a historical meeting with the 14th Dalai Lama in Sweden, where they observed a convergence between their two disciplines (Taams & Kwee, 2006).

A NBP that we propose is derived from the practice of social, clinical, and neuro-psychology in combination with a this-worldly understanding of the Dharma. Before elaborating on clinical issues, here are a few words on the social and neuropsychological dimensions. The social psychology that we endorse is Social Construction that is compatible with the Dharma (Gergen & Hosking, 2006). It contends that on a metalevel of the interpersonal/speech the locus of study is not the individual, but people's interacting networks. "Reality" is not a solipsistic matter, rather a narrative construction between

communicating people and may thus be "true" in one community, but "untrue" in another one. Obviously, the scientific accounts of psychoanalysis or humanistic psychology differ from that of Behaviour Therapy and Cognitive Therapy, but they are considered to be "true" within their respective parochial boundaries. However, boundaries can be transgressed. A social constructionist perspective has given birth to "relational being" that in the Buddhist lore of the "Heart Sutra" is known as "Interbeing" (Thich Nhat Hanh, 1998). Both refer to a "social self" that, on a metalevel, necessitates the "emptiness" of individual selves. The self's emptiness is the Buddha's psychological proposition par excellence that is finding corroboration in neuropsychology. There is no evidence whatsoever to substantiate the existence of a "homunculus self" residing in the brain. It seems that there is: perceiving without a perceiver, thinking without a thinker, feeling without a feeler, and doing without a doer (Malach, Harel, Chalamish, et al., 2006; Epstein, 1996)

Mainstream Psychology on Buddhist Lines

NBP is the outcome of a silent – scientific and transcultural – revolution founded on mainstream psychology and pan-Buddhist principles (acknowledged by all denominations) grounded in the Buddha's discourses, the Nikayas.[1] These go beyond the tenets of Theravada (practiced in Kampuchea, Laos, Myanmar, Sri Lanka, Thailand) and Mahayana (practised in China, Japan, Korea, Vietnam, and which includes the Vajrayana of Bhutan, Mongolia, Sikkim, Siberia, Tibet). Pan-Buddhist essentials include: the Four Noble Facts, Eightfold Path, Three Empirical Marks of Existence, BSM, karma, Inter-Dependent-Origination-Arising-Subsiding/Ceasing (IDOAS) of thinking/feeling/doing (skandhas, aggregates, or modalities), provisional self and ultimate not-self/non-self, emptiness, Brahmaviharas, Madhyamaka, Yogacara, and the 6th sense (mind's eye) that observes "dhammas" (the smallest units of experience) during meditation. The Buddhist tradition allows a cultural interpretation of its principles, the reason why atavisms, like the soul, its transmigration and reincarnation, and other non-Buddhist views could have entered the Dharma via the back door. Thus, a teaching of emptiness was/is able to cater the illiterate masses, superstitious people who are used to belief in magic, miracles, metaphysics, rituals, omniscience etc. (Conze, 1980). The more sophisticated audience is aware of "upaya kaushalya", skilful means, which helped the Dharma to blossom in numerous eras and across cultures by accommodating and adapting to local customs. Thus it was possible that during their first encounters, western scholars projected a religion in Vajrayana (e.g., De Vallée Poussin), a philosophy in Mahayana (e.g., Stcherbatsky), and a psychology in Theravada (e.g., C. Rhys Davids). None of these are per se wrong and need to continue existing alongside each other.

The crucial question is: what is apt for the 21st century? We contend that religion and philosophy as upaya have outlived their usefulness. Moreover, we refute the old Buddhist psychology as an archaic interpretation of the Buddha's discourses that deserve to be scrutinised, verified, and/or falsified by empirical means as best as one possibly can, in line with the Buddha's charter of free inquiry (AN, *Kalama sutta*) that extols an evidence-based spirit:

[1] Here referred to as: **AN (Anguttara Nikaya** – The numerical discourses); DN (**Digha Nikaya** – The long discourses); KN (**Khuddaka Nikaya** – The division of short books that includes the Dhammapada); MN (**Majjhima Nikaya** – The middle-length discourses); SN (**Samyutta Nikaya:** - The grouped discourses); English translations of these suttas can be found in: < www.metta.lk/tipitaka >

Do not believe on rumours or hearsay, because it is reported to be good, ancient or practiced by tradition… because it is in the scriptures or because of logic, inference or metaphysics... because the speaker appears believable or you are shown the testimony of an old sage. Do not believe in what is fancied, because it is extraordinary, it must have been inspired by a god or other fancy being... because of presumption or custom of many years inclines you to take it as true... just because of someone's reputation and authority or because he is a guru.

First, we endorse the view to consequently apply the pan-Buddhist essential principles that repudiate metaphysics, religion, and philosophical musings as a substitute for practice. In several instances the Buddha practiced restraint, "non-speech", when provoked to answer questions that are not conducive to eradicate suffering. These are known as the classical unanswered questions (AN, Avyakata sutta) and refers to: (1) whether the world is eternal or not eternal; (2) whether the world is finite or infinite; (3) whether the soul and body are identical or different; and (4) whether the Buddha exists after death, does not exist after death, both exists and does not exist after death, or neither exists nor does not exist after death. The Buddha left these undetermined, because any answer will lead to taking a metaphysical stance on either of the two extremes: eternalism (there is life after death) or nihilism (there is no life after death). The Buddha's this-worldly stance is concerned about how unwholesome karma comes into being and how it can be curbed toward wholesomeness.

In his time the Buddha was known as a "kammavadin", someone who deals with the whereabouts of intentional action: the conditions for its presence, its perpetuating antecedent and consequent factors. Instead of speculating about the afterlife, he proposed a multi-causal and multimodal hypothesis, "pratitya samutpada", on the Inter-Dependent-Origination-Arising-Subsiding/Cessation (IDOAS) of feeling (Sensation-Affect), thinking (Imagery-Cognition), and doing (Behaviour-Interrelations): the BASIC-I.D. modalities. The latter stands for neurogenetic Drives (hunger, thirst, sex, clothing, shelter, which are the origin of many intentions) or Drugs (medication, for the body). Karma is a functional assessment and the key to change that can be explained in a *candle analogy* (the extinction of the craving fire of greed and hate by de-conditioning from the modalities) and in a *domino analogy* (a 12 steps interlinked serial on intentional actions' conditionality).

The Candle Metaphor of Karma

Habitual behaviour patterns form the bulk of regrettable intentional actions, the point at which reflection often begins. Habits come about by interplay of the modalities that are known as "skandhas", mostly translated as aggregates. The BASIC-I.D. (i.e., the skandhas/aggregates) reflects the structure of what is called "personality". These comprise: body/mind, perceiving, conceiving, conating, and consciousness. Bodily organs enable the psyche to function and experience: Sensation, Imagery, Cognition, Affect, and Behaviour in an Interpersonal context. Experiencing may take place consciously or non-consciously, depending on the wilful attention paid and consecutive awareness of what is attended to. Our daily experiences are mostly governed by habit that happens "automatically" due to well learned or "conditioned" responses. However, sometimes a habit may be an inappropriate reaction to a new *Stimulus* situation requiring some new adequate Response that needs to be figured out by the *Organism*. Whether the latter's responding is adequate, appropriate, or wholesome can be felt on the affective level. Affect can be any inner short and long term feeling, from weak moods to strong emotive experiences with a positive, negative, or mixed quality. An inadequate Response is likely connected to some emotional

disturbed or unhappy feeling and often the beginning of somebody's voluntary paying attention and focusing awareness to the skandhas/modalities, showing a SICABI. firing order, which can as well be functionally ordered in *S-O-R* terminology, as follows:

1) *Body/Mind skandha:* A momentary Stimulus configuration impinges on the Organism: external or internal forms, something one is aware of in fleeting sense consciousness after detection and contacted with/touched upon the radar screen of a sense organ (rupa) to be perceived.
2) *Perceiving skandha*: Sensation – while wilfully attending and apperceiving, which is post-perceptual but pre-conceptual, perception is influenced by memory and recognition, and the *Organism* gets some sense feeling (partly overlapping affect) that is relatively positive, negative, or neutral (*vedana*).
3) Conceiving skandha: Imagery/Cognition – the *Stimulus* representation (Gestalt/picture) in the *Organism* becomes conceptualized – i.e., dualistically categorized as good/bad, right/wrong, etc. – further fabricated, and proliferated as believes, attitudes, and values (*samjna*).
4) *Conating skandha*: Affect/Behaviour – having appraised, the *Organism* emits an emotive *Response* that motivates a volitional/intentional active *Response* through "self-talk" that plans and prepares a contextual expression: an act of karma in an Interpersonal context (*samskara*).
5) *Consciousness skandha*: One can be aware of the above series, but not per se be conscious about, which automatically leads to the formation of "ego illusion" and "god delusion" that belong to I-me-mine, in whose defence the attack of others is sanctioned: meditation is a measure to bypass resort to a self (*vijnana*).

Neither an *S-O-R*/CBT paradigm, nor a skandhas/BASIC-I.D. view endorses a "ghost in the machine". The modalities' emptiness implies that basically there is no self to identify with. The self's emptiness is obvious when the nature of reified abstractions is understood. Pirsig's *Zen and the art of motorcycle maintenance* (1974) deals with this issue: where does inherent existence, soul, or self reside if the bike is torn apart? This is a variety of a 2nd century comparison: the fryer Nagasena explained king Milinda that the skandhas are like the parts of a chariot. Mind deconstructed in its modalities disintegrates like a decomposed body, comparable to a chariot. Its constituent parts are but a temporary assemblage. The Buddha used the analogy of a lute, whose elusive music is construed by the combination of strings, box, and bow that is full of momentary experience but empty of eternal sound or self-nature (SN, Sigalovada sutta). Not only sound, but all perceptible phenomena are impermanent, non-abiding, and ever changing by nature, thus essentially empty. The self exists only as a mind construction that freezes the flux of BASIC-I.D. processes and is therefore nothing but a non-existing illusion. Another road to arrive at self's emptiness is Nagarjuna's (2nd century) "sunyata", the emptiness of all that is impermanent. He discerned the ultimate empty self and the provisional self of the "householder", who is aware of the futility of a name, but simultaneously appreciates the convenience of having an identity card. The crux is to keep karma un-afflicted by not attaching to greedy or hateful thought/feelings/deeds that are empty anyway.

The Domino Metaphor of Karma

Unwholesome karma is noticeable in craving feelings, grasping thoughts, and clinging behaviours, which do not breathe the quality of freedom, rather of being shackled. Wholesome karma is free from craving, grasping, and clinging. This state is attainable

when ignorance has been overcome and knowledge is wisely applied. Like in a court of justice intentions and wishes count less than actual facts, manifest behaviours, and observable deeds. However, intentions form the seed for future actions. To be mindfully aware of them prevents unwholesome karma and likely promotes wholesome karma. Karma's working is illuminated by an assessment method of its conditionality comprising 12 links, interconnected like domino pieces (Conze, 1980). Our this-worldly-here-now interpretation of these interlinks discerns three parts: a general (steps1-4), specific (steps 5-10), and cyclical part (steps 11-12), like illustrated below:

Step 1	Conveys that the stepwise model is about karmic greed, hate, and ignorance, which concurs with an *S*-*O*-*R*/CBT paradigm, as follows:
Step 2	Explains *S*: out of ignorance sensory events arise, (e.g. a fight)
Step 3	Explains *O*: out of this, consciousness arises, (i.e. thoughts on the fight)
Step 4	Explains *R*: out of the thoughts, emotional acts arise, (e.g. more aggression)
Step 5	Specifies *S*: out of bodily sense organs as condition, perceiving arises
Step 6	Specifies *S*: out of perceiving, contact arises, (e.g. seeing John)
Step 7	Specifies *O*: out of contact, experiencing arises, (e.g. I feel aversion)
Step 8	Specifies *O*: out of experience craving thoughts arise (e.g. I wish him dead)
Step 9	Specifies *R*: out of craving, hate, greed, and other emotions arise
Step 10	Specifies *R*: out of hate, more aggressive behaviours find expression
Step 11	*S*-*O*-*R* cycling: step 10 originates the conception and rebirth of steps 5-10
Step 12	*S*-*O*-*R* cycling: each rebirth of an emotion undergoes ageing to death, etc.

The metaphors rebirth, ageing, and death have made many credulous followers believe that the 12 steps exposition is about reincarnation, the soul, and "Transcendental Truth", rather than a very close examination of IDOAS: the Buddha's Middle Way between eternity and "no-thing-ness". The emptiness of not-self is a this-worldly experience of liberation – the benefit of un-craving/un-grasping/un-clinging – while nothingness and eternity refer to the beyond, which is not in the scope of Buddhist psychology. Such emptiness is attained when the state of being affectively conditioned is extinguished and full contentment, a state of being completely at ease, is experienced. Having de-conditioned habitual patterns, un-chartered territories are explored from moment-to-moment, fresh and anew. The shorthand for emotional extinction is "nirvana", which is not a place to go like a paradise, but a state of BSM that is characterized by being "unmoved". It is a resting state of silence, before and after "moving out" – the literal meaning of *emovere* – the Latin verb from which the term emotion is derived. It is the cessation phase of each emotional IDOAS episode, pre and post its origination.

The state of Nirvana belongs to the human realm. It is not at all something out-of-orbit. It is the *summum bonum* of the Dharma that starts on a momentarily basis with the potential to be gradually cultivated into a trait that equals Buddhahood. In a Buddhist inspired CBT, it is correct to say that a nirvanic state is attained if for instance an anxiety disorder is extinguished by exposure treatment or clinical depression is dispelled by cognitive restructuring. Nirvana and negative emotional states – "samsara" – alternate in daily life. The metaphoric adumbration of the latter states has opened the back door for metaphysical speculations as well. Due to the "appearance" of Mara and his army of demons, alleged other-worldly beings, that we infer as seductive projected fantasies of the Buddha himself just prior to his awakening, samsaric states were called: hell realm (e.g., hate), animal realm (e.g., greed), hungry ghost realm (e.g., ignorance), demi-god realm (e.g., envy), and god realm (e.g., pride). We contend that these terms are outdated and

propose instead to adopt a taxonomy of basic emotions and their affective varieties as the targets of change. These can be depicted as layers of an onion, consecutively from the outer to the inner: depression, anxiety, anger, sadness, joy, love, serenity, and silence. The first group of four are relatively unwholesome, thus to be abandoned, while the second group is relatively wholesome, thus to be cultivated. In the Buddhist lore joy, love, serenity, and silence are to be acquired and "immeasurably" aggrandized by amplifying the social meditations, the Brahmaviharas (to be found metaphorically "where the divine dwells"), notably: loving kindness, empathic compassion, shared joy, all in meditative equanimity. Such is the pan-Buddhist way to secure wholesome karma.

Affect: The Heart of Psychology and CB-Practice

In the eastern and pristine Buddhist languages, Pali and Sanskrit, there is no word, neither for psychology, nor for emotion, around which karma revolves. For instance, in Mandarin the term for psychology is "Xin Li Xue", meaning "the science of the heart", a metaphoric denotation for the emotional from whose genuineness "right speech" stems. This concurs with the Buddhist view of the mind "located" in the heart – the emotions – rather than in between the ears. It seems that the psychology of emotions has much to contribute to the Dharma's practical aim to eradicate greed, eliminate hate, and dispel ignorance, and CBT's purpose to alleviate emotional disorders by cognitive restructuring and behaviour modification.

The core in the study of emotions is to understand which of them are basic or primary. From a BASIC-I.D./skandhas perspective an emotion holds the middle ground between body/mind, which might be considered primary if bodily experienced and there is minimal contamination of Affect by the BSIC-I. modalities. On this topic exists a Babel of tongues as evidenced by fourteen existing lists (Ortony, Clore, & Collins, 1988; Johnson-Laird & Oatley, 1992). A BASIC-I.D. examination of three of these lists of primary emotions reveals the following comparison (see Table 1).

Plutchik postulates eight basic emotions. We consider acceptance as an attitude with predominantly Cognitive, Behavioural, and Interpersonal features. *Anger*, present directly after birth, is a universal somatic experience, not further analysable, and definitely primary. Anticipation comprises Cognition and Imagery and cannot be classified as an emotion. Disgust impresses as a Sensory experience. *Joy*, *fear*, and *sadness*, also present from birth on, strike as universal, unanalysable, somatic, and thus primary. Surprise may vary from a Cognitive reaction (to an unanticipated event) to a sudden activation of a neural reflex (R. Lazarus, 1991). Izard lists ten slightly different emotions, six of which need scrutiny. Contempt exists in Cognition with the quality of anger and defensive fear. Distress is a specific term for the Sensory experience of being tensed or upset. Guilt consists of Cognitions, social values, and anxiety. Interest is conative rather than emotive, thus foremost Cognitive (intentional and volitional) as well as Sensory (perceptual and attentional). Shame is a variety of fear with Cognitive and Interpersonal aspects. Frijda's list consists of three other not yet discussed emotions. Desire refers to the future and consequently contains Images and Cognitions. Pride connotes joy based on Interpersonal comparison, which is Cognitive. Aversion (from "aversio", Latin for turning away) has a Behavioural emphasis due to a Sensory-based dislike.

Our postulation concurs with James' (1890) "standard" emotions. He suggested fear, anger, sadness, love, based on their somatic involvement. For practical purposes, we propose *fear, anger, sadness, joy, love* as primary emotions and add *depression* and *serenity/silence* (nirvana) as special instances to complete our list of primary Affect. We exclude acceptance, anticipation, disgust, surprise, contempt, distress, guilt, interest, shame,

desire, pride, and aversion as basic using the BASIC-I.D. as a filter. These are rather secondary Affects as they semantically point at one or a combination of the other modalities. Thus, in practice they call for obvious interventions and matched techniques: (1) acceptance, anticipation, contempt, desire, and guilt call for C/I interventions, (2) disgust, distress, interest, and surprise for S interventions, (3) shame and pride for I. interventions, and (4) aversion for B interventions.

More on the Taxonomy of Primary Affect

From a Buddhist perspective depression is considered to be not merely a negative experience. Depression can also be positive, if viewed as an obstacle to be turned into a path that may mark the beginning of awareness, self-reflection, and a learning experience leading to awakening. It is enriching if conducive to become "sadder but wiser". Siddhartha attained serenity and silence during a state of despair. In clinical depression clients attribute failures to themselves and success to external factors. Their sombreness is fed by a negative view of themselves, others, and the future (Beck, 1976). Sometimes, the urge to commit suicide prevails. Such death wish distinguishes depression from love.

This emotional experience of love is heralded as the most important thing in the world (Sternberg & Barnes, 1988). Indeed, love is the most sought after emotion in all cultures and often designated as the *raison d'être* of life. It is not a discrete state that lends itself easily to experimental investigation. Two kinds of love can be distinguished: passionate (e.g., infatuation) and dispassionate love (e.g., fondness). A variety of the latter is compassion (e.g., altruism) that takes a prominent place in the Buddhist value system, next to loving kindness and shared joy. Enlightened compassion adheres to what we have called the “oxygen mask principle”: in case of emergency in the airplane, use it yourself first, before applying it to your kids. Compassion is a down-to-earth practice that needs to be practiced intelligently. Love is sometimes called “spiritual”, a fuzzy concept that points at some transcendence without any evidence whatsoever. Rather than being spiritual, NBP expounds the social meditations that have proven to be immensely difficult to practice, but which, if applied radically, could make the world a better place.

The taxonomy of primary Affect can be more deeply understood by its functional relationship to Behaviour in terms of karmic or intentional action *vis à vis* a goal. The modality of Affect motivates action, thus inhering in conation, volition, intention, known as “samskara skandha”. The behavioural function of each of the primary emotions can be described in its orientation toward a goal (Johnson-Laird & Oatley, 1992). Peeling the emotional onion’s layers, the “moving” dynamics of depression, fear, anger, sadness, joy, love, serenity, and nirvana are revealed. In *depression* – the end result of chronic and massive Affect repression – no goals are worthwhile to pursue: the person feels intensely dejected and down. One is in a state of disorder, confused, demoralised, and hopeless. From a Buddhist perspective even a depressive state harbours the potential to awaken and to reassess things as they have become. In *fear* the attainment of a goal is threatened. Anxiety and fear can be functional or dysfunctional. In the latter case it might take the form of a disorder. For instance, claustrophobia, the irrational fear of confinement might be the result of anger or sadness being "locked-up". In *anger* a striving for a goal is blocked and frustrated. Anger burns from within. Its heat usually goes along with lowered levels of awareness and a loss of control. If repressed, psychosomatic illness might manifest. The expression of anger depends on culture and various rationales. In *sadness* there is a loss of an attained or aimed at goal. Sadness and joy are like two sides of a coin; both are melting-humid experiences. In *love* a goal of merging, in reality or in fantasy, is met. This is to be attained by total acceptance and surrender. In *joy* there is a progression toward or

attainment of a goal. In *serenity/silence* there is no goal. The state is characterised by a nirvanic contentment or fulfilling emptiness. Silence, and to a lesser degree serenity/relaxation, is elementary because it is considered to be the true "awakened" nature of humankind. It is a universal experience in childhood and to be qualified as a state of bliss. According to hedonic principles, people strive for happiness/pleasure and avoid suffering/pain in managing goal priorities.

The rationale of discerning primary Affect is to enable CB-therapists and Buddhist coaches, to find appropriate techniques that match with the corresponding modality. Because basic emotions cannot be tackled directly, we should be sparse in labelling Affect primary so that the practitioner can easily detect secondary Affect by using the BASIC-I.D. filter. Affect is secondary if it is semantically contaminated by another modality. For instance, anticipation is a secondary Affect because it primarily contains Imagery and Cognition. If anticipation is considered to be primary, Cognitive and Imagery material would be lost for intervention. Another example is guilt. We often speak about guilt feelings, but as guilt comprises primarily fear provoking self-blame Cognitions and Imagery, guilt is secondary. If guilt is not recognised as such, the obvious option, cognitive restructuring by "rational coping", would not be considered the treatment of choice. *Mutatis mutandis*: distress (S) is apt for treatment by "relaxation", shame (I.) by "assertion", and aversion (B) by "desensitization".

Varieties of Affect and Skandha Firing Orders

The central interest of the Buddhadharma as a psychology is to unravel who, what, where, when, and how do we feel what we feel, and to give an account of feelings' interconnectedness to thinking and doing? Between the state of emotions gone awry (depression) and non-emotion (silence or Buddhanature) all possible varieties of emotional experience have a place. There is no limit to the sometimes overlapping mixtures and countless numbers of "affective melodies" that can be created from the same basic set of musical notes. The affective lexicon might consist of 4000 English words. Table 2 is an illustration of a small sample of these words that mostly refer to secondary Affect and mixed feelings. An important implication of having such list is the moment to moment practice of being aware what we emote through identifying the basic family of the Affect involved. The various terms signify the different hues of the primary emotional colour that we experience (Kwee, 1996, 1998).

Feeling (primary Affect and Sensation) is a function of thought (Imagery and Cognition) as well as of doing (Behaviour and Interactions). The skandha's non-independence – interconnectedness and interplay – had already been described by the Buddha in terms of what we have called earlier: IDOAS. In the opening verses of the *Dhammapada*, we read (Byrom, 2001):

We are what we think. All that we are arises with our thoughts. With our thoughts we make the world. Speak or act with an impure mind and trouble will follow you, as the wheel follows the ox that draws the cart. We are what we think. All that we are arises with our thoughts. With our thoughts we make the world. Speak or act with a pure mind and happiness will follow you, as your shadow, unshakable.

Table 1: A comparison of four lists of primary Affects or basic emotions

	Plutchik (1994)	**Izard (1972)**	**Frijda (1987)**	**New Buddhist Psychology**
1	Acceptance	Contempt	Contempt	
2	*Anger*	*Anger*	*Anger*	*Anger*
3	Anticipation	Distress	Distress	
4	Disgust	Disgust	Desire	
5	*Joy*	*Joy*	*Joy*	*Joy*
6	*Fear*	*Fear*	*Fear*	*Fear-Anxiety*
7	*Sadness*	Guilt	Pride	*Sadness*
8	Surprise	Surprise	Surprise	
9		Interest	Aversion	
10		Shame	Shame	
11				*Love*
12				*Depression*
13				*Serenity-Silence*

Table 2. A practical guideline to become aware of the varieties of primary Affect

Depression	Anxiety	Anger	Sadness	Joy	Love	Serenity	Silence
blue	worry	annoyed	pity	amused	tenderness	relaxed	
dejected	apprehended	contempt	sorrow	glad	fondness	trustful	
dysphoric	anguish	hostility	distress	happy	intimacy	contented	
downhearted	fear	animosity	grief	humour	compassion	grateful	
despondent	fright	fury	affliction	delight	infatuation	safe	
low spirits	horror	rage	agony	euphoric	eroticism	secure	
melancholic	terror	hate	mourning	manic	kindness	satisfied	
dysthymic	panic	resenting	hurt	content	affection	peaceful	
etc...	etc...	etc...	etc...	etc...	etc...	etc...	

According to this quote, feeling/thinking/behaving are the focus of study in Buddhist as well as scientific psychology. Moreover, the Buddha did not prescribe magic bullets but psychological means (meditation) to heal mind's "dis-eases". If unaware and unawake, we incontestably suffer from "existential neurosis". This is caused by the imperfection and unsatisfactoriness of life itself, due to a fateful dose we have to take: the pains of birth, the despair of illness, the burden of aging, and the sorrow of death. From moment to moment we may be hit by the arrows of greed and hate that have been soaked in the root poison of ignorance on the skandhas and karma. Being savvy on the working of the mind and the principles of cognitive-behavioural learning might help to eradicate our emotional misery. The Sallatha sutta (SN) describes that if hit by an arrow, the untrained mind touched by bodily pain grieves and laments, while the skilled meditator won't be distraught. The untrained mind experiences two kinds of pain: a bodily and a mental pain; he feels pains as if hit by two arrows. But the meditator, if touched by a bodily pain, grieves and laments not. He feels only bodily pain, not mental pain, as if hit by just one, not by a second arrow. This sutta again illustrates an *S-O-R* model of assessment that follows a standard skandha sequence, notably a SICABI. firing order discussed earlier. This experiential sequence is in accord with what the Buddha hypothesized about how karma comes into being. However, the statistically possible BASIC-I.D. transmutations (the faculty of 7) amounts to 5040 karmic sequential experiences to be aware of.

The Functional Analysis of Karma Cycles

We have elaborated this model to explain how habits of feeling/thinking/behaving are perpetuated through vicious cycles along five major sequential orders. This reflects an *S-O-R* "learning by conditioning principles" paradigm (classical/operant/vicarious) and is in essence a reconstructive template for the functional analysis of karma. This is a ready to be used blueprint that provides clues where and when to intervene in order to break up the cycles, from which point a turning around leading to virtuousness may begin.

The *1st cycle* starts with a *Stimulus* (Sensation of the arrow penetrating the body), the *Organism* (Images of doom and gloom and Cognition of despair if invalidity or death is anticipated), evoking a *Response* (Affect of fear-panic, or anger-rage and the intentional Behaviour of hateful revenge, meanwhile Interacting: complaining and lamenting on what happened). These feed back to Sensing more Affective misery all over, rounding up the first cycle, called: cognitive mediation.

The *2nd cycle* follows a BSD. A firing order and reflects a long-tem intrinsic loss.

As a result of the dysfunctional Behaviours (e.g., aggression), the person harbours chronic tensions (Sensation) that are eventually transformed into chronic pains or even a psychosomatic disorder out of which illness may develop, for which medication (Drugs) are indicated. All of this enhances the emotional disturbance (Affect).

The *3rd cycle* follows a BI.SA firing order and reflects a long-term extrinsic loss.

As a result of the aberrant Behaviours (e.g., aggression), the person evokes negative reactions in Interaction with the social environment. This drifts him/her into social isolation and eventually in a state of sensory deprivation (Sensation), in case connections with work and family got lost, aggravating disturbed Affect.

The *4th cycle* (BSI/CA sequence) represents short-term intrinsic gain (negative

reinforcement). The aggressive Behaviours first lead to tension reduction (Sensation), but in the long run the short-term relief did not solve any of the problems. Then, thoughts of doom and gloom (Imagery) and of guilt and remorse (Cognition) mount, resulting in much more emotional disorder (Affect), like fear of fear.

The *5th cycle* (BI.SA sequence) represents short-term extrinsic gain (positive

reinforcement). The aggressive Behaviours first seem advantageous Interpersonally, but turn out to be disastrous. One may gain social attention, face-saving tactics, manipulative ploys, or be excused from responsibilities, but all of this backfires and generalize into even more stressful events (Sensations) increasing disordered Affect.

Karma is not "fate" that we undergo passively, but intentional cognitions and behavioural activities that we construct ourselves. This mostly implies a choosing for wholesome intentional images and cognitions that determine ditto goal-directed behaviours and interactions. What can NBP contribute? Kahneman (2003) presents a psychology of rational judgment and choice. Processes of perception and intuition run fast, parallel, automatic, effortless, associative, but learn slow. However, reasoning runs slow, serial, controlled, effortful, rule-governed, and flexible. Unfortunately, our perceptual apparatus inheres in structural weaknesses leading us to see the world intuitively through a pair of illusory glasses. These illusions are often the basis of which we automatically make decisions that are necessarily irrational. Such mistakes are difficult to control and change. The observation that we are carried away by our minds to construct an illusory view of the world and of our selves and that mindful awareness meditation can correct such erroneous views, is a Dharma cornerstone.

To break up karmic vicious cycles – malevolent intentions and regrettable behaviours – mindful awareness was in the Dhammapada instructed by the Buddha as follows:

O Bahiya, whenever you see a form, let there be just the seeing; whenever you hear a sound, let there be just the hearing; when you smell an odor, let there be just the smelling, when you taste a flavour, let there be just the tasting; when you experience a physical sensation, let it merely be sensation; and when a thought or feeling arises, let it be just a natural phenomenon arising in the mind. When it is like this, there will be no self, no I. When there is no self, there will be no moving about here and there and no stopping anywhere. That is the end of Dukkha (existential neurosis). That is Nibbana (contentment due to extinction of emotional extremes). Whenever it is like that, then it is Nibbana. If it is lasting, then it is lasting Nibbana; if it is temporary, then it is temporary Nibbana. In other words, it is just a principle (of eradicated craving, grasping, and clinging).

Breaking Up Karmic Vicious Cycles: Meditation

Our working definition of mindful awareness meditation is inspired by Vasubandhu's (4th century) Vijnavada (school of mind) that brings "jnana" (the root of Chan or Zen) – the practice of direct knowing "without picking or choosing" – to the fore, which is about:

Cultivating neutral presence without any goal by remembering to watchfully attend in a receptive, focused and compassionate way the stimuli entering consciousness via the senses and any feeling-thinking passing in the space of BodySpeechMind; hereby

1. Noticing receptively (no purpose or interference) the internal stimuli attended to in a choiceless mode (no attributing, inferring, evaluating) while surfing from-now-to-now without craving, grasping or clinging, in "suchness", like a mirror.

To be mindfully aware enables to liberate from suffering, but not before seeing and breaking through the imprisonment that "ordinary mind" imposes upon us, particularly the illusion of I-me-mine/self and the delusion of the soul and god (Anacker, 2005). Based on pure observing, this meditation is the "general factor" of the Buddha's 12 meditations that have specific kinds of body/mind dhammas as their object (DN, Mahasatipatthana

sutta). Awareness of the body attends (1) *breathing*, (2) *behaviours*, (3) *repulsiveness*, (4) *elements*, (5) *decomposing*, and (6) *feelings*.

Sitting with an upright back, one observes breathing and, whenever attention gets distracted, uses this as a concentration anchor. It is about watching the steady and effortless abdominal *breaths*, how these naturally pass the nostrils in/out. Awareness is on the type of each breath, noticing: "long", "short", "calm", etc., which tranquilizes and increases concentration, clarity, and balance. Emotional disruption is to be desensitized (attended little by little) until it wanes. Delight, dispassion, relinquishment, and release go along with a smile. Be in the unfolding here/now, in this breath, in abiding calm concentration until, in absorption, self is forgotten, and equanimity, contentment, luminousness, and serenity are felt. Next, the focus is on *behaviou*r: The practice is to note in bare attention the four dignities and all other behaviours, like "talking", "drinking", "savouring", "toileting", etc. Then, the body's *repulsiveness* is attended to: the body is a bag with two openings full of grain, wheat, rice, beans, and seeds, etc. Enveloped by the skin, it consists of hair, nails, teeth, flesh, nerves, bones, gorge, marrow, kidneys, heart, liver, midriff, spleen, lungs, intestines, faeces, bile, phlegm, pus, blood, sweat, fat, tears, grease, saliva, mucus, urine, and other fluids. All of this will sooner or later *decompose* to the *elements* earth, water, fire, and wind. As death is the sole certainty, contemplation focuses on refraining from clinging to the body through exposure to its decay by visualizing one's corpse, cut-up, bleeding, or gnawed. How its flesh swells, darkens, and cast in the ground, stinks, rots, dissolves, and meanwhile eaten by vermin. How it reduces to a skeleton and scattered bones of the hands, feet, shin, thigh, back, hip, chest, rib, shoulder, neck, jaw, tooth, and skull. How the bleached bones of a shell colour, more than one year old, lie on a heap, rot, and turn into dust. Awareness of *feeling* (in IDOAS) refers to skin deep Sensation and Affect, including deep-seated emotions. Note covertly: pleasant, painful, or neither-pleasant-nor-painful feeling. By this scaling technique to assess feeling the Buddha shows to be a psychologist.

The meditations on awareness of the mind is to definitely break up karmic vicious cycles and a remedy for "the Buddha's psychopathology", the varieties of greed-cupidity (grasping/"musts"), hate-aggression (clinging/"must not"), and ignorance-stupidity (illusions/delusions, cravings). In particular, it is about the observation that attends (7) *hindrances*, (8) *aggregates/modalities*, (9) *6 sense-bases*, (10) *awakening*, (11) *4-Noble Facts*, and (12) an *8-Fold Path*, to discern their presence or absence and in what degree. Hindrances are obstacles (to be turned into one's path): the sweetness of sensory pleasure, the bitterness of ill-will, the imprisonment of apathy (sloth, torpor), the swings of restlessness (agitation, worry), and the nervousness of doubt. The skandhas are to be un-clung from by penetrating the insight of social *Interdependence* (in the flux of IDOAS) and by *Deconstructing* (self/god). Next, the modality of Sensation requires attention. The internal-external sense bases: to be aware of pleasant, painful, or neutral feelings with regards to contact between the six organs (eye, ear, nose, tongue, skin, brain), their objects (of sight, sound, odour, taste, touch, thoughts), and their combinations without clinging to any of them. To further un-crave, un-grasp, and un-cling, the awakening factors require observation by investigating the dhammas, persistence (to improve), enthusiasm (to increase), serenity (to deepen), concentration (to sharpen), and equanimity (to balance). The list ends with the Buddha's discourse on the 4-Noble Facts (see: Mikulas, 1978) and the 8-Fold Path. The end result is "to see things as they really are" or rather have become in IDOAS.

Breaking Up Karmic Vicious Cycles: CBT

The most widespread introduction to the Dharma is the teaching of the 4-Noble Facts. If its essence is to "cure" psychological suffering, the Buddha's metaphor of an inescapable "illness" is still applicable. This "existential neurosis" is a self-inflicted psychological "auto-immune dis-ease" that starts right after birth and becomes manifest in our dealings with disease, decay, and death. Those who have seen Woody Allen's Deconstructing Harry would immediately understand the run-of-the-mill "existential suffering" – hopeless but not serious – referred to here. Usually indicating life's suffering, the Buddhist "dukkha", a term that defies translation, may also mean unsatisfactoriness due to impermanence/imperfection or trouble to roll, like a stuck cart's wheel. The term stress seems not quite adequate because this – as conceptualised by Selye in the 1930s – might mean unwholesome "distress" (contributing to disease) or wholesome "eustress" (contributing to wellness). We have to be courageous (noble) not to flee from inevitable dukkha. In an illness metaphor the first step is diagnosis of existential dukkha, the root of self-caused misery; to be understood. Secondly, dukkha has a cause, the Buddha's psychopathology and the yearning for self's permanence/perfection; to be abandoned. Thirdly, the prognosis: dukkha can be eradicated and prevented, and while aging and death are inevitable, self-caused suffering can be cured by not-self; to be realized. Fourthly, the way to cure is to confide in the doctor's therapy, which is: wisdom (right view and intention), conduct (right speech, action, livelihood), and focus (right effort, mindfulness, concentration); the 8-Fold Path, to be cultivated). Awakening will be attained by the "arahat": someone who has defeated his inner enemies. As Pogo said, the enemy is us: our self chosen detrimental karma.

While the Dharma works toward mental growth, CBT aims at eradicating emotional disorders that sometimes needs anti-depressant medication. Mindful awareness, seems to be well on its way to become a fruitful enhancer of mainstream therapy now the insight is dawning that prior to any modifying, one's awareness what to modify is a prerequisite. Such cannot be implicitly assumed. Thus, before implementing a CBT technique, a concise training that explicitly raises awareness of thought/feeling/action seems to be an indispensable component before administering CBT techniques. For instance, in Rational Emotive Behaviour Therapy (REBT), an influential mode of CBT, the allocation in cognitive, emotive, and behavioural techniques is a heuristic exercise rather than a strict categorization, because of the overlap in the modalities targeted by a particular technique. Kwee and Ellis (1997) presented an overview of the most frequently employed REBT techniques:

Cognitive techniques (refer to I and C): 1. Active disputing of "musts" and other irrational beliefs; 2. Use of rational coping statements; 3. Summing up dysfunctional behaviours' disadvantages; 4. Modelling; 5. Cognitive distraction (such as: biofeedback, relaxation, Yoga, meditation); 6. Cognitive homework (the use of self-help forms, books, cassettes); 7. Reframing (seeing bright side of "awful" things); 8. Semantic corrections (according to General Semantics).

Emotive techniques (refer to A and S): 9. Shame attacking exercises (including judicious use of profane language); 10. Rational-emotive imagery; 11. Forceful coping statements; 12. Forceful self-dialogues (disputing irrational beliefs on tape); 13. Using humour (like rational humorous songs); 14. Using group processes for experiential and emotive-evocative exercises; 15. Interpersonal and family relationships; 16. REBT's role playing;

17. Reverse role playing; 18. Other emotive techniques (such as: strong encouragement, forceful disputing, self-disclosure, analogies, metaphors, conditional acceptance, etc.).

Behavioural techniques (refer to B and I.): 19. In vivo desensitisation; 20. Implosive desensitisation; 21. Remaining in awful situations; 22. Response prevention, 23. Penalization (as well as rewards and other reinforcements), 24. Medication; 25. Social skills training (including assertion, relationship, communication, sex).

The reader who is not proficient in REBT will not precisely understand what is meant by several of these techniques, because of the jargon and lack of descriptions (due to space constraints). However, there is not much imagination required to sense the overlap with the Buddha's 12 meditations and other strategies and tactics described in the Buddha's discourses (see: De Silva, 1984).

CBT's Rational and NBP's Valid Cognitions

Vijnavada's epistemology (theory of knowledge) concurs with CBT's *S-O-R* centrepiece Anacker, 2005): it is not the external situation or event that causes our being emotionally upset, but our own illusory/delusional perceptions and irrational/dysfunctional thoughts about the event, which are modify-able. While Buddhist meditation aims at cleansing perception and sensory experiences, CB-practice such as REBT, aims at changing thoughts' content by disputing irrational beliefs and changing behaviours that impact unwholesome Affect. A thought is irrational if it (1) does not correspond with known facts and logics, (2) does not lead to self-chosen/wholesome emotive and behavioural goals, and (3) does not advance interpersonal harmony. In a therapeutic context it is insufficient to only point at dysfunctional cognitions. It is necessary to formulate alternative functional cognitions in order to break vicious cycles. For instance, a client is depressed when thinking: "He must love me or else I am a worthless human being." Applying the rational criteria, the following alternative is constructed:

> *Thus, I won't reach my goal to gain contentment. There is no evidence that he must love me, nor is there any proof that my worth depends on being loved by him. If he loves another woman, he must not love me, which feels sad but no reason to detest my self as a human being. My worth of self can't be judged, because there is no accurate way to rate it. My mere existence warrants my value unconditionally. Thus, I'll feel OK and avoid unnecessary conflicts with me and with him.*

Like REBT, the Dharma abolishes most of "the ego" on the provisional level, but eradicates the self altogether on the ultimate level.

In Yogacara lore Dharmakirti (7th century), the last original Buddhist thinker before the Dharma's demise on the Indian subcontinent in 1193, discerned between valid ("prama") and invalid ("aprama") cognitions. Invalid cognitions lead to what is unwholesome ("akusala") and violate the three empirical marks of existence: (1) because the universe is in a state of flux the true nature of things are empty, (2) I-me-mine/self is also impermanent thus empty as well, nothing but a heap of modalities, and (3) craving/grasping/clinging for non-existing solid substance results in suffering. There is congruence in criteria for what is invalid and irrational, they are both absolutistic. The wholesome ("kusala") function of cognitions is determined by its validity, rationality, and relativity. Dharmakirti analyzes cognitive validity by discerning (1) the direct object of observation, evident and public, (2) the appearing object in the mind's eye, a private mental

image, and (3) the conceived object, coloured by inferences/evaluations, hidden for the person her/himself. This is a hierarchy of knowledge. If the three are in "correct" alignment, valid cognition is said to occur and not-self/non-self can be deeply understood through deconstructing the reified abstraction of self. No spiritualism or transcendentalism is necessary to explain awakening. Thus, Occam's razor is respected.

Again, there is a striking congruence with an REBT technique, Korzybski's General Semantics (Kwee, 1982), mentioned in the previous paragraph. This is on the awareness that the map is not the territory and that speech/language is about the ladder of abstraction that can be viewed as a map of the map of the map, which may lead to invalid/irrational or "un-sane" reifications – like I-me-mine/self – unless there is awareness on the natural order of abstracting. We need to be aware that we mostly react to our own made semantic abstractions rather than to the pure perception of the territory. Language moves from the concrete to the abstract, from the specific to the general. If we never get general, we don't say anything; and if we do not get specific, "real" meaning might remain obscure. Unsanity arises when stuck on the ladder of abstraction. Categories of faulty abstractions include: dead level abstracting (e.g., fear of fear, angry at anger, sad about sadness, etc.), selective abstracting, arbitrary inferring, misattributing, inexact labeling, dichotomous reasoning, overgeneralizing, magnifying, minimizing, catastrophizing, personifying, etc. In CBT these categories are subject for correction. The correct order of abstracting starts with the "silent" level of the impermanent "process world" (particularly: atoms, molecules, cells, etc.), the next level is descriptive that reports just the "facts" (e.g., a psychological report), subsequently there is the level of inference that refers to what the facts mean (e.g., "I've made a mistake"), and finally, the level of judgment or affective evaluation whether something is "good" or "bad" (e.g., "I'm a lousy psychologist and a worthless human being").

Awakening to alleviate suffering means: not to identify with anything in an impermanent world of process. Such goes along with sanity to deconstruct thought (inner speech) and eventually ban the semantics of the "is of identity" and all varieties of the verb "to be". If aware of the latter, it is immediately clear that there is no static self to identify with: "I" consists of many "iiiiiiiiiii's". This has a striking resemblance with the Buddha's expression on the skandhas/modalities: "this is not me, not mine, not myself".

The Buddha's Cognitive Strategy and Tactics

To recapitulate: a therapeutic approach aims at modifying invalid/dysfunctional thoughts and a meditative approach aims at cleansing illusory/delusional perceptions. To attain Nibbana, the Dhamma advices the strategy: to abandon unwholesome cognitions by deconstructing inner speech altogether toward pure sensory perception and attending the stumbling blocks perception itself provides by illusions (of self) and delusions (of god).2 CBT and the Dhamma are complementary and if applied in concert will likely enhance emotional balance and contentment. If "good clinical practice" is the standard, there is no doubt that patients suffering from emotional disorders cannot be abstained from CBT and/or medication. In addition, we contend that mindful awareness of the change targets is a necessary component of any cognitive-behavioural strategy. Empirical evidence has been gathered in support of this contention through the "mindfulness-based" interventions and

[2] According to Edelman (1987), "reality" is a construction of what we perceive (representation = memory + projection: perception precedes electrical correlates of cognition by 100-200ms ~ seeing is 20% retinal and 80% brain activity).

so-called third generation CBTs: Dialectical Behaviour Therapy and Acceptance and Commitment Therapy.

While cognitive modification techniques per se are not the "treatment of choice" in NBP, the Buddha did propose such specific tactics in his discourses. Implicitly, cognitive modification is and has been all over whenever ignorance is conversed in Dhammic wisdom. As a "kammavadin" – someone who deals with intentional actions and how these come about by analyzing events on a this-worldly basis – the Buddha explicitly proposed twelve cognitive modification tactics (Premasiri, 2003). The first seven stem from the Sabbasava sutta (MN), which refer to preventive measures:

1) Wholesome Affect is preceded by "right" views: to understand not-self and see that beliefs about events, not the events per se, evoke emotionality.
2) Restraint: it is wholesome to practice self-control on whatever one "must" and "should" have or not have that had entered the sense doors
3) Wise indulging in basic physiological needs like food, clothing, shelter, to safeguard against illness and promote well-being.
4) The discipline to endure certain pressures from the physical and social environment to secure freedom of unnecessary worries.
5) To drop unwholesome thoughts, one is timely mindfully aware of, right from the start before they affect unwholesome emotions.
6) To avoiding unnecessary situations that one might expect to likely create psychological cankers, unwholesome thoughts and emotions.
7) To prevent cankers, one cultivates awakening by being: aware, investigative, persistent, enthusiastic, serene, concentrated, and equanimous.

The next five, derived from the Vitakkasanthana sutta (MN), are rather curative cognitive tactics to deal with the habitual flow of unwholesome thoughts consecutively:

8) Whenever an unwholesome thought enters the space of consciousness, one replaces this with another wholesome thought (e.g., blaming and forgiving).
9) If that fails, closely examine the harmful consequences of the unwholesome thought and its inevitable product: the creation of suffering all around.
10) If that fails, forget the thought and engage in the diverting attention onto something distracting that is wholesome like reading a sutta or jogging.
11) If that fails, investigate and reconstruct the antecedents of the thought and remove its cause, e.g. anger expressed as sadness out of fear to feel the anger.
12) If that fails, resist with force: be harsh and radical by for instance clenching teeth or pressing the tongue against the palate.

It is noteworthy to keep in mind that the latter interventions refer to dealing with automatic thoughts that will persist to be mechanical if not understood and not mindfully aware of. They are to be used like a raft. If the river is crossed, there is no need to carry the raft around for the next trip.

Conclusion

The Dharma's goal – nirvana – which is the extinction of conditioned emotional flames in the empty goal getter, is attainable along many roads depending on one's skilful means to gain insight and see the natural light of awakening. Along the road, to get

illuminated/enlightened, "enlightenment", is not an end in itself, but a means toward an end and a beginning to see how emotional suffering due to existence can be extinguished. Because all emotionality starts with intentional action, cognitive-behavioural tactics belong to the most straightforward practices to change the affective vicissitudes of karma in an evidence-based manner. Granted, there are different strokes for different folks and the present guideline to karma modification is not particularly suitable for the minds of the "childish" and the meek. They would benefit more from "do's and don'ts", ethics, morality, religion, and the metaphysics of heaven. However, for grown-up people, who have the capacity to think, pick, choose, and wish to decide for themselves rather than to follow luring metaphysics, there is a non-theistic and transcultural combination of a Buddhist and contemporary psychological roadmap that may well engender peace, internally and externally, in a contemporary way.

CB-practice and the Dharma have overlapping daily concerns and therefore might learn from each other. One of the things is to practice what one preaches. This means that the therapist, teacher, or coach is always a student practitioner as well, because emotional balance and contentment/happiness is a life-long cultivation. As a student in teaching students, the teacher shares her/his savvy to give birth to the teacher out of the student. In a curative healing context the aim is to make clients become their own therapists, particularly by sharing the psychological wisdom of not-self. There is often a fear to apply this essential issue, because talking about not-self is supposedly confusing. Thus, some proponents contend that therapy strengthens the self, while the Dharma dissolves it. Others claim that the healthy self needs to be recovered first before embarking on a "spiritual" journey. However, nobody can dissolve something that is not there: wrong views need to be dissolved. Next to the understanding along the fact that the daily provisional self is ultimately a reified abstraction that consists of empty modalities, there is another understanding that regards the self non-independently from its not-self contextual elements: her/his social environment. The ultimate empty self does not exist alone. On the provisional level it is interdependent of others: we all depend on each other to exist. From this perspective, the only "self" existing is an interpersonal or social self, which is not a self-contained entity behind the eyeballs under the skin, but embedded in a network or matrix. The classical metaphor as depicted in the Avatamsaka sutra is Indra's jewel net ("Huayen") that is a matrix with at each crossing a jewel that reflects any change at any point in the network. Change takes place in concert. Seeing everybody connected to everybody else goes back to the Buddha's IDOAS, applied to the social realm. In NBP the social is considered "spiritual" enough. Like "Transcendental Truths", the "spiritual" is an airy ideology without arms and legs and therefore discarded in NBP.

The practice of karma modification is concerned with down-to-earth daily hassles like anger that, if accumulated, might explode into serious problems. In the Buddhist lore anger is seen as garbage – if composted, its energy can be preserved and transformed for the better – rather than something merely negative to be cut and thrown out (Thich Nhat Hanh, 1998). If expressed to feel good, the opposite will probably occur in the long run. One likely becomes angrier and if reciprocated by the other a vicious cycle might develop and somebody will get hurt. Pounding on a cushion is not a solution either, because, although relieved, the seeds of anger will still be there and might have even grown bigger. The Buddhist attitude to take care of anger does not mean to suppress or run away from it, but to allow its "suchness". On the contrary, while breathing in and out and thus sponsoring and embracing the anger in tenderness, one focuses concentration to the anger in mindful awareness. The garbage of anger, wherein flower seeds are hidden, will – with the sunshine

of our full loving attention – become fermented into powerful dung that helps to make the lotus in us sprout, grow, flower, and bloom.

It might be clear that the pan-Buddhist teaching is not meant to make out of its proponents vegetating people who are out-of-orbit, but steadfast people, who walk the middle way to attain balance within themselves and between them and their social environment. A cognitive-behavioural approach to Affect and karma modification seems to be a fruitful contribution in building a NBP that expedites the outmoded ways of religion and metaphysics in helping people end their suffering outlive their usefulness.

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CHAPTER 11:
The Witness in Cognitive Behavior Therapy and Buddhist Psychology

Paul Soons

Abstract: It can be stated that psychotherapy and mindfulness meditation aim at the development of the witness, *alaya-vijana*. This is a state in which a person can observe their lower and higher emotions, thoughts and behaviours, without being attached to them. A fully developed witness is the last phase before entering the level of Mind, non-dualistic consciousness, or silence or void.
The first aim of this paper is to investigate what is stated about this state or concept in the cognitive behavioural tradition. It seemed evident that this concept is not enough elaborated for CBT to function in confluence with a path of awakening. The second aim is to explore in the Buddhistic tradition how this concept is elaborated. The third aim is to formulate the concept of the witness into a cognitive behavioural framework with help of Buddhist Psychology. It can be concluded that the concept of the witness can be reformulated in the cognitive behavioural framework. This is an important step because now there is a connection between CBT and the Buddhist path of awakening on the theoretical level.

Introduction

Psychotherapy and the path of awakening (insight meditation) are two different disciplines that emerged in two different cultures and environments. They have two different goals but there is an overlap in the working of these two. Now in this era the two practices are linked together on a practical level. For example the MBCT is such a combined approach. There have been conducted therapy effect studies that indicated that such an approach is an effective treatment, including for the treatment of depression (Segal, Williams & Teasdale, 2002). So there is a confluence in all day practice. Why is there that connection, why are they practiced together? But there is not a connection between the two approaches on a conceptual or philosophical level.

In the past 50 years many westerners started a Buddhist practice as a spiritual path. It was beneficial for many of us, but there is a shadow side in the transplantation of an ancient spiritual tradition to the west. Buddhist philosophy and meditation practice both offer many tools for profound spiritual development, but they do not address all psychological concerns for westerners. Without more culturally appropriate interventions such as psychotherapy, even advanced meditators continue to suffer from anxiety, depression, isolating narcissism or numbed disengagement (Aronson, 2004).

In the 1970s, when meditation was first taught widely, there was much hope for its therapeutic potential. Evidence showed that meditation contributed positively to reducing the physical correlates of stress, such as high blood pressure. There was hope that meditation would help to prevent emotional problems in relationships and work. But it did not. So there was a realization that something was missing in our practice. It was not just a

question to "practice harder". Many stopped meditation definitely, others stopped temporarily and started in the meanwhile psychotherapy (Aronson, 2004). So was my own experience, when I started with meditation about 30 years ago.

But psychotherapy and meditation have different goals on the practical level: the meditation teacher told us to abandon anger, develop patience, give up attachment and understand the absence of self. The psychotherapists, conversely, encourage us to experience feelings of anger and this is done in a context of promoting self-assertion and individuality. The question follows how are these inconsistencies to be understood and can they be reconciled? And of course this is a field of much misunderstanding

Han de Wit (1987) acknowledged this and stated that psychotherapy is for neurotic problems and the path of awakening is for existential problems. When neurotic pain is dominant, then spiritual practices are not indicated. When someone is wrestling with existential (i.e., sickness, ageing, death) questions then a spiritual approach is the just choice. When there is no existential pain, there can be no neurotic pain. Neurotic pain originates as a consequence of unbearable existential pain. When there is neurotic pain, no existential pain can be experienced.

Goleman (1988) stated that there are different goals for psychotherapy and the path of awakening. A similarity between the paths of awakening and psychotherapy is the focus that both give to the way people think about themselves, about their relations with others and nature. Psychotherapy works with people with neurotic problems and personality disorders (DSM-problems). Eastern paths of awakening work with normal, and socially adjusted people (Watts, 1973). In some therapeutic schools there is more similarity with spiritual eastern pratices: Jung's individuation process, Maslow's self actualisation, Allport's functional autonomy and Adler's creative individuality.

Psychotherapy aims at reducing the influence of the conditioning of the past in this moment. Meditation aims at changing the conditioning process itself, so that it has no influence anymore on our behaviour in the future. From the perspective of the paths of awakening behaviour, and personality change is only secondary. They are epi-phenomena of the changings in the fundamental processes of experiencing reality. Consciousness is the medium for messages, which together form our experience. Psychotherapy engages in the messages and their meaning. Meditation is engaged with consciousness, the medium. Both are complementary (Goleman, 1988).

What is the connection between psychotherapy and the path of awakening: both advocate insight, behaviour change, development. The traditional paths of religion in the West (maybe not those in contemplative monk orders) were more passive. They were directed towards a status quo, a function. They have not the aim to change the inner nature of humans. Both approaches found each other. Psychotherapy filled the gap, which the path of awakening could not fulfil. It was a practical confluence and it seemed to work. In this article I would like to link CBT and Mindfulness Meditation/Buddhist Psychology on a conceptual and philosophical level. What is common between the two? How can the connection be made? Is there a common concept? What are the differences?

The psychotherapeutic tradition, especially the cognitive behavioural approach

The question here is whether there a concepts to indicate something like the concept of "observing function"? Are there connecting concepts? Albert Ellis (1977) uses the concepts of self-acceptance and self-esteem. Self-acceptance means that the individual fully and unconditionally accepts himself whether or not he behaves intelligently, correctly or competently and whether or not other people approve, respect or love him. Instead of strongly evaluating his or other people's selves, he can pretty rigorously stick to rating only

performance. Blaming or praising the whole individual for a few of his acts is an unscientific overgeneralisation. “I am not my behaviour, feelings, cognitions. It is better only to rate these aspects and just do not rate the whole person (=self)”.

CBT promotes self-awareness and introspection in the experience of behaviours, feelings and cognitions that contribute to people’s problems and symptoms. To learn the ABC-approach is an activity that dissociates those elements from the self through teaching by the therapist and in the resulting introspection of the client. Introspection enhances awareness, mindfulness and observation capacity. Insight is needed to discern between behaviours, feelings and cognitions. After practising vigorously you can get more control over your functioning (Ellis, 1962).

REBT strives for an egoless state of being, in a manner which according to Ellis, is only matched by Zen Buddhism. In REBT actions and performances may be judged, but not the self, for the essence of a human being is found as a process in state of flux. Any judgement will fail, as they are artificial attempts to stop an ongoing development. Even if an representative sample of such a process is taken at random of all aspects of the self, such judgements would be, according to Kwee “a pars pro toto” and an identification of the concept with the self (Kwee & Holdstock, 1996; Kwee & Ellis, 1998; Watson, 2000).

Lazarus (1977) wrote a chapter in a reader with the title: “Towards an Ego-less state of being”. A very self-destructive habit of thought and action is the widespread tendency to place one’s “ego” on the line. The “overgeneralized self” is involved in errors of absolutistic thinking, poor “self-worth”, blaming and damning, categorical imperatives. Inappropriate and overextended ego-involvement is probably responsible for the bulk of anxiety, guilt, and depression-related reactions from which so many people suffer. Effective therapy succeeds in showing clients how to dissociate a unitary “self” from the numerous situations that pervade their lives. Instead, emphasis is placed upon clients to see the plurality of “selves” across innumerable situations. A unitary self is to be dissociated from the numerous situations that one lives in. Not “I am a failure”, but “I failed in this situation”. The therapist teaches the client the profound differences between statements such as “I am a failure” versus “I failed in that particular situation”. So what is promoted here is a disconnection of self and the contents of the self (behaviour, feeling and cognitions) as a basis for a better mental health.

C.O. Evans (1970) seeks in his book “The subject of consciousness”: a solution to link CBT and paths of awakening in terms of cognitive psychology. He found that solution in the term “not-projected consciousness”. These are those elements of consciousness who form together the background of consciousness when awareness is directed to the objects. The observing self is the “not-projected consciousness”. The background of the elements and the background of experience of objects are the same. But the observing self itself can not be observed. We are consciousness, which can not be observed. Only the objects of consciousness can be observed (Deikman, 1982).

A definition of the process of identification according to Walsh & Vaughan (1983) is: the process in which consciousness assumes that something belongs to the self. Dis-identification is the process when someone becomes mindful of the fact that a thought or cognitive structure is part of himself and then tries to not identify with it. Identification is egosyntonic, a realization that something belongs to the self. Dis-identification is an egodystonic process, it is a kind of “letting go’ (Evers, 1994).

Assagioli (1965), from the psychodynamic tradition, stated that there is an observing self that can be distinguished from the transpersonal self. Experiences of feelings, behaviours and cognitions can be attached to the self, in a way that there is no distinction. The experiences are identified with the self. To become aware of these

experiences you should observe them. Then they are dis-identified from the self. Deikman (1982), also from the psychodynamic tradition, postulated an observing self which can experience thinking, feeling and behaviour. The observing self is prior to feeling, thinking and behaving. It is transcendent and it has a "mirror"-function. Subject is not object. The observer is not that which can be observed.

In the psychotherspeutic tradition, especially the cognitive behavioural approach, there can be found a concept that can be used to witness behaviour, emotions and cognitions. It is the observing self or the observing function. There is some awareness of a self, a person, an "I", that is not the same as behaviour, feeling of cognition. The observing function is implicit in it. That concept of self is a static concept. It really is not a concept but a process or function. This might be an adequate concept for the observing function on the personal level, which is the level of conventional psychotherapy.

The Eastern, especially the Buddhistic Tradition

Mindfulness is the process of witnessing in the mind's eye (Kwee ea, 2006). The concept of "non-self (anatta)" is helpful here: the mind is not-personal. There is only the uninterrupted stream of phenomena (Goleman, 1988). Mindfulness is consciousness free of choice. Self observation and introspection show us that there is no permanant "I". The witness crystalises into a constant mental quality.

In the Buddhist tradition the meditator is instructed to become a witness to their own experience. The first thing to occur is what classical Theravada meditation texts call "dispelling the illusion of compactness". This is where a sense of being an independent observer disappears. No enduring or substantial entity or observer or experiences or agent – no-self – can be found behind or apart from these moment-to-moment events to which they could be attributed (an-atta = no-self). The only observable reality are the events themselves. There is no awarenss of an observer. There are just individual moments of observation (Wilber, 1986).

In what is called the transpersonal witness there is a difference between witness (subject) and that what is witnessed (object). The Transpersonal Bands are sometimes experienced as the supra-individual witness: that which is capable of observing the flow of what is – without interfering with it, commenting on it, or in any way manipulating it. The witness simply observes the stream of events both inside and outside the mind-body in a creatively detached fashion, since, in fact, the witness is not exclusively identified with either. In other words, when the individual realises that his mind and his body can be perceived objectively, he spontaneously realises that they cannot constitute a real subjective self. The perceived cannot perceive. This position of the witness, or we might say, this state of witnessing, is the foundation of all beginning Buddhist practice (mindfulness). Remind the distinction of lesser and true mysticism, it is the distinction of the transpersonal Witness (there is dualism) and the Level of Mind (non-dualism). The last phase in spiritual development is the Level of Mind, or the state of unity. The transpersonal self is the witness. The transpersonal witness or better a state of witnessing: that which is capable of observing the flow of what is, without interfering with it, commenting on it, or in any way manipulating it (Wilber, 1977).

There are more concepts found in the Indian spiritual tradition. "Alaya-vijana" 'the storehouse consciousness" (Murti, 1955). "Alaya-vijana", also called the Buddhist Brahman, is beyond all conception and imagination, yet at the same time is it the potentiality of all possible thought, it is pure consciousness (Zimmer, 1974). Patanjali (a non-Buddhist writer) made a distinction between "purusha"and "drashta", soul and observer. "Purusha" is the witness of the activities of the mind, the "cita" . There is an

intentionality or identification between the “purusha” and the “cita”. The aim of yoga and meditation is meant to losen this intentionality (Bor ea, 2003). Another non-Buddhist tradition is the Advaita Vedanta tradition (Tiemersma, 1998, 2003). “Sakshin” is called the witness of all experience of consciousness. In the Sankhya-philosophy a distinction is made between “purusha”, the soul which is the witness and “prakriti” all phenomena in nature (Potter, 1981).

The conclusion here is that in the Indian spiritual tradition and especially in the Buddhistic path of awakening there are useful concepts to bridge the gap between psychotherapy and insight meditation. There is the concept of the witness or observer, which can be considered as a central concept in the development of insight through awareness. The concept is not a static one but is to be considered as a process, a function or mental quality.

Discussion:

The function of the witness as the connection between CBT and mindfulness

Wilber (1986) makes a distinction between different levels of development:

- the pre-personal level, which includes the development of the physical self, the emotional self and the mental self;
- the personal level, which includes the rule-role phase, the critical self phase and the development of the visionaire or existential self;
- the transpersonal level, which includes the phase of the nature mystic, the phase of the goddess mystic and eventually the phase of the formless mystic which is a development beyond the person, beyond duality and encompasses non-duality.

The development of the witness starts from the end of the personal realm through the transpersonal realm and ends in unity. Also Goleman (1988) postulates a likewise model of different levels of insight through insight meditation.

Conventional psychotherapy can be considered to work as the lower levels of insight of Vipassana. Transpersonal psychotherapies work at the medium and higher but not the highest levels of insight meditation. Goleman (1988) stated that conventional psychotherapy is a kind of insight meditation on the lowest levels. What then is the connection between the observer or observing self and the different levels of development of higher insights? The observer can start at the end of the personal development which is at the beginning of the transpersonal development till the end of the transpersonal development. The observer is a function that develops through all these stages of different and developing insight. Observation results in awareness, which in turns results in insight.

MBCT functions on the personal level. So that is for both insight meditation and CBT. Mindfulness itself – awareness of present experience with acceptance – may be seen as a common factor contributing to the efficacy of both Western psychotherapy and formal mindfulness meditation practice (Germer, 2005). Like western psychotherapy, mindfulness meditation developed in response to suffering that was understood to have a psychological cause. Also like psychotherapy the domain of mindfulness meditation includes thoughts, feelings, perception, intentions and behaviour. MBCT borrows from the mindfulness practice the idea that learning to accept painful experiences, rather than to get rid of them (the classical approach of CBT), can be transformative (Germer, 2005).

In both traditions, insight involves stepping back and seeing the way one has mistakenly come to believe that thoughts and perceptions are more real than they are. This

is often described as loosening our "identification" with our thoughts and emotions. Beliefs loosen their grip on us in this process. Insight is a process of loosening our grip on rigid beliefs. Common between CBT and insight meditation is the purpose of loosening the grip of unreflectively held ideas (Germer, 2005). The capacity of observation may lead to awareness, which may lead to insight, which may lead to further development.

The function of psychotherapy is to develop the observing self. But also the function of insight meditation is to develop the observing self, in which there is a full distinction between subject and object. So insight meditation and CBT work towards a full development of the observer function. Deikman (1982) states that the first step in spiritual development is to develop an observing self so there will be a distinction between subject and object. The second and last step is the phase in which there is no distinction anymore between subject and object, so there is non-duality.

In psychopathology dissociation might be the case. A gradual scale can be postulated which goes from being detached, being attached and being dissociated (Wilber, 1986). Pathology is the case when we use the concept of "detached observer" of thoughts and feelings taught in most meditative traditions, which are intended to intellectualise and dissociate themselves from their libidinal drives, or to engage in reaction formation whereby the opposites of such drives are embraced as natural products of new-found "spirituality". The degree of detachment might be an indicator of healthy or unhealthy development and this might be used as a single criterion measure of spiritual development. Both the generic as well as the specific (DSM), can be considered from the perspective in which the observation function is central. Mindfulness instruments can be used to detect from being attached, detached or dissociated. The concept of observation function can be used as a theoretical basis for an operationalisation of the concept of mindfulness. What are markers of mindfulness? There can be construed questionnaires to measure the degree of mindfulness. This could be a fruitful approach for effect measurement and a measurement of symptoms. Such mindfulness instruments are the KIMS and the MAAS (Baer ea, 2004).

Conclusions

Psychotherapy and the Buddhist path of awakening are both ways of diminishing unhappiness and promoting happiness. That is what they have in common. They come from a different culture and tradition. They are practiced in combination as well on the same level (the personal level) as on different levels (on the person level and the transpersonal level). Psychotherapy is for DSM-problems (personal level) and path of awakening is for existential problems, originally (Soons, 2004; 2006).

Mindfulness meditation and psychotherapy are both ways to enhance the observing self or the observing function. The observing function is a central concept in developing mindfulness awareness and also in psychotherapy. It aims at awareness enhancing. There are common levels and also not overlapping levels. The witnessing quality is a common quality and it is the connection on the conceptual/philosophical level. Witnessing or observation can lead to awareness and eventually insight. Psychotherapy works on the lower levels of the continuum. Paths of awakening do that as well on the lower levels (=psychotherapy level) as on the higher/existential levels. Both psychotherapy and mindfulness meditation aim at enhancing the witness capacity: psychotherapy is very specific and problem oriented; mindfulness does it in a non-specific way.

MBCT is a combination of the mindfulness approach and psychotherapy both on the personal or the conventional level. This combination on the same (= personal) level is relatively new. From two perspectives the observation function is enhanced: people learn to

use the ABC- model by working on specific problems and meditation helps by dis-identification as a general quality. As a double force it might be double effective. Both enhance the observation function in a different way: CBT by analyzing and changing thoughts and insight meditation just by observing and accepting them. It seems a potentially, powerful joint venture! Health and psychopathology can be considered from the perspective of attachment-detachment-dissociation (=degree of mindfulness). This has clinical, generic and specific problem relevance.

A fully developed observation function is the last phase before unity: eventually the observation ("alaya vijana") function disappears. Then there is only consciousness in unity. This is the place of this concept in the total journey of the path of awakening. It raises the question: what is the relation between mindfulness and non-duality? Eventually the observation function disappears, there is only consciousness. So the whole endeavour ends in unity (non-duality).

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CHAPTER 12:
The Biography, 'Navayana' as the 'new Vehicle' and Upaya

P.J.C.L. van der Velde

Abstract:

1. Biography

In general one can say that in the Buddhist tradition the Buddha himself is the greatest of paradigms of what an ideal life should be. Tradition has it that the Buddha went through the process of healing himself, at least his quest can be seen as such. This is not only proven by incidents from his life as the son of king Shuddhodana but it also follows from the incidents from his previous lives in the Jatakas, the 'birth-stories'. The Jatakas not only deal with the Buddha, they also deal with many other saintly persons who likewise went through the process of healing from imperfection, from Dukkha by the noble 'Dharma' the medicine administered by the skilful physician, the Buddha. Many modern Buddhists in the west or westernised Buddhists see their 'conversion' - if actually they do convert - to Buddhism as part of autobiography, it is part of a narrative account, of a narrative identity.

2. Navayana, the 'new vehicle'

The Buddhism as it develops within modernised culture in recent times can be indicated as 'Navayana'. Concepts, teachings and ideas from these new developments as they came into being in the west, at times come back to Asia. The term Navayana is used for various currents of thinking within modern Buddhism but that there is hardly any 'new Buddhist' who designates him-or herself as a 'Navayanin' or something of the kind. Navayana is a so-called 'etic' term only rarely used by Buddhists themselves. This implies quite some differences with the names of the other three great currents, Theravada, Mahayana and Vajrayana that are widely used by traditional Buddhists themselves. Very often we find that new converts to Buddhism in the west designate themselves as belonging to the schools of their teachers, whereas within these teachings characteristics can be found that are typical for the 'new vehicle'.

3. Upaya 'skilful means'

The Buddha is said to have been extremely skilful in the administration of the Dharma, the unique medicine against all imperfection. He adjusts the medicine in accordance with his 'skilfulness in means', his Upayakaushalya. The term 'Upaya' itself means 'skilful means', and for the time being it consists of the following:

1) It is the adjustment of the treatment for a suffering person, the treatment in the form of the Dharma after the particular diagnosis;
2) It is the adjustment of the Dharma to a particular society in a particular period;
3) It is the concept, the principle that explains apparent contradictions in the teachings of the Buddha;

4) It is the concept, the principle that explains apparent contradictions in the teachings of the historical Buddha and Buddha's of the past and future, as other times need other Dharma's;
5) A bit more challenging maybe, we might say that Upaya also is the principle by the means of which local traditions, rites, practices or beliefs can be integrated into the greater Buddhist tradition. Thus, Upaya comes to be an innovative force always present within the tradition itself.

Introduction

Buddhism is not a unity, it is not 'one religion' or 'one tradition' or so, it has never been a unity, there are and have been hundreds of schools that may have very little in common. These days we may even find a discussion going on whether Buddhism actually is a 'philosophy', a 'religion' or whether it is a 'way of living' or yet something else. Even descriptions as a 'secular religion' can be heard. This is at least remarkable given the fact that in the original languages of India it is very hard to find a word for religion or for philosophy. Words as 'Dharma' or 'Darshana', may come close to the western concept of religion, yet these are not equal to 'religion', though they may show similar features. Buddhism is not a matter of 'believing in Buddhism', rather one may come across descriptions such as 'practicing the Dharma', in whatever form. Yet two aspects all forms of Buddhism seem to have in common:

1.There will always be a link to the life history of the Buddha. One may find this link not only within the various schools of Buddhist thinking, also many individual Buddhists or people attracted to Buddhism, people who are 'practicing the Dharma' will underline this relation. The schools can be that different that at times they may not even recognise each other as Buddhists, but there will always be the link to the life of the Buddha, sometimes even to the life histories of earlier Buddha's. Buddha's life history is held to be the ideal spiritual perfection of existence. The ideal paradigm thus held in common, is the life of the Buddha. Moreover:

2. Every current type of Buddhist thinking, every school, claims to have direct access to what the Buddha really meant and taught to his disciples. Some schools will simply say the others are wrong, other schools are more careful and admit that there can be variations in the Dharma. Or they may claim that their Dharma teachings encompass all earlier teachings. Most schools will also claim that their practices can be linked back to a particular moment in the life history of the Buddha. Zen, for instance, will always be connected with the flower sermon in which the Buddha showed only a flower to Kashayapa in order to establish the tradition of silent, wordless teachings. Many schools will even link their practices of meditation back to the actual life of the Buddha. In Bodh Gaya one may find near the Mahabodhi temple a meditation path that consists of stones in the shape of lotus flowers. Schools practicing walking meditation will connect this particular practice back to the acts the Buddha himself is supposed to have performed in the weeks before and after his enlightenment when he was practicing walking meditation along this path.

According to the tradition of early Indian Buddhism the first Buddhist conference was held just after the Buddha's Parinirvana in Rajageha, present-day Rajgir. A group of 499 Arhats, enlightened monks, took part in the session under the guidance of Kashyapa. Upali, the barber of the Buddha, recited the rules of the Vinaya; Ananda remembered all of

the Suttas of the Buddha and the Abhidhamma that consisted of the teachings the Buddha had given to his mother when she was reborn in the heaven of the thirty-three gods after her death as a male deity. Everyday the Buddha came down from heaven to give a summary of his instructions during the three months he preached there. He came down in order to walk his almsroute and to accept the gifts from the laity. Thus, they would not lose the occasion to assemble merits for their next existence or to support ancestors in their next lives. Everyday the Buddha gave a summary of the teachings he had given to his mother in heaven to Sariputra once he had come down to the earth. Thus, the Theravada claims to have direct access to the most authoritative teachings of the Buddha recited right after his death.

The Mahayana tradition, on the other, states that while the Arhats were assembled in Rajageha, a parallel session took place on the Gridhrakuta, the Vulture's peak near Rajageha, an elevated rock where the Buddha used to come to preach to his followers. Tradition has it that if the Buddha would preach on the Vulture's peak his friend king Bimbisara who has been imprisoned up by his son Ajatasattu nearby could hear his edifying words. The great philosopher of Mahayana, Nagarjuna, states that this Mahayana session was held on another peak nearby, named Vimalasvabhava to the south of Rajageha. Samantabhadra is said to have presided over the conference, Vajrapani recited the Mahayana Sutras, Maitreya took care of the Vinaya and Manjushri recited the Abhidhamma. Sariputra, one of the Buddha's foremost disciples, was present there and for this reason we may find for instance in the Hrdsutra, the Heartsutra, how the Bodhisattva Avalokiteshvara personally addresses Sariputra. This would show that the Sutra was uttered during Sariputra's life. Therefore Mahayana traditions may even state that the conference of Rajageha was held prior to that of Rajageha as it is accepted that Sariputra and Mahamaudgalyayana passed into the Parinirvana before the Buddha died. Yet others may claim that as Sariputra and Mahamaudgalyayana were Arhats they would always remain in the proximity of the great enlightened beings.

Adherents of the Vajrayana tradition likewise claim to have access to the original Dharma of the Buddha. They have the tradition of the so-called Terma texts, texts that the Buddha is supposed to have uttered or handed over as manuscripts during his life, but it is by the Vajrayanins generally accepted that in his days society was not yet ready for these particular revelations. Therefore he would give his lectures but hid them in stones or he taught these to miraculous snakes who practically live forever. Elsewhere it is stated that he would teach them to celestial damsels or other mythical beings. In later days when time would demand this these messages would be revealed by the same snakes or they were discovered by magicians such as Padmasambhava who lived in Swat, Tibet and Bhutan in the eighth century C.E.. Pema Lingpa (1450-1521 C.E.) is another of those 'Terthons', the ‘Terma finders’. He lived in Bhutan. He is said to have discovered many Termas in Bhutan. Several of these were in what is named the wondrous Khandroma script, so tradition has it, a script developed by divine nymphs. In this alphabet one sign has a thousand meanings. When I was in Bhutan in 2000 I saw one Terma text that was supposedly discovered by Pema Lingpa. Actually it was simply written in Tibetan but considered to be written in Khandroma. The text was rather short but in the printed form it was quite extended, which is mainly due to this possibility of multiple interpretation. Padmasambhava and his two wives Mandarava and Yeshe Tsogyal have likewise discovered countless texts so tradition has it. Padmasambhava is also thought to have several secret messages handed over to his two wives.

Thus both Mahayana and Vajrayana may claim to have access to the original message given by the Buddha but adjusted to the contemporary world period in which they

came into being. Maybe it is better to say that they have teachings that at the time the Buddha lived were not suitable to be taught. After all the Buddha had to start teaching somewhere in his days. These 'new' teachings thus are not 'new', the only thing is they are discovered right now, now that they are needed in these new days.

All teachings are adjustments of the Dharma to the particular period of teaching. They are Upaya's, skilful means and moreover they are conventions, and thus they are 'not always true'. The Dharma may always be true but it may change its shape. This idea that all Dharma teachings are conventions is above all developed by the great Mahayana philospher Nagarjuna who lived in the second century C.E..

If it comes to imagining, Buddhism may see that modern people attracted to the Dharma will put forward that it is not the present Buddhism that makes an appeal to them, because that is a 'religion' with all kinds of 'superstitions', 'dogmas' and 'rituals'; what they want is rather the 'original Dharma of the Buddha, something that was not a 'religion' but 'a way to liberation or to healing or so'. The renowned Alexandra David Neel, whose books are read all over the globe and translated in many languages, was at times attacked for her interest in Tibetan Buddhism that was in her days considered to be the most perverted form of Buddhism in the world. It was heavily frowned upon and named 'Lamaism'. Alexandra David Neel herself would assert that it was not Lamaism but the ‘original teaching’ of the Buddha that she so highly respected (Lopez Jr. 2002: xxxiii[3]). Other famous examples are Madame Helena Blavatsky and Colonel Olcott who founded the Theosophical society in 1875 (Lopez Jr, 2002: xiv). Together they traveled to Asia when they considered Buddhism endangered by the influence of Christian missionaries that they saw as a threat to Asian culture in general (Lopez Jr., 2002: xv). As soon as they arrived in India they converted to Hinduism, but Olcott later traveled on to Sri Lanka where he converted to Buddhism. Afterwards he even visited Japan. All of the time, however, in the imagining of both Blavatsky and Olcot there was the idea that the Buddhism of their days was a corrupted form of the original Dharma and that the original message of the Buddha was hidden beneath countless forms of superstition and all kinds of outdated rituals. Olcott wrote a book that would play an important part if it comes to the imagining of Buddhism in the west: the Buddhist Catechism. In Sri Lanka the book was at first warmly welcomed. It was considered to be a kind of western, maybe therefore 'scientific' recognition of Buddhism. It was approved by the Buddhist Sangha. Problems arose, however, when Olcott stated that he considered the cult concerning the famous tooth of the Buddha in Kandy as mere superstition. Olcott defended the modernised Buddhism that considers the Dharma to be scientific and rational instead of 'religious'. When he openly stated that the tooth of Kandy was a piece of deer's antler opposition arose against him within the Singhalese Sangha and the approval of his Buddhist Catechism was withdrawn (Lopez jr, 2002: xix). In the end Olcott never accepted the tooth for real. The teeth of the Buddha are held to be that sacred, as they have heard the sacred words of the Buddha before these could reach the ears of his disciples. Western Buddhists will often state that Asian Buddhism is full of superstitions and rituals and therefore a 'religion', the essential Dharma has been 'polluted with all kinds of traditions' and 'religious practices', so one may often hear. In Asia, on the other hand, these practices are considered to be part of the tradition, they belong to the living Asian Buddhism of daily life.

So thus far, I think it is rightful to say that theses modernised images, so often found within various currents of western Buddhism, have more to say about what

[3] Donald Lopez Jr.. (2002) Modern Buddhism, readings for the unenlightened. Penguin Pocket

westerners long for than about Buddhism as an ancient tradition in Asia. Thus the imagining of Buddhism contains some paradoxes.

The original Buddhism is above all characterised as a way to liberation. In Buddha's days there were many religious searchers who tried to find an alternative for the fixed goals of the great Vedic rituals that were quickly losing their appeal. Whether these rituals were actually efficient was doubted by many and alternatives were sought for the static targets of life of the Vedic religion that were far too much directed towards worldly aims in the eyes of many. At the end of the nineteenth century the reception of Buddhism had changed, it was by some such as the above mentioned Olcott and Blavatsky considered to be a serious philosophy, not a 'creed' (Lopez Jr., 2002: xv). A philosophy would be met with more respect in those days than a religion. Buddhism is older than religions such as Christianity or Islam and for merely that reason already far superior to these two, so it was stated. Moreover, Buddhism was said to be scientific, it was in accordance with human reasoning and with natural sciences, so it was stated (ibid.: xv). Meanwhile we have to keep in mind that these same persons very often vehemently criticised the Buddhism as it was practiced in Asia, this they considered to be debased and corrupted to a mere religion of superstitions. The last decades we can see that Buddhism is now preferably considered to be a 'philosophy', a 'way of living', it is not a 'religion', it is 'nondogmatic' etc. At times we may even see that the teachings of the Abhidhamma, for instance, are not even allowed to be a 'model' of the workings of the mind, they must be what the mind is about, they must be how the human mind is working for real. Meanwhile many schools of Buddhism will admit that all teachings are conventional, they are only true at that moment, that place, in the context of teaching to that particular individual or to that group. What is true one moment is not necessarily true the next moment, even though it can be a modification of the Dharma. Recently several prominent Buddhist teachers such as the Dalai Lama and David Brazier have developed yet other ideas. The Dalai Lama often reinforces that it is not necessary to convert to Buddhism to follow his ideas and David Brazier has stated that there are 'Buddhists amongst the adherents of all world religions'. Thus Buddhism changes from an alternative for the Vedic sacrifices with their earthbound targets into a way of escape out of the world of suffering, into a religion and a religious identity, into science, into a 'non-theistic religion', into a system of superstitions, into a philosophy and now recently even into a kind of 'state of mind', a spiritual disposition found within all world religions. The modern Buddhist thus comes to be seen as an ideal spiritually developed person, his or her passions and thoughts in absolute balance. The Buddhist changes into the 'perfected modern human', so to say.

The more remarkable: as was stated above many Asian languages do not even have different words for religion, philosophy, faith, or way of living; this distinction does not exist (e.g. in Sanskrit). But speaking from within the Asian tradition itself these utterances and descriptions for the Dharma practice as well would simply be considered as nothing else but Upaya's, they are 'skilful means'. Refocusing on what the original should be is part of the entire Buddhist tradition. It is a form of skilful means to discover the actual Dharma in the form of a skilful means, to say it in an almost Koan like paradox.

Part of this refocusing may be the identification of the essential experience of personal suffering and the experience of the Buddha himself. Therefore, the connection between the ideal paradigm of the Buddha and the personal experience of Dukkha is essential in the Buddhist identity, in the construction of a connection between the individual and the Dharma. Dukkha is an active factor in the universe, but so is the Dharma. The one needs the other to be fully active.

Moreover, as every being will at the end come to reach Nirvana, every creature lives in a Jataka at present, in a life on the way to enlightenment. At the end each and every creature will one day touch the earth of Bodh Gaya in order to defeat one's personal army of Mara. Our present lives are just like one of the countless lives the Buddha passed through in his birth stories on which more will follow beneath. The universe is the place where we develop our wisdom. At the end this will result in the experience of Nirvana.

Siddhartha Gautama discovered what many Buddhas had discovered before him, and we as well will one day, each of us, discover what he had discovered, so is the generally accepted thought. Therefore, Buddhism always has a connection to one's life history in whatever birth one may reside at the moment of reflection. Moreover, the moment that one perceives the Dharma may be due to the grace of Bodhisattva's or it may be due to karmic merits accumulated in countless past lives. These karmic merits may invoke the grace of the noble Bodhisattva's. Even the gravest sinner will once be reborn in a birth in which he or she will come across the noble Dharma. Whereas in modern Buddhist literature one may often find the idea that Bodhisattva's live amongst us in the form of exemplary ideal persons such as Mother Theresa or the Dalai Lama, the Bodhisattva ideal, however, likewise implies that everybody will one day reach enlightenment, even mass murderers or war criminals and those guilty of genocide. Buddhists are advised to feel sorry for these persons as they will head millions of lives of great suffering before their negative karma will finally be extinguished. In the Jatakas, we may read that even the Buddha himself committed grave sins in his previous lives and therefore he is supposed to have suffered even during his last life as Siddhartha Gautama (Strong, 2001: 32-34).

Navayana, the 'new vehicle'

The term 'Navayana' is used here to designate Buddhism as it develops within modernised cultures, in recent times. It is the Buddhist thinking or practice that develops in Western modernity and the interaction this thinking has with Asian, traditional and modern Buddhism. It is still under construction, but the other three schools of Theravada, Mahayana and Vajrayana are likewise constantly developing and at times similarly focusing and refocusing on these issues, even though the idea may exist, above all in the west that the three older currents in Buddhist thinking are quite static and stable. They actually are not. At times concepts, teachings and ideas from these new developments also come back to Asia and start a new, or renewed, life there. The name Navayana can therefore in my opinion be chosen and used to indicate the fourth great current in Buddhist thinking. One thing to keep in mind while using this term Navayana is that it is a name for various currents of thinking within Buddhism and that there is hardly any 'new Buddhist' who designates him-or herself as a 'Navayanin' or something of the kind. Therefore it is an etic term only rarely used by Buddhists themselves. This sets it quite apart from the names of the other three great currents, Theravada, Mahayana and Vajrayana that are widely used by traditional Buddhists themselves. In the west it will be hard to find a western Buddhist who names him-or herself a 'Navayanin'. They most probably will designate themselves as belonging to the schools of their teachers, whereas within these teachings characteristics can be found that are typical for the 'new vehicle'. However, if one were to use the term Navayana, these Buddhists may be met with opposition.Some scholars or researchers prefer other names such as Neoyana, literally the same as Navayana, only 'neo' is Latin for Sanskrit 'nava', the two words are Indo European cognates. Still others prefer terms such as Neozen. I prefer Navayana as the word is a compound of Sanskrit words, loyal to the Asian

tradition whereas the word Neozen is in my opinion too limited in its scope, it refers in particular to the Zen tradition of Japan and its many applications in modernity.

Most of the 'Navayana' Buddhists can be found in the west, (i.e. in Europe, the Americas, Australia and New Zealand). Asian Buddhists will usually identify themselves with traditional currents of Buddhist practice, as these can be found in Asia. In the west one will only rarely come across Buddhists of western origin who were raised as Buddhists. This might be a matter of time, though. Most people who live in the west and are raised as Buddhists can be found amongst migrant communities from Asia. Buddhists of western origin for some reason or other got attracted in their lives to the Buddhist Dharma. Some of them consider themselves to be 'converted' to Buddhism while others simply 'support the Dharma' without calling themselves converted to Buddhism. This very often has to do with the workings of proponents of Buddhism such as the Dalai Lama who state that one does not have to convert to Buddhism in order to experience peace of mind, to be compassionate or to be friendly. Moreover, as was stated above, typically western Buddhism is not considered to be a religion, it is considered to be a way of living, a philosophy, an attitude towards life. One converts to a religion, not to a philosophy or to an attitude towards life. In spite of this, however, any system can have religious features, even if it does not originate from one of the five major world religions.

'Navayana' Buddhists can be quite eclectic in what they practice, often it is not considered to be a big deal to make combinations of Tibetan Buddhism with Japanese Zen or Theravada Vipassana techniques. On the other hand within other currents of Navayana Buddhism, one may also come across the idea that the teachings of other schools are simply wrong.

Biography and its connection to the Buddhist Dharma

If someone from the west converts to Buddhism it usually is part of an autobiography, it is part of a narrative. The newly converted Buddhist will have an account to tell of where he or she started with his or her religious or, as one may often hear nowadays 'spiritual', career. On a certain moment or occasion, one’s life was touched by the Buddhist message of the Dharma and the person got attracted to it. It is difficult to say whether the Dharma will be the final stage of development of this person, be it as a convert or as a supporter of the Dharma, as we may not be sure whether the narrative account will stop here.

The Buddha's life history within the Buddhist tradition is seen as the ideal life history. It is the quest for the healing wisdom of the Dharma. It is the quest for the insight that puts an end to all imperfection and suffering in the universe. Buddha's life history, however, not only consists of his last life as prince Siddhartha Gautama, is also encompasses his long path to Nirvana, all of his previous lives. Tradition has it that Gautama remembered all of the lives he lived before he was born as the son of king Shuddhodana, in the night he reached enlightenment. Mara, the god of the world, challenged him to give up his noble quest by asking him who could bear testimony of his right to Nirvana. It was then that the Buddha realised the importance of his past lives and he touched the earth in order to request her to testify of all of his previous merits. The goddess earth appears and Mara's army is beaten. Thus tradition has it that the Buddha could remember all of his past lives but he chose not to tell all of these accounts to his disciples. He only did so if circumstances demanded this. In fact he declined the idea of bringing up the past too much as one can choose the path to Nirvana and liberation this very moment. It is no use to look for answers for one's suffering in the present by studying the past and

one's past lives. Everything has a cause and this cause has a cause as well. In Buddhist ideology the path to liberation lies in the disruption of this chain of causes, the present action may not develop into a cause for further reactions. It was only when the telling of the past life was part of teachings at that very moment, if it was part of Upaya on which more will follow below, that he was willing to look for causes in the remote past. Otherwise knowledge of past lives would lead to the danger of attachments to skills, to idle acts or one would simply blame one's unlucky present situation to unfortunate demerits from an unlucky past. Thus, of each and every birth story we know the reason why the Buddha chose to tell it as this is handed down in each Jataka. Moreover identifications are given. Each character that plays a role in the Jataka is identified with a person of the last life of the Bodhisattva's last life as prince Siddhartha Gautama. Thus, the Jataka's not only serve as an ideal example of one person's strive for liberation, they serve as an illustration of how an entire group of beings in the end developed into human beings and because they were due to their virtuous acts time after time reborn in the close company of the enlightened master they finally almost all of them reached enlightenment in his close company. This is even true for Devadatta, the Buddha's evil cousin who was at the end reborn in hell. He was born in the Buddha's company because he was not all bad from the beginning (Strong, 2001: 18,19). The Jataka's thus consist of an entire group of ideal life histories, the ideal histories of those who surrounded the Buddha. Strong (2001: 40) mentions how the future Buddha's elephant (or Ananda, later his favorite disciple), one of his future friends, his horse, his groom, his future wife, the Bodhi tree and four treasure vases are born the very night he was born.

Thus one may conclude that virtuous acts will always result in a rebirth close to persons who are about to reach enlightenment if not now in this life, it will follow in one of the many lives closely following this life. The Buddha's life history from the very beginning till the enlightenment is in fact the spiritual healing process of an entire community. The number of lives it takes may at times seem to be quite large, but it is rather limited if one were to compare it to eternity.

Once the Buddha passed through his process of perfection tradition has it he changed entirely. It is stated that he then developed his 32 characteristic body marks, the so called 32 Lakshana's, completed with the 80 secondary marks, the Upalakshana's. Some accounts have it that he showed these characteristics already at the time of his birth and that it was exactly due to these body marks that the great seers who attended his father's court could recognise his remarkable nature. Furthermore, it is often stated that at the moment of realising what Nirvana implied his skin showed a golden hue, a luster that would later on disappear, only to return when he was about to pass into the final Nirvana. His healing process was started when he first met a living Buddha, in many of his life histories this is Dipankara, and it came to his final result when he reached enlightenment, due to his discovery of imperfection and suffering in the world. According to some sources he met, not one, but many Buddha's in succession in his previous existences (Strong, 2001: 20,21). The path to the enlightenment, and after the enlightenment other episodes (e.g. the visit to the heaven of the thirty-three in order to visit his mother who was reborn there after her death that occurred seven days after his birth), changed the Buddha into an ideal therapist; this is due to the fact that he 'has been there', he has experienced it all and apart from that he is able to remember it all. The visit to the heaven of the thirty-three is sometimes considered to have been an episode in which he went through the beyond any doubt traumatic experience of having lost his mother at such an early age by the means of visualisations. Buddhist teachers such as David Brazier connect the visit to the heaven of the thirty-three with these kinds of therapeutic healing practices and experiences.

However, in other biographical sources it is stated that his mother and his father cried when he left the palace, so that his mother must have lived to witness this moment of the 'great departure'. Of course, another woman may have been considered by him to be his mother, for instance Mahaprajapati who was the second wife of king Shuddhodana and was the mother of prince Nanda. Tradition has it that when Maya died she asked Mahaprajapati, who was her younger sister, to take care of the young prince Siddhartha. Mahaprajapati is said to have handed over her own son to a wet nurse in order to take proper care of her sister's son.

This makes the Buddha the ideal example for the mere reason he 'has been there', he went through the process himself, at least his biographies tell us he went through all these processes, he has become the ultimate healer. Of course we have to keep in mind that the Buddha's life history is a 'vita', there is not too much we know for sure if it comes to actual history. There is a lot of imagining in the Buddha though, which may be considered history to 'live with', instead of history as 'it actually happened'. Albeit that few Buddhists in Asia will doubt the actual historical value of Buddha's life accounts as they are handed over in the ancient biographies, miraculous though they may be.

Because he went through it himself he becomes the ultimate Bhisaja, the foremost physician. His Dharma is the most perfected medicine, it is Bhaisajyaraja, the 'Royal Medicine'. Because he lived all lives, he knows all experiences in physical and mental afflictions. His analysis of the world is what a skilful physician would do: there is the disease Dukkha; there is the cause of the disease: Tanha or Trsna; the cause of the disease can be removed: Nirodhana, and there is the medicine: the noble eightfold path of the Dharma.

In the Saundarananda[4], the account of the conversion of Nanda the Buddha's half brother, this four-partite analysis of the noble teachings is explained by the Buddha to his half brother Nanda once the latter one has come to realse that his ultimate healing lies in the path his elder brother developed at the moment Nanda has given up his primary reluctance to follow this path:

Saundaranda XVI.

41. 'Therefore think about the truth of Dukkha as if it were a disease, in the vices (dosha) lies the cause of disease, in the truth about putting it to rest lies the ultimate health and in the path lies the medicine

42. Therefore you should understand that activities bring Dukkha with them and you should also understand that the vices (dosha) come forth out of the same activities, know that avoidance of activities is the antidote and know also that avoidance is the path'.

Buddha is therefore the healer of the world and he became the ultimate healer by right as he passed through the process himself, not only in this life but in many earlier lives, so to say.

The original healing powers of the Buddha live on in his teachings as they are handed down by his disciples and supporters in the ages that followed up to the present time. The Buddhist tradition would say, the teachings live on like the Buddha's physical

4 In this contribution I at times refer to this text. It is a poetical biography of Nanda the half brother of the Buddha. The text was composed in Sanskrit by Ashvaghosha, a Buddhist author who lived in approximately the second century A.D.. In this text the conversion of Nanda to his brother's Dharma is described. The translations quoted in this article are my own based on the edition of Johnston (1928).

presence lives on in his remains, his relics and in the images and Stupa's that were produced to replace his presence. Likewise he lives on in the Buddhist Dharma.

Within the Buddhist tradition a birth as a human is considered to be the most perfected existence thinkable, it is the ideal birth to reach the ultimate experience. A human being is gifted with a great intelligence and moreover a great memory. According to traditional Buddhist cosmology a being can be reborn in six realms. In the realm of the gods life will seem to be perfect, every experience will be glorious. As a god, however, one will not experience any suffering, and suffering is an essential trigger for spiritual advancement. After a life in heaven a downfall may follow into one of the deepest hells, just for the mere fact that in heaven there is not any conscience of what a being is actually doing. In hell life is exactly the other way around, there life consists only of suffering. There are cold and warm hells and if one is born in a cold hell one will desperately long for a warm hell and vice versa. Born in the animal realm one might be instigated by ignorance, although in many Buddhist traditional accounts animals can be very bright and intelligent. In many of the Jataka's for instance the Buddha himself is reborn as an animal and so were his disciples, parents and others. Life as a Preta, or hungry ghost is about suffering and lust and so is life as one of the angry demons. If one is reborn as a human being one will experience the sharp contrasts between happiness and suffering and these experiences of contrasts will inspire one into realising what existence is about. With the help of the intelligence one may understand what is happening, the memory collects all that has happened in the past. One knows that one will die, one knows of the passage of time. In between one experiences what it is like to be a human, above all in the contrasts.

The encounter with a living Buddha while one is reborn as a human is considered to be very fortunate for reaching spiritual progress, enlightenment even. It was the Buddha's own experience. Meeting a living Buddha has in Asia developed into an ideal paradigm, many Buddhists do not strive after enlightenment through the difficult path of meditation, they hope by the means of the accumulation of virtuous karma to be reborn in one of the heavens in order to be born on earth as soon as the next Buddha comes down to the earth. If one hears the sermon of a living Buddha it is very easy to reach the ultimate experience, so tradition has it. Moreover, if one utters one's resolution to become a Bodhisattva or to reach for Nirvana in the presence of a living Buddha this statement is much more powerful than in any other setting. In the Saundarananda this is stated as follows, the Buddha is compared to a doctor who administers a medicine, and moreover there is the fortunate moment that should not be wasted:

Saundarananda V.

48. 'It is just like when a doctor who forcibly administers a medicine to a patient that may be disagreeable, likewise what I told you may be disagreeable, but the essence is true and leads to your fortune.

49. Therefore fix your mind with skills on your wellbeing, as long as this fortunate moment is there, as long as death does not approach, fix it on methodical exercises (yoga) as long as your youth is there'.

Therefore, birth as a human being is still the most profitable. Embodiment as a human may be impure, the body may consist of a 'thin leather bag full of entrails, worms and impurity', yet embodiment as a human implies the above mentioned intelligence and the great memory. When the Buddha himself lived as a human being he met several

Buddha's of the past and in their presence made the resolve to reach enlightenment and it was as a human that he at the end realised Nirvana.

In modern western Buddhism not only the life-history of the Buddha is of utmost importance, parallels can be constructed as well between supporters or converts to modern Buddhism and modern Buddhist teachers such as the Dalai Lama or Thich Nhat Hanh for instance. They are in a way considered to be extensions of the original teachings and of the original Buddha. Therefore meeting them, and next to that constructing parallels between one's own life and that of the great example puts one's life apart and stresses that it actually is a Jataka we are living in. The personal account during which one has discovered the value and meaning of the Dharma is therefore often connected to an actual encounter with a modern Buddhist teacher who got hold of one's experiences and of one's life. After all the discovery of the value of Buddhist Dharma is not a logical step in the west.

Upaya, skilful means.

The term Upaya is mainly found in Mahayana teachings: it is the adjustment of the Dharma to the disciple, as a physician adjusts his treatment to the disease of the patient. As the Dharma mainly exists in the form of teachings and as they are part of manifold life histories one might say that the Dharma practice as we know it today are the result of countless Upaya's. In Madhyamaka philosophy it is stated that the Buddha's teachings were conventions in the first place, as was stated above. The Buddha had to start his teachings with his first words, with first teachings, as any message starts with certain utterances or acts. From this point of view the four noble truths are no exception, they were conventions as well at a certain moment in time. The turnings of the Dharmawheel, the origin of Theravada, Mahayana, Vajrayana and at present the 'Navayana' can all be seen as Upaya's. If the name Neo-zen is preferred, if it should be Neo-yana, this would all be Upaya.

Buddha's and Bodhisattva's have countless Upaya's at hand, they above all have the ability to adjust the teachings, they dispose of Upayakasuhalya, a faculty particular to Buddha's or Bodhisattva's. The fact that the Buddha hid certain teachings for which society in his days was not yet prepared is a matter of Upaya.

Upaya and Upayakaushalya

The healing with which the Buddha actually connects his disciples maybe his 'patients' or 'clients' therefore looks like that of a physician or a therapist who first analyses the person he or she is treating and next to this, plans a way to the treatment. In Buddhism this would once more be named Upaya. The Buddha is often said to have been especially skillful in dealing with his disciples because of his unique handling of 'Upayakaushalya', his 'abilities in the application and development of skilful means'. Here as well a clear parallel with medical sciences can be distinguished as Upaya often comes close to the 'treatment after the diagnosis'. In a broader sense Upaya may also imply that the Dharma needs to be adjusted not only to a particular disciple, but also to a particular society, culture and time. Here we find a traditional opening in the Dharma when adjustment of the original teachings is required to new circumstances.

In all cases however the treatment remains the same: it still is the Dharma. The Dharma is the medicine though many forms developed over the time, within particular cultures and societies in accordance with individual cases. There are two important forms of Upaya in the Buddhist tradition, Upaya can take the form of certain acts, even miracles; on the other hand Upaya may consist of teaching the Dharma. The act of the Buddha when he showed Kashyapa the flower, in the flower sermon, can be called Upaya and so can the

visit which he paid to heaven with his brother Nanda in order to show him the heavenly damsels, the Apsarases to get his mind distracted from carnal love and passions.

In the Saundarananda Upaya, the treatment of the Buddha is described as follows:

Saundarananda XIII.

3. 'The hero guided some with a subtle word, other in a loud voice, and yet others in both ways.

4. Just like gold comes forward out of dirt and it is pure, free of filth and is shining, even if it lies in dirt, it does not get stained by filthiness.

5. Just as a lotus leaf that originates from the water remains in it,
and whether it is above the water or underneath it, it does not get stained by it,

6. just so a saint is born in the world and he does what is pleasing to the world for the reason of his status and purity he does not get stained by the figurations (dharmas) of the world.

7. On moments when he gives his advises he does so the one moment binding, with abandon, friendly, in a harsh way, with stories or with concentration, but merely for the reason of the treatment, not just because he feels that way then.

8. And he took on a body out of that great compassion: 'May I in whatever way deliver the creatures of suffering!', because he experiences that much compassion with them'.

In this way, the Buddha adjusts his treatments to his disciples. For instance, he does not instruct them harshly because he is in a bad mood in that moment. And if he is in a bad mood it is Upaya...

Meanwhile Upaya is also the concept that explains that some of the Buddha's teachings at first sight seem to be contradictory. Contradictions in the teachings are explained with the help of Upaya and Upayakaushalya. Contradictions can be explained out of the momentum on which, and the personality of the disciple or group of disciples to whom the Buddha was addressing his message. If even so certain Dharma instructions remain unclear this is explained by the means of an assumed ignorance on the side of the person who thought to lack proper understanding.

Upaya may even imply an occasional little lie, if at the end its intentions are clear, it is to help the patient, the suffering person. Just like with medical treatments the pains that arise out of the treatment can at first be worse than those from the original disease. A comparison is made on this in the Saundarananda. Nanda was addicted to sensual passions, so the tradition has it, and the Buddha led him to passionlessness by at first intensifying his passions; once more one finds a comparison here of the Buddha's acts with those of a skilled physician:

Saundarananda X.

42. 'Just like a man cleans a dirty piece of clothing by at first making it even dirtier by applying soda, just so the Wise one dragged him into even worse passions, but with the target of putting an end to this impurity, not out of the idea of causing more impurity to arise. Just like a doctor intent on banishing diseases from a body will at first exert himself to cause the patient to suffer more, exactly, in that very way the Wise One connected him with heavier passions, for the very reason of putting his passions to an end'.

Upaya therefore has four meanings at least for the moment and I would like to add one more aspect of the concept as number five:

1. It is the adjustment of the treatment for a suffering person, the treatment in the form of the Dharma after the particular diagnosis;
2. It is the adjustment of the Dharma to a particular society in a particular period;
3. It is the concept, the principle that explains apparent contradictions in the teachings of the Buddha;
4. It is the concept, the principle that explains apparent contradictions in the teachings of the historical Buddha and Buddha's of the past and future, as other times need other Dharma's;
5. A bit more challenging maybe, we might say that Upaya also is the principle by the means of which local traditions, rites, practices or beliefs can be integrated into the greater Buddhist tradition. Thus Upaya comes to be an innovative force always present within the tradition itself.

Concluding: Navayana, biography and Upaya

In many cases the interest in the Dharma of westerners who are attracted to Buddhism is part of as narrative account: 'First I was raised as Roman catholic, I became a feminist as a student, later on I was in a kind of global movement dealing with the environment, then I was into spirituality when I lost my job and discovered Buddhism after my trip to Nepal', for instance.

One may very often next to that hear why Buddhism is considered to be that attractive. In popular imagining western Buddhism is often said to deny the existence of hell, it has no dogmas, no punishing god, there are equal chances for men and women, it is liberating, there is a gay Buddhist movement, and moreover it is stated that Buddhism does not disrespect the human body, and more specifically the female body, as is done in so many religions. Moreover, Buddhism is stated to be in accordance with the latest discoveries of science, it is scientific and often it is considered to have been scientific from the very first days the noble Dharma came to be discovered, so it is said.

In some cases it is said to be a 'religion', a 'way of living', a 'philosophy', a 'therapy', or even 'the therapy' and there are many other descriptions of this kind. All of these features can be far removed from the practice one may find in Asia, where hell is definitely present in Buddhist cosmology, where Karma serves as rewarding or punishing, where man and woman are so often not equal at all, they certainly were not in the past, and the human body is often though definitely not always considered to be extremely impure and impermanent.

Buddhism as we know it nowadays can be said to be the result of Upaya. Therefore, if nowadays in the west it has to be a 'religion', it can be considered as such, it can be so. If it should not be seen as a religion, but rather as 'way of living' or a 'philosophy', it can likewise be so. If it must be 'atheistic' it can be so, 'theistic', even this is not unthinkable, though the divine is never the 'ultimate' in Buddhism. It is challenging for Buddhism to be involved in matters such as psychotherapy, euthanasia, animal rights and so on, issues that play a part in modern day ethics. If it must be a way to final liberation, it can be seen as such. Two things one needs to keep in mind, the connection to the Buddha's 'vita' must be made and there must be the relation to the original Dharma, in whatever suitable form. Then it is nothing else but Dharma.

Some reflections on implications for psychotherapy; shifts and changes.

Wherever Buddhist teachings arrived in Asia there always came to be a mixture with religious of philosophical thoughts and traditions already present in the area. There is no such thing as a 'pure Buddhism' if it comes to this. If one school is pure than all the others have the same right to this assumed purity. Due to the concept of Upaya an opening can always be found towards the specific demands of an individual, a culture or a time. Buddhist teachers were always ready to engage into this process.

Mental and physical healing have always been part of the Buddhist teachings as the Dharma serves as the medicine against the prime source of suffering: Dukkha, the imperfection embodied in existence. A complete cessation of Dukkha can only be found in Nirvana. Temporary physical or mental healing is allowed, from a traditional Buddhist viewpoint as a preliminary stage on the spiritual path. This temporary healing can be part of compassion, of 'passionless compassion'. It will be seen in Buddhism as a preliminary stage on the spiritual path. Of course, these arguments of reasoning are only of interest if one desires to connect traditional Buddhist thinking to recent developments. Buddhist schools thus always sought for ways to legitimise their teachings in order to defend themselves to attacks from opponents. Thus, recent developments in Buddhism, including the connections made between psychotherapy and Buddhism, are from a traditional point of view, absolutely legal. It is Upaya that creates this openness, whatever conservative traditions from Asia might say for instance. Moreover, a birth as a human may not be lived in vain, and tradition has it that if mental or physical afflictions are a hindrance towards progress any treatment is allowed.

Finally in Navayana teachings one can often find ideas that Buddhism is not a religion and not dogmatic. For modern humanity this seems to be of great importance. If it comes to this I would like to say that given the concept of Upaya it really is no problem at all to develop a non-dogmatic, non-religious Buddhism if time, society and individuals, or for instance the particular application of Buddhist techniques demand for this. Yet these ideas have more to say about what one exactly considers to be a religion and about what one considers to be a dogma than about what Buddhism essentially is in its many currents as they developed over a period of approximately 2500 years. Of course, these arguments of reasoning are only of interest if one desires to connect traditional Buddhist thinking to recent developments.

CHAPTER 13: A Buddhist Perspective of Positive Psychology

Soorakkulame Pemarathana

Abstract: Acknowledgement of the mind's ability to choose and to decide among alternatives is important in shaping a positive view of life. Early Buddhism presents a view of human personality which emphasises an ability for free choice.

Character traits, habits and tendencies (*samkāra*) in Buddhist perspective are ultimately results of our chosen ways of thought directed by *the will* (*cetanā*) of the person. They are not inherent and permanent but are opened for reform by the use of the same will (*cetanā*) which can be utilised to direct one's actions and thoughts in a more constructive manner.

With this view of the human being, early Buddhism shows the unwarranted nature of the state of "helplessness". Buddhism discourages individuals from seeing themselves and their situations as beyond their control. Though the individual and events are causally related, the will (*cetanā*) of the individual has a room to play within the web of connections. Early Buddhism provides optimistic explanatory styles to understand human conditions, highlighting the human potentials by which one can be in the position to help themselves.

Introduction

Themes of Positive Psychology demonstrate a considerable commonality with the teachings of early Buddhism. The quest for happiness and development of positive emotions are central to the Buddhist practice. The discussions on the interface between Buddhist teachings and Positive Psychology have become fascinating concern in comparative studies. Suggestions have been made for the possible cohesive confluence of the Buddhist teachings and Positive Psychology (Kwee, M.G.T., & Taams, M.K, 2006). Most of these discussions focus on the Buddhist teachings on positive emotions (i.e. compassion, gratitude and the practice of mindfulness). This paper focuses on the notion of helplessness in Positive Psychology and the Buddhist explanatory styles which can be utilised as antidotes to the feeling of helplessness.

Positive Psychology acknowledges the human mind's potential to positively address the diverse issues of life. This acknowledgement of the mind's ability to choose and to decide among alternatives is important in shaping a positive view of life. Early Buddhism[5] presents a view of human personality which emphasises its ability for free choice particularly in directing one's thoughts. Early Buddhism in one hand regards individuals' tendencies as deliberate constructions and accepts the intrinsic ability to restructure these on others. Belief in the ability to control and change is the opposite of

[5] My investigation of Buddhism is based on the Buddhist canon in Pali language. The term "early Buddhism", in this study, refers to the form of Buddhism represented in the Pali discourses.

helplessness. Early Buddhist disclosure of the territories of human personality to which we have some degree of choice and control, provides a good base for a comparative study of Buddhist psychology and Positive psychology.

Helplessness

"Helplessness" is a mental state in which one does not do anything, based on the cognitive belief that the situation is beyond one's control. This is an overwhelming feeling, there is no point in trying to overcome problematic situations. More generally, it is a conviction in one's own powerlessness to overcome, or to move ahead, with the situation. This is usually an exaggerated notion of lack of control of oneself and related situations. What is crucial in this notion is the individual's 'explanatory style' of causal connections of events and their relation to oneself. Explanatory style is the manner in which each individual habitually explain to themselves why events happen. Psychologists assert that the causal attribution one entertains on uncontrollable aversive events sets parameters for the feeling of helplessness (Abramson, L.Y. et al, 1978). Martin Seligman suggests that helplessness is "learned' or "acquired" by the individual, based on their explanatory style. "Your way of explaining events to yourself determines how helpless you can become, or how energised, when you encounter the everyday setbacks as well as momentous defeats." (Seligman, 2006: 16) Pessimistic explanatory style, which sees the situations as beyond control, results in helplessness. Positive psychology advocates optimistic explanatory styles that include personal control over situations. An optimistic explanatory style stops helplessness and replaces it with hope and optimism. (Peterson & Seligman, 1993).

The Buddhist Optimistic Explanatory Styles

In this connection, early Buddhism can be seen as offering the individual optimistic explanatory styles regarding human conditions. The early Buddhist conception of human being is mainly characterised by the idea of free will and potentiality. In the early Buddhist view, being human means being able to choose and act willfully. The early Buddhist description of what constitutes a human being assigns personal control and free will to the individual, particularly in shaping one's patterns of thinking.

1. Buddhist Conception of Human Being

In Buddhism, human beings are analysed in terms of Five Aggregates, namely: corporeality (*rūpa*); feeling (*vedanā*); perceptions (*saññā*); mental formations (*samkāra*); and consciousness (*viññāṇa*). A human being is viewed as the interplay of these aggregates. Based on the sense-organs of corporeality and conscious ability there is contact with external stimulus. This contact gives rise to feeling which leads to perception, which recognises the external stimulus. Then one is confronted with the choice to develop thoughts further by selecting from alternative courses of direction. Depending on the chosen direction of thoughts, "the mental formations" are produced in human personality. Mental formations include dispositions, tendencies, traits and habits of a person. This ability of human personality to choose and direct one's thought and action is termed in Buddhism as *cetanā* or "the will."[6]

[6] The Pali term, cetanā is variously translated as will, intention, purpose (Pali – English Dictionary, London: PTS, 1994, p. 271), volition and effort (Encyclopedia of Buddhism, Vol. IV, Colombo, 1979, p. 86), All renderings denote individual's ability to exercise his will in thought and action.

2. The Will (Cetanā)

In creating mental formations *the will* of the individual plays an important role. The will decides the patterns and the direction of thoughts from amongst many alternatives. It is the will, according to early Buddhism, that constructs 'experienced reality.' Not only does the will influence the objective content of the experience, but it also shapes the psychophysical organism within which it has arisen (Bhikkhu Bodhi, 2000:1071). The will in question is largely free in the Buddhist view. That is why Buddhism attaches the responsibility of one's actions and character traits to the individual and encourages all to follow a positive course of action with compassion and wisdom. In this case, early Buddhism seems to affirm one of the most significant findings in psychology in the last twenty years, that is, "individuals can choose the way they think."

3. The Lack of Permanence

Whatever character traits, habits and tendencies that we have developed are ultimately a result of our chosen way of thought developments. Since they have been created by the individual, they lack an inherent and permanent nature and as such are open to scrutiny and change. The method of scrutinising and changing them is the application of the same will to direct one's actions and thoughts towards a more constructive end. The human being is viewed in early Buddhism as one who has ample opportunities to change, particularly in the realm of thought, at any given point having his power of will.

4. Human Abilities

Early Buddhism advocates certain other abilities of the human being that enable him to operate his free will (Anguttara Nikaya III : 337 f.). According to Early Buddhism human beings possess the ability of initiation (*ārabbha dhātu*), the ability of exertion (*nikkama dhātu*), the ability of striving (*parakkama dhātu*), the ability of resistance (*thāma dhātu*), the ability of persistence (*thiti dhātu*), and the ability of undertaking (*upakkama dhātu*). This teaching grants human beings not only the freedom of voluntarily initiating actions according to choice, but also the ability of voluntarily changing one's prolonged habits and patterns of behaviour. This realm of choice and control is really an "unclaimed territory" of the human personality in our usual understanding.

Perceiving human beings as such clarifies the groundless nature of the state of "helplessness" whereby one does not choose to do anything. One is not encouraged to see oneself and situations as beyond individual control. There is always a realm where humans can use their control by choosing and deciding the way to think and act. Early Buddhism encourages the exercise of one's will in life. Though the individual and events are causally related, the will of the individual has a room to play within web of these connections and as such an impact on the end results and the nature of the whole scenario. The nature of individual's response and reaction to experiences and situations is shaped by his will and his choice among various alternatives.

Hence, in early Buddhism "helplessness" will be taken as a mere misconstruing, on the part of the individual, of one's potential. The will of the individual highlighted in Buddhist analysis emphasises "personal control" that one has over life events. Personal control is the opposite of helplessness (Seligman, 2006 : 6). Researches have shown that simply being aware of the ability to change, or control, was enough to substantially counteract its distracting effect (Peterson & Seligman, 1993). Explanatory style provided by early Buddhism provides an optimistic perspective. This perspective of human being

promotes the belief of 'can do', 'can change' and 'can be happy' in which positive psychology is interested.

5. Human Well-Being

The Buddhist view of human potential in the realm of mental life has also important implications to well-being and happiness. Genuine well-being in Buddhism is not a state that is contingent on the presence of pleasurable stimuli, either external or internal, but an achievement through an inner transformation (Wallace, 1999: 180). It results from freeing the mind from afflictive tendencies, cultivating mental balance and realising one's fullest potential in terms of wisdom, compassion, and creativity (Wallace & Shapiro, 2006: 693). According to Buddhism, one of the distinctive characteristics of genuine well-being, as opposed to hedonic well-being, is being within one's control. Enjoyment derived from sensual gratification, fame and power are transient and largely out of one's control. Lasting well-being and happiness can be achieved, or rather produced, through sustained training in cultivation of mental balance. Mental balance and consequent lasting well-being do not occur automatically or mechanically. Personal endeavour and conscious direction are thoroughly involved in this process. Buddhism admits that one can utilise this power of will to transform his or her habitual patterns of attentional, conative and emotional spheres. Human beings need not be victims, forever, of prolonged patterns of thought and emotions. It is the power of the will that can make individuals free from unwanted afflictive emotions and directs the cultivation of mental balance. Indeed this cultivation involves a sustained training. This training is possible due to the power of will that operates in the sphere of mental life.

Though external conditions and situations influence one's life, the enduring well-being is determined by the way that one internally interprets and responses to those conditions and situations. The greater potential that the individual is invested is to change and to redirect his mental life. In achieving well-being we are not helpless but we can help ourselves.

Conclusion

Early Buddhism with its conception of the will of human beings expands the spectrum of human experience beyond various limited ranges. It emphasises such aspects of human personality as happiness, leadership, creativity, and strength. It certainly questions the validity of the belief of helplessness and introduces an alternative view of human potential; thus, early Buddhism could be a complementary system which can be useful in changing people's explanatory styles to replace "learned helplessness" with "learned optimism."

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CHAPTER 14:
Mindfulness: Significant Common Confusions

William L. Mikulas

Abstract: Western psychology has discovered mindfulness, it being a very popular and central concept with many individuals and groups. Unfortunately, there are some very common confusions and confounding related to mindfulness, with significant practical implications. This includes confusions with concentration, acceptance, and Langer's approach.

Introduction

In the last decade Western Psychology has discovered mindfulness, almost always directly or indirectly derived from Buddhism. Currently, mindfulness is one of the hottest and most popular topics in North American psychology (e.g., Baer, 2003; Germer, Siegel, & Fulton, 2005). Mindfulness has been identified as a "core psychotherapy process" (Martin, 1997) and a theme "across schools of psychotherapy" (Horowitz, 2002). There are "mindfulness-based" cognitive behaviour programs to reduce relapse in depression (Segal, Williams & Teasdale, 2002) and alcohol and substance use (Witkiewitz, Marlatt, & Walker, 2005). Unfortunately, there is a lot of confusion about exactly what mindfulness is, misunderstandings with great practical implications (Mikulas, 2007). The three most common are confusing mindfulness with concentration, acceptance, and Langer's social psychological approach.

My definition of mindfulness is the active maximising of the breadth and clarity of awareness (Mikulas, 2002). It is the behaviour of moving and sharpening the focus of awareness within the field of consciousness. This definition corresponds to how mindfulness is usually described in Buddhism. Other times in the Buddhist literature mindfulness is described more as a property of the mind, in which case my definition corresponds more to the cultivation of mindfulness, rather than mindfulness itself. Mindfulness involves simply observing the contents and processes of the mind; it is just being aware, bare attention, detached observation, choiceless awareness. It is not thinking, judging, or categorising; it is being aware of these mental processes. The essence of mindfulness training is simply noticing whatever arises in consciousness while minimising the occurrence of and getting lost in related thoughts, reactions, and elaborations (e.g., Goldstein, 1993).

Concentration

My definition of concentration is the learned control of the focus of one's attention; it is the behaviour of keeping one's awareness, with varying degrees of one-pointedness, on a particular set of contents of the mind (Mikulas, 2002). All the world's major meditation traditions stress the development of concentration and/or mindfulness (Goleman, 1988; Ornstein, 1986). As a result, concentration and mindfulness are often

confused and confounded in meditation programs, manuals, and individual practices, although they are distinctively different, behaviourally and neurophysiologically (Dunn, Hartigan, & Mikulas, 1999; Mikulas, 2000).

Developing concentration has powerful applications in education, sports, art, and the attention disorders, including ADD/ADHD, self-focussed attention and attentional bias (cf. Mikulas 2002). Developing concentration also quiets the mind and leads to more control over cognitions. If this quieting of the mind is done while one is sitting still, it manifests as biological relaxation, the most researched effect of meditation in the Western literature (Andresen, 2000; Murphy & Donovan, 1997).

Concentration as a learned skill is not well-known in North American psychology, largely because it is seen as a less volitional component of the dominant information-processing model. Hence, in most applied situations emphasis is on altering the environment, rather than teaching a skill. The current interest in mindfulness is not accompanied by equal interest or understanding of concentration. As a result, it is very common for meditation-based results to be attributed to mindfulness, when they are often due to concentration. For example, several American theorists talk about mindfulness-produced relaxation, when it is concentration that produces the relaxation. Mindfulness includes simple awareness of concentration and relaxation.

Currently in North America "mindfulness-based" clinical programs are being developed and promoted at a fast rate. If one looks carefully at exactly what is done in these programs one finds components that strengthen mindfulness and/or concentration. But since all focus and explanation is on mindfulness, inadequate attention is given to the development of concentration.

It is my contention that the effectiveness of most of these programs would improve if more attention was given to concentration. After that, the next step is to come to understand the subtle interplay between mindfulness and concentration. For example, the mindfulness-based cognitive behaviour therapies emphasise becoming mindful of certain classes of cognitions. But this is difficult to do with a racing mind. Concentration quiets the mind and makes mindfulness of cognitions easier. Then a combination of concentration and mindfulness allows one to disidentify with one's cognitions and step back from them, which makes it easier to change cognitions and disrupt automatic cognitive chains. This also creates the space for insight knowing (prajna), which is the primary purpose of Buddhist meditation.

Acceptance

The primary North American organisation of cognitive behaviour modification is the Association for Behavioural and Cognitive Therapies (ABCT), previously named the Association for Advancement of Behaviour Therapy. Currently, and for the last few years, by far the two most popular and influential topics in ABCT have been mindfulness-based and acceptance-based therapies (e.g., Hayes, Strosahl, & Wilson, 1999). These are being heavily promoted as the new wave or next step in behavioural and cognitive therapies. Within ABCT mindfulness is almost always defined in terms of acceptance; mindfulness is awareness plus acceptance.

However, although an attitude of acceptance may sometimes be useful in cultivating mindfulness, they are separate and very different. Mindfulness has nothing to do with accepting or rejecting, it is simply awareness of these processes. This distinction has important implications for therapy and personal/spiritual growth, such as when it is important for the person to be mindful of not accepting; this should be particularly

important for acceptance-based therapies. If mindfulness training suggests that acceptance is part of mindfulness, then the person will be biased against being mindful of non-acceptance; and this could generalise to related domains and thus impair overall mindfulness.

"Equanimity" is a very important concept in Buddhism (Pandita, 1992), a concept related to acceptance. It is equal acceptance and receptivity toward all objects of consciousness, an evenness of mind in which one is not more interested in or drawn to some objects of consciousness than others. A Buddhist analogy is that the sun shines on everything equally. One way of producing equanimity is by quieting the mind via concentration. Equanimity is one of the seven factors of enlightenment (Pandita, 1992), "qualities of mind that, when cultivated in practice, profoundly affect our relationship to the world around us" (Goldstein & Kornfield, 1987, p. 61). The other six factors are mindfulness, concentration, investigation, effort, rapture, and calm. Again, it can be seen that mindfulness, concentration, and equanimity are all different, but related. Mindfulness is considered primary, as it facilitates the awakening, strengthening, and keeping in balance of the other six factors.

Langer

Social psychologist Ellen Langer (1989) has developed her own concept of "mindfulness," which, as she well knows, is very different from Buddhist mindfulness. Langer uses the term to include being open to novelty, being sensitive to context and perspective, creating new categories, changing mindset, challenging assumptions, breaking set, getting involved, and taking responsibility. Langer's approach includes components that increase mindfulness, as understood from a Buddhist perspective, although not labeled as such; and an increase in Buddhist mindfulness might improve some aspects of Langer's program.

Although Buddhist mindfulness and Langer's mindfulness are obviously very different, many theorists and papers combine them together in undifferentiated ways. And there are now over a dozen research reports of treatment programs that combine these two approaches to mindfulness in ways that are unclear and hard to separate. For example, several treatment programs combine Buddhist mindfulness meditation with discussion and practice of Langer components, such as seeing old information in new ways, being aware of multiple perspectives, and creating new categories. Then, any treatment results are attributed to "mindfulness."

In fact, Langer's mindfulness is more related to the clinging behaviour of the mind: the tendency of the mind to crave for and cling to certain sensations, perceptions, beliefs, expectations, opinions, rituals, images of the self, and models of reality (Mikulas, 2002). In Buddhism this craving and clinging is known to be the cause of suffering and unsatisfactoriness (dukkha), as delineated in the well-known Four Noble Truths (Rahula, (1974).

Conclusion

In Buddhism, the cultivation of mindfulness is considered the most important thing one can do, as it facilitates everything else that one does. As psychologists are gradually discovering the implications of this fact for therapies and personal/spiritual growth, it is critical to be clear about exactly what mindfulness is and isn't.

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SECTION C

Current research on CBT in Asia

CHAPTER 15:
The Efficacy of CBT variations for Childhood Anxiety and Depression

Sara Louise Olsen, Tian P.S. Oei and Emma Jane Macek

Abstract: Aims and objectives – The purpose of this meta-analytic review was to assess the differential efficacy of CBT treatment formats for childhood anxiety and depression. **Hypothesis** – We hypothesised that different treatment formats would be more suited to either childhood depression or anxiety. We hypothesised that children in waitlist conditions may experience improvements due to maturation. **Method –** A literature review of children with an anxiety disorder or depression was conducted. 36 studies were included in the review, with 2400 children (aged 5-17 years) in total.**Results** – Pre to post treatment effect sizes were calculated for the active CBT conditions and waitlist conditions. Anxious children made moderate to large improvements from pre to post treatment. Children who were treated with group CBT with an added family component tended to make the most substantial improvements. Children with anxiety who were not treated at all (waitlist) made small or no improvements over time. The depressed children tended to make moderate to large improvements from pre to post CBT treatment. However, almost half of this improvement was also noted within the waitlist controls. Addition of a family component to CBT did not improve overall treatment outcomes.**Conclusion -** CBT is an efficacious treatment for childhood anxiety and depression. Moreover, addition of a family component to group CBT is the most efficacious treatment for childhood anxiety. Adding a family component to CBT when treating depressed children did not result in greater improvements by post treatment. Finally, children with depression have high rates of remission without treatment.

Introduction

Anxiety and depression are among the most common mental health problems in childhood and adolescence. However depression in childhood still does not have a specific diagnostic category within the American Psychiatric Association (APA) Diagnostic and Statistical Manual (DSM). This is despite the fact that depression affects 2 to 8% of children and typically begins by age 14 (Brent et al., 1996; Labellarte, Ginsburg, Walkup, & Riddle, 1999). Moreover, anxiety affects 5 to 18% of children, with a typical onset at around 7 to 12 years of age (Labellarte et al., 1999). These problems, if left untreated in childhood, often follow a chronic course into adulthood and result in long term psychosocial and emotional consequences (Flannery-Schroeder et al., 2004; Lewinsohn & Clarke, 1999; Velting, Setzer, & Albano, 2004). Given the severity and prevalence of these internalising disorders beginning in childhood, questions that will be addressed in this paper include:

1. What is the quality of trials addressing the efficacy of CBT for anxiety and depression in childhood, and does this meet the standards of the NHMRC (2000) for well controlled research?
2. Which outcome measures are most prevalently used in the literature, and which of these provide the most consistent positive treatment response by post treatment?
3. Is CBT an efficacious treatment for childhood anxiety and depression, and which format variations (e.g., group CBT, parent involvement etc.) are associated with the most reliable improvements in functioning from pre to post treatment for each of these disorders?
4. Are treatment gains made by children from pre to post treatment specific to the therapeutic benefits provided by CBT treatment? What role does maturation (i.e., as measured by the treatment gains made by children in waitlist control conditions) play?
5.

The specificity of treatment response is of particular interest, given the dynamic period of childhood and adolescence. Depending on their current developmental stage, or level of maturation, any one child's presentation may differ widely in the space of weeks or months. Not only does this make the process of diagnosis difficult, but it may mean that children can spontaneously remit without treatment at all, simply as a process of maturation (Kazdin & Weisz, 1998). Thus, an examination of treatment response in children who were assigned to waitlist control groups is a novel means of addressing this issue.

There have been some meta-analyses published in the last 5 years addressing childhood anxiety disorders and depression. Two recent meta-analyses used number needed to treat (NNT) effect size (ES) analyses to examine treatment response in children with depression (Compton, March, Brent, Albano, Weersing & Curry, 2004) and anxiety (Cartwright-Hatton, Roberts, Chitsabesan, Fothergill, & Harrington, 2004; Compton et al., 2004).

Cartwright-Hatton and colleagues reviewed 10 randomised control trials (RCT) of childhood anxiety. They concluded that CBT is associated with a strong positive effect at post treatment compared to no treatment controls. Compton and colleagues (2004) examined the efficacy of CBT for childhood anxiety and childhood depressive disorders. They concluded that CBT is the treatment of choice for these disorders, and identified the need to address combinations of CBT with other treatments (e.g., pharmacotherapy) in a quantitative manner. This is a goal of the current review.

CBT has been shown to have the most empirical evidence supporting its use for children with internalising disorders and has been recommended by the APA (Chambless et al., 1998; Hibbs, 2001) as the therapy of choice (Hibbs, 2001; Kazdin & Weisz, 1998). However, the concept of Evidence Based Practice (EBP) recognises that the APA criteria are not sufficient for arguing that a treatment can be effectively applied in a clinical context (Hibbs, 2001). A more thorough model of assigning weight to a treatment's efficacy is not only to include issues relating to efficacy, but also assessment and theory. Thus, a movement beyond analysis of RCTs exclusively is needed. These criteria are presented in Table 1.

The current review will attempt to address these issues, by examining not only efficacy, but issues related to measurement and outcome specificity. In particular, the question of which CBT format variations are most efficacious for childhood anxiety and depression will be addressed quantitatively for the first time in this paper. It was hypothesised that different treatment formats would be more suited to either childhood

depression or anxiety. To date, the efficacy of individual CBT has been established for childhood anxiety (Kazdin & Weisz, 1998; Kendall, 1994; Kendall et al., 1997). However, studies employing group formats for this anxious age group are minimal (Barrett, 1998; Silverman, Kurtines, Ginsburg, Weems, Lumpkin & Carmichael, 1999), despite the fact that studies have demonstrated the efficacy for group CBT with adult anxiety disorders in comparison to drug therapies, and meta-analyses have demonstrated this efficacy over wait-list controls and psychological placebos (Moreno, Mendez-Carrillo, & Sanchez-Meca, 2001). Additionally, benefits of exposure to feared social interactions and group processes, such as modelling and peer support, may increase the efficacy of group format in anxious children.

Table 1: Level of Evidence Criteria

Level of evidence	Study design
I	Evidence obtained from a systematic review of all relevant randomised controlled trials.
II	Evidence obtained from at least one properly-designed randomised controlled trial.
III-1	Evidence obtained from well-designed pseudorandomised controlled trials (alternate allocation or some other method).
III-2	Evidence obtained from comparative studies (including systematic reviews of such studies) with concurrent controls and allocation not randomised, cohort studies, case-control studies, or interrupted time series with a control group.
III-3	Evidence obtained from comparative studies with historical control, two or more single arm studies, or interrupted time series without a parallel control group.
IV	Evidence obtained from case series, either post-test or pretest/post-test

Source: NHMRC 2000

The question of how much improvement is related specifically to treatment outcome rather than maturation will be addressed using pre to post treatment effect size calculations for active CBT treatments and waitlist control conditions for each of these disorders. We hypothesised that children in waitlist conditions may experience improvements due to maturation.

Method

Participants

To determine the efficacy of CBT with childhood internalising disorders, a review of the literature was carried out using the following inclusion and exclusion criteria:

1. The children must have received either a diagnosis consistent with the Diagnostic and Statistical Manual (DSM; American Psychiatric Association, 2000) classification for a childhood internalising disorder including anxiety disorders

(GAD, SAD, Over-Anxiousness Disorder, Social Phobia, School Refusal) or Depression.
2. The date of publication of the studies must have fallen between 1980 and February 2005. This earlier date coincided with the release of the third edition of the DSM, and the latter, with the date of the composition of the present study.
3. The CBT treatment must include both cognitive and behaviourally orientated components. Trials that did not include a comparison group were not excluded for review.
4. Only English language studies were reviewed.
5. Studies including children over the age of 17 were excluded.

To obtain the present sample of studies, a PSYCINFO search between 1980 and February 2005, using the keywords "CBT" and "child*" and "Anxiety" or "Depression" was carried out. In addition, studies were located through previously published review articles with 106 English language journal articles in total retained for this review. Of this selection, 36 studies met criteria for inclusion, 25 addressing CBT for childhood anxiety, and 11 for childhood depression. These studies are summarised in detail in Table 2.

In total, 2400 children participated in the studies included in this review. These children were aged 5 to 17 years of age, and there were approximately equal numbers of males and females. In the anxiety sample, there were 1345 children in total. They were aged 5 to 17 years (mean age of 10.62). Of these, 52% were diagnosed with GAD (Generalised Anxiety Disorder, 24% were diagnosed with SAD (Separation Anxiety Disorder), and 24% were diagnosed with Social Phobia. Co-morbid internalising and externalising disorders were allowed in 48% of the studies.

The majority of participants excluded from the study were those who had intellectual impairments (approximately 27%), psychosis (approximately 33%) and current psychotherapy or pharmacotherapy (approximately 40%). Sixteen percent of the studies did not specify whether participants were excluded based on the presence of a co-morbid disorder. An additional 16% of studies excluded all participants with either internalising or externalising co-morbid disorders.

In the depression sample, 1058 children, aged 7 to 17 years (mean age of 14.27) were reviewed. Forty-four percent of the participants were male. The majority of excluded participants had intellectual disabilities (approximately 21%), psychosis (approximately 29%), and medical conditions (approximately 14%) or were currently involved in psychotherapy or pharmacotherapy (approximately 36%). Forty-five percent of studies excluded all participants who had an internalising and/or externalising co-morbid disorder. An additional 45% allowed for such co-morbidities, and 10% of the studies failed to specify such exclusions.

Table 2: Cognitive Behavioural Treatments for Childhood Internalising Disorders

Study	Treatment Groups	Participants	Age	Outcome Measures	Inclusion Criteria	Exclusion Criteria	Follow up	Level of Evidence	Overall Treatment outcome
					ANXIETY				
Albano et al., 1995	1.GCBT+ FAM	5 (3 male, 2 female)	13-17 yrs M=14.4	SUDS STAIC-T CDI	ADIS-C & P diagnosis for Social Phobia	None	3 & 12 months	IV	Reduction in anxiety symptoms at follow-up
Barrett 1998	1. GCBT 2. GCBT+FAM 3. WLC	60 Total 1. 23 2. 17 3. 20	7-14 yrs	FSSC-R CBCL – Internalising CBCL – Externalising	DSM-III-R primary diagnosis of OAD, SAD and social phobia.	Intellectual/physical disabilities, currently taking anti-anxiety or depression medication, parents in acute marital breakdown	12 months	II	GBT+FAM marginally > GCBT
Bernstein et al., 2000	1. Imipramine + CBT 2. Placebo + CBT	63 total (38 female, 25 male) 1. 31 2. 32	M = 13.9	CDRS-R RCMAS BDI	> 20% days absent from school in last 4 weeks; at least one anxiety disorder and MDD	ADHD, conduct disorder, bipolar disorder, eating disorder, alcohol or drug abuse; mental retardation; seizures (or other medical complications); history of bipolar in 1st degree relative; current psychotropic medications; pregnancy; positive urine toxicology screen; abnormalities on ECG or blood tests	None	II	Imipramine+ CBT > than placebo+ CBT in improving school attendance and decreasing symptoms of depression.

Cobham et al., 1998	Child anxiety only: 1. CBT 2. CBT +PAM Child +Parent Anxiety: 3. CBT 4. CBT +PAM	67 total 34 male, 33 female 1. 17 2. 15 3. 18 4. 17 (SAD = 8; OAD = 3; GAD = 40; simple phobia = 12; social phobia = 3; agoraphobia = 1)	7-14 yrs M = 9.6	RCMAS STAIC +P CBCL internalising	DSM-IV and DSM-III-R diagnosed anxiety disorders	1) co-morbidity 2) concurrent treatment 3) significant medical problems 4) physical /intellectually impaired.	6 & 12 months	III-2	Child-anxiety only: 82% in the CBT condition no longer met criteria for an anxiety disorder vs. .80% in the CBT +PAM. Child + parental anxiety condition, 39% in the CBT condition no longer met criteria vs. 77% in the CBT +Pam. Maintained at follow-up.
Chorpita et al., 2004	1. CBT	7 (2 male, 5 female) 71.43% Specific Phobia 28% GAD 28% SAD 28% Social Phobia 14.29% TTM 14.29% AD-NOS 14.29% PDA 14.29% MDD	7-12 yrs M = 10.71	CBCL-internalising CAFAS RCADS	DSM-IV anxiety disorders	Primary externalising disorder Psychosis Cognitive impairment	6 months	IV	Clinical significant changes from pre to post on all measures

Dadds et al., 1997	1. GCBT + FAM 2. Monitoring group	128 total 1. 61 (16 male) 2. 67 (48 male) (GAD = 35; SAD = 6; Simple phobia = 47; Social phobia = 45)	7-14 yrs 1.M = 9.5 2.M = 9.3	CBCL RCMAS	1. >20 RCMAS 2. teacher's list anxious children 3. not teacher's list of disruptive children	impulsive, aggressive, hyperactive, noncompliant behaviours	6 month	II	Symptoms successfully targeted
Flannery-Schroeder et al., 2004	1. CBT with no externalising disorder 2. CBT with co-morbid externalising disorder	38 (30 male, 8 female)	Original sample from Kendall et al., 1997 aged 8-13. Follow-up sample 15-22 yrs M = 19.3	CBCL-P Internalising Externalising CQ-P RCMAS CDI/BDI CQ-C	DSM-IV anxiety disorders 19 participants with a co-morbid externalising disorder	None- groups matched based on presence of externalising disorder at pre-treatment	7.4 years	III-2	CBT is equally effective for co-morbid and non-co-morbid children
Flannery-Schroeder & Kendall, 2000	1. CBT 2. GCBT 3. WL	37 (19 male, 18 female) GAD n=21 SAD n=11 Social Phobia n=5	8-14 yrs	RCMAS STAIC-A-T STAIC-A-S CQ-C SASC-R CDI SPPC LS FM-C CBCL-internalising STAIC-P CQ-P PRSC SAS-P FM-P TRF	DSM-IV Anxiety disorder	Disabling physical condition Psychosis Anti-anxiety or antidepressant meds	3 months	II	More treated children no longer met diagnostic criteria than WL. CBT slightly more effective than GCBT. Gains maintained at follow-up

Heyne et al., 2002	1. CBT 2. FAM 3. CBT+FAM	61 total 33 males 28 females 1. 21 2. 20 3. 20	7-14 yrs M = 11.5	FT FSSC-II RCMAS CDI SEQ-SS CBCL TRF GAF	Less than 85% attendance during the past 2 weeks; DSM-IV diagnosis of an Anxiety Disorder	Exclusion of children with a DSM-IV diagnosis of conduct disorder	4.5 months	II	Statistically and clinically significant pre- to post-treatment change for all groups. Immediately post-treatment, CBT least effective increasing school attendance. CBT+FAM didn't produce > outcomes at post- or follow-up
Howard & Kendall, 1996	1. CBT + FAM	6 (5 male, 1 female) 50% SAD 67% OAD	9-13 yrs M=10.17	CBCL-P FSSC-R CDI STAIC-T STAIC-T-P TRF	DSM-III-R anxiety disorders	Primary diagnosis of specific phobia Psychosis Disabling physical condition Anti-anxiety medication	4 months	IV	Reduction in symptom severity noted on all measures. Clinically significant change (no statistical tests performed) Improvement maintained at follow-up
Kane & Kendall, 1989	1. CBT	4 (1 male, 3 female) 100% OAD	9-13 yrs M= 10.25	CBCL-Internalising-Parent and teacher rated STAIC-T	DSM-III-R anxiety diagnosis	Not specified	3 – 6 months	IV	Reduction in symptom severity from pre to post, maintained at follow-up. No statistical tests performed

Kendall 1994	1. CBT 2. WLC	47 total 1. 27 (14 male) 2. 20	9-13 years 1. 52% 11-13 yrs; 48% 9-10 yrs	RCMAS STAIC - A-trait - A-state FSSC-R CQ-C CDI NASSQ CBCL - internalising - social - health - externalising STAIC-A-trait-P TCBCL - internalising - externalising	DSM-III-R anxiety disorder	IQ <80, had disabling physical condition, psychotic symptoms currently using anti-anxiety medications.	12 month	II	Symptom reduction in majority of subjects, maintained at follow-up
Kendall et al., 1997	1. CBT 2. WLC	94 total 1. 60 (35 male) 2. 34 (23 male)	9-13 years 52% 9-10 yrs, 48% 11-13 yrs	RCMAS STAIC FSSC-R CDI CQ-C NASSQ CBCL STAIC-A-Trait-P CQ-P BDI Teacher reports, TRF	DSM-IV anxiety disorder.	Psychotic symptoms, currently using anti-anxiety medications.	1 year	II	Majority having reduction in symptoms, continued to follow-up
King et al., 1998	1. CBT 2. WLC	34 total 1. 17 (10 male) 2. 17 (8 male)	5-15 yrs M = 11.03	FT FSSC II RCMAS CDI SEQ-SS CBCL TRF GAF	Met Berg and colleagues' (1969) criteria for school refusal	Intellectual/ physical disabilities, psychotic or suicidal behaviour, anti-anxiety or anti-depression medication; a current physical illness, or parents involved in acute marital breakdown.	12 weeks	II	CBT >WLC Maintained at follow up

Last et al., 1998	1. CBT 2. ES Emotional support therapy	56 total 1. 32 2. 24 end of study treatment N of: 1. 20 (13 female) 2. 21 (15 female)	6 – 17 yrs CBT M = 11.67 ES M = 12.40	FSSC-R STAIC-M CDI	DSM-III-R anxiety disorder; > 10% absenteeism from classes for at least 1 month previously; no current diagnosis of major depression or use of psychiatric medication	Not specified	none	II	CBT = ES
Manassis et al., 2002	1. GCBT 2. CBT	78 total (42 males, 36 females) 1. 37 2. 41	8-12 years M = 9.98	MASC SASC CDI MASC Conners CGAS (clinician) GIS	All children met the criteria for at least one DSM-IV anxiety disorder	Psychiatric disorder, medical condition, not proficient in English, estimated IQ of < 80, learning problem.	none	II	CBT = GCBT
Mendlowitz et al., 1999	1. GCBT 2. FAM 3. GCBT+ FAM 4. WLC	68 active treatment participants (39 females, 29 males) 1. 18 2. 23 3. 21 4. 40	7-12 yrs M = 9.8	RCMAS CDI CCSC	DSM-IV criteria for one or more axis 1 anxiety disorders.	Psychotic disorders, medical disorder, English difficulties	none	II	GCBT reduced anxiety and depression in children.
Muris et al 2002	1. GCBT 2. ED (emotional disclosure) 3. WLC	30 total 1. 10 2. 10 3. 10 (10 male, 20 female)	Groups 1 & 2: 9-12 yrs M = 10 Group 3: M = 10.5	RCADS STAIC - Trait Anxiety	elevated RCADS scores DSM-III-R anxiety disorder	Not specified	none	II	CBT superior to ED and the no-treatment control condition

Muris, Mayer et al., 2001	1. GCBT 2. CBT	36 Total 1. 19 2. 17 (9 males, 27 females)	8-13 yrs M = 9.9	STAIC SCARED-R	elevated SCARED-R scores, DSM-III-R anxiety disorder	Not specified	none	II	Group and individual CBT equally effective in reducing children's anxiety symptoms.
Nauta et al., 2001	1. CBT 2. CBT+ PAM	18 total 1. 9 2. 9	8-15 yrs M = 10.2	FQ – C & P SWC – C & P Total fear score	DSM-IV criteria for anxiety disorder based on ADIS-C	Psychotic symptoms; intellectual disabilities; current involvement in other treatment	3 & 15 months	II	Equivalent treatment outcomes.
Shortt et al., 2001	1. GCBT+ FAM 2. WLC	71 (29 male, 42 female) 59% GAD 27% SAD 14% SOP	6-10 (M=7.85) 1. M=7.83 2. M=7.88	RCMAS CBCL-internalising	DSM-IV anxiety disorders	Intellectual impairment Disabling physical condition Current involvement in psychotherapy/psychopharmacological interventions	12 months	II	GCBT significantly improved compared to WLC. Treatment gains maintained at follow-up
Silverman, Kurtines, Ginsburg, Weems, Rabian et al., 1999a	1. SC (exposure based cognitive self-control)/ CBT 2. CM (exposure based contingency management)/CBT 3. ES (education support control condition)	81 completed 1. 32 (17 males) 2. 33 (16 males) 3. 16 (8 males)	6-16 yrs M = 9.83	RCMAS & P FSSC-R & R/P FT CDI CNCEQ CBCL PGRS	Diagnosis of phobic disorder based on the DSM-III	Pervasive developmental disorders, psychotic symptoms, current involvement in psychosocial or psychopharmacological treatment	3, 6 & 12 months	II	Substantial improvements for all treatment groups. Maintained at follow ups

Silverman, Kurtines, Ginsburg, Weems, Lumpkin et al., 1999b	1. GCBT 2. WLC	56 total (34 males, 22 females)	6-16 yrs M = 9.96	RCMAS –C/P FSSC-R –C/P CDI CBCL - internalising - externalising PGRS	Primary DSM-III-R diagnosis of social phobia, OAD or GAD	Pervasive developmental disorders, psychotic symptoms, current involvement other treatment	3, 6 & 12 months	II	GCBT > WLC
Spence et al., 2000	1. CBT +FAM 2. CBT 3. WLC	50 total 1. 17 (10 males) 2. 19 (10 males) 3. 14 (11 males)	7-14 yrs 1. M = 10.94 2. M = 11.00 3. M = 9.93	ADIS-P RCMAS SWQ-PU SCAS SSQ-P SCQ-P BAT-C	Primary diagnosis of social phobia	If despite a diagnosis of social phobia from the parental interview, no report of worry on SWQ-PU; severe learning difficulties; medication for a psychological disorders; or other emotional behavioural disorders.	6 & 12 months	II	CBT +FAM = CBT > WLC
Treadwell & Kendall, 1996	1. CBT 2. WLC 3. Control (no diagnosis)	151; 71 Anxiety disordered children 58% OAD 22% SAD 20% AD 80 Control children (38 male, 42 female)	8-13 yrs M=11.7	RCMAS STAIC-T and S FSSC-R CDI NASSQ CBCL-Internalising and Externalising TRF	Anxiety Sample: DSM-III-R anxiety Control: Normal levels on measures of anxiety, internalising, externalising and depression	Anxiety Sample: Co-morbid MDD or dysthymia	None	III-2	Anxiety disordered children more severe than control on all measure except CBCL-internalising & FSSC-R. CBT and WLC children did not differ on measures.
DEPRESSION									

Brent et al., 1997	1.CBT 2.SBFT (systematic behaviour therapy) 3. NST (Nondirectiv e Supportive Treatment	107 total 1. 75.7% female 2. 77.1% female 3. 74.3% female	1. M = 15.7 2. M = 15.4 3. M = 15.7	BDI CGAS	DSM-III-R diagnosis o f MDD	Psychosis; bipolar I or II disorder; OCD; eating disorder; substance abuse within past 6 months; ongoing physical or sexual abuse; pregnancy; chronic mental illness	none	II	CBT > than SBFT or NST for adolescent MDD
Kahn et al., 1990	1. CBT 2. Relaxation 3. Self-modelling 4. WLC	68 (33 male, 35 female)	10-14 yrs	RADS CDI BID PHCSCS	RADS>72 CDI>15	Psychotropic medication Psychotherapy	1 month	II	CBT=Relaxatio n=Self-monitoring>W LC Self-monitoring were less able to maintain gains at follow-up compared to CBT and relaxation.
Kerfoot et al., 2004	1. Social worker administered CBT 2. Standard Care	52 (28 male, 24 female)	M = 13.7	MFQ HoNOSCA	MFQ score> 23	None	NA	III-2	Intent-to-treat analysis CBT=Standard care
Lewinsohn et al., 1990	1. GCBT 2. CBT + FAM 3. WLC	59 (23 male, 36 female)	1. M = 16.26 2. M = 16.15 3. M = 16.28	CES-D BDI IC-Frequency (adolescent) IC-Frequency (parent) CBCL Internalising Externalising Depression	DSM-III depression diagnosis	Co-morbidity Psychosis Mental retardation Schizophrenia	1, 6, 12, 24 months	II	CBT=CBT+Par ent> WLC Treatment gains maintained at follow-up
Liddle &	1. CBT	31 (21 male, 10	7-11 yrs M	CDI	DSM-III-R	Mental retardation	3 months	II	Children

pence, 1990	2. Attention Placebo 3. WLC	female)	=9.2	LSSP MESSY (total) (positive social skills) Teachers MESSY	depression diagnosis Fluent English				showed improvements on the CDI only. CBT was not more efficacious than the Placebo or WLC.
Reynolds & Coats, 1986	1. CBT 2. Relaxation training 3.WLC	30 (11 male, 19 female)	M=15.65	BDI BID RADS STAI-T RSES ASCS-HS	BDI>12 RADS>72 BID>17	Concurrent medication Psychotherapy	5 weeks	II	CBT=Relaxation>WLC. Gains maintained at follow-up
Rossello & Bernal, 1999	1. CBT 2. IPT (interpersonal psychotherapy) 3. WLC	71 (33 male, 38 female)	13-17 yrs M= 14.70	CDI PHCSCS SASCA FEICS -criticism -emotional involvement CBCL (adolescent) -social ability -behaviour CBCL (parent) -social -behaviour	DSM-III-R major depression or dysthymia diagnosis	Imminent suicidal risk Psychosis Bipolar Alcoholism Conduct Disorder Drug use Organic brain syndrome Hyper-aggression Current psychotropic medication or psychotherapy	3 months	II	CBT=IPT>WLC for depression measures. IPT>CBT=WLC for self-esteem and social adaptation measures. Treatment gains maintained at follow-up.
TADS, 2004	1. CBT 2. CBT+ Fluoxetine 3.Fluoxetine Alone 4. Placebo	439 (200 male, 239 female)	12-17 yrs M = 14.6	CDRS-R RADS SIQ-Jr	DSM-IV diagnosis of MDD CDRS-R total score>45	IQ<80 Taking antidepressant drugs Bipolar disorder CD Developmental disorder Psychotropic medication Concurrent psychotherapy	NA	II	CBT+drug>drug alone>CBT alone>placebo

Vostanis et al., 1996	1. CBT 2. Non-focussed Treatment	57 (25 male, 32 female)	8-17 yrs M=12.7	MFQ-child MFQ-parent RCMAS-child RCMAS-parent SEI-child SEI-parent AS-child AS-parent	DSM-III-R Depression diagnosis	Learning disability Major physical illness	NA	II	No short term benefit of CBT over Supportive therapy. Similar gains made in both groups
Weisz et al., 1997	1. CBT 2. WLC	48 (26 males, 22 females)	M = 9.6	CDI CDRS-R	CDI score of 11 or higher and a CDRS-R score of 34 or higher	Not specified	9 months	II	CBT > WLC at immediate, post-treatment and 9 month follow up
Wood et al., 1996	1. CBT 2. Relaxation	48 (15 male, 33 female)	9-17 yrs 1. M = 13.8 2. M = 14.6	MFQ RCMAS WJS ABS	DSM-III-R Depression diagnosis MFQ score>15	Current use of antidepressants Psychosis Autism Learning Disorders Major illness	3 & 6 months	II	CBT>Relaxation on MFQ CBT=Relaxation on RCMAS, WJS & ABS

Key:
TTM; Trichotillomania, GAD; Generalised Anxiety Disorder, SAD; Separation Anxiety Disorder, AD-NOS; Anxiety Disorder- Not otherwise specified, PDA; Panic Disorder, with Agoraphobia, MDD; Major Depressive Disorder; AD; Avoidant Disorder,
ADIS; Anxiety Disorders Interview Schedule for Children – Child (C) and Parents (P) versions; RCMAS; Revised Children's Manifest Anxiety Scale – (P) Parents version, FSSC – R(II); Fear Survey Schedule for Children – Revised and R/P (Revised Parents version) CDI; Children's Depression Inventory, CBCL; Child Behaviour Checklist (P) parent; MASC; Multidimensional Anxiety Scale for Children, FAD; Family Assessment Device, DASS-21; Depression Anxiety Scale, SAS; Sibling Accommodation Scale, Ham – A; Hamilton Anxiety Rating Scale, Ham – D; Hamilton Depression Rating Scale, CGI; Clinical Global Impression Scale; MFQ; Mood and Feelings Questionnaire, STAI; State-trait Anxiety Inventory – Child (C) and Adults (A) and Modified (M), (T) trait subscale, (S) state subscale; CDRS-R – Children's Depression Rating Scale – Revised; C-GAS – The Children's Global Assessment Scale; BDI – Beck Depression Inventory; CNCEQ – Children's Negative Cognitive Errors Questionnaire; CCSC – The Children's Coping Strategies Checklist; GIS - Global Improvement Scale; SWQ-PU – Social Worries Questionnaire – Pupil; SCAS – Spence Children's Anxiety Scale; SEQ-SS – Self-Efficacy Questionnaire for School Situations; TRF – Teacher's Report Form; GAF - Global Assessment of Functioning; FT – Fear Thermometer; PGRS – Parent Global Rating Scale; HoNOSCA – Health of the National Outcome Scale for Children and Adolescents; CQ – Coping Questionnaire, (C) Child, (P) Parent; CAFAS; Child and Adolescent Functional Assessment Scale; SIQ-Jr; Suicidal Ideation Questionnaire- Junior High School Version, BAI; Beck Anxiety Inventory, RIQ; Responsibility Interpretations Questionnaire, PSI; Parenting Stress Index, NASSQ; The Negative Affectivity Self-Statement Questionnaire for Children, SASC-R; Social Anxiety Scale for Children-Revised, SPPC; Self Perception profile for children, LS; Loneliness Scale, FM; Friendship measure, (C) child, (P) parent PRSC; Parent's Rating Scale of Child's Competence, SAS-P; Social Activities Scale-Parent, SEI; Self-Esteem Inventory, AS; Aggression Inventory, LSSP; List of Social Situation Problems, MESSY; Matson Evaluation of Social Skills for Youngsters, WJS; Warr and Jackson Self-esteem scale, ABS; Antisocial Behaviour Scale, CES-D; Center for Epidemiological Studies- Depression Scale, IC; Issues Checklist, SASCA- Social Adjustment Scale for Children and Adolescents, PHCSCS; Piers-Harris Children's Self-Concept Scale, FEICS; Family Emotional Involvement and Criticism Scale, RADS, Reynolds Adolescent Depression Scale, BID; Bellevue Index of Depression, RSES; Rosenberg Self-Esteem Scale, ASCS-HS; Academic Self-Concept Scale-High School Version; SUDS – Subjective Units of Distress; RCADS – Revised Child Anxiety and Depressive Scale; Conners – Conners Parent Rating Scale; SCARED-R – Screen for Child Anxiety Related Emotional Disorders (R) revised; SWC – Scale for Worry in Children (C) child and (P) parent; SSQ – Social Skills Questionnaire (P) parent; SCQ – Social Competence Questionnaire (P) parent; BAT-C – Behavioural Assertiveness Test for Children.
FAM – Parent/Teacher/family involvement in child's therapy
PAM – Parent Anxiety Management
GCBT = Group Cognitive Behavioural therapy

Design

To determine the credibility of the evidence given for childhood anxiety and depression in the literature reviewed in this meta-analysis, the overall quality of the studies were compared against NHMRC guidelines (see Table 1).

A qualitative review of the significance and consistency of positive effect sizes noted by the outcome measures utilised in the studies which included pre and post treatment means and standard deviations were also calculated using the following formula:

$$\frac{d = M_{\text{post treatment}} - M_{\text{pre treatment}}}{SD_{\text{pooled}}}$$

In all, 23 of the 25 anxiety studies and all of the depression studies were included. Post treatment to follow-up was also calculated. The significance of the effect sizes were calculated based on pre and post sample sizes using an Effect Size Generator 2.2 program developed by G. Devilly (2004).

The quantitative meta-analytic review of CBT format variations for anxiety and depression were calculated for the active CBT conditions and the waitlist conditions in all of the studies that reported means and standard deviations using the above formula to assess pre to post treatment gains. The "magnitude" of the effect sizes were assessed using Cohen's criteria (Cohen, 1992). That is, "Small" *(d*= .20), "Medium" (*d*= .50) and "Large" (*d*= .80).

Materials

The following measures were used in the meta-analytic review of CBT format variations for anxiety and depression portion of this review paper.

RCMAS

The RCMAS (Reynolds & Richmond, 1985) is a measure of manifest anxiety validated specifically for children of school age, with an included lie scale. The measure has good reliability and validity with reliability estimates in excess of .80. The discriminant validity of this measure has also been demonstrated (Seligman et al., 2004).

CDI and BDI

The CDI (Kovacs, 1992) and BDI (Beck, 1961) were the measures utilised in the meta-analysis for childhood depression. The CDI has high internal consistency, test-retest reliability and good validity. The BDI was originally developed for use with adults, but is often used successfully with adolescent populations. The BDI is a measure of depression severity which can discriminate people with and without a depressive disorder in the general population. It has demonstrated good reliability and validity for both adults and adolescents.

Procedure

This paper is a review of existing CBT studies for treating childhood anxiety and depression. Specific details on the individual treatments and procedures for each study can be accessed from the original studies.

Results

Level of Evidence

Utilising the criteria presented in Table 2, 18 of the 25 anxiety studies were found to be "well controlled" RCT's (level II evidence). Three studies were assigned level III-2 evidence, and four studies were level IV evidence, indicating less stringent control or a failure to include a control group. Ten of the 11 depression studies were "well controlled" RCT's (level II evidence). Overall, the quality of the existing studies for depression in children is high. The majority of the studies examining childhood anxiety were also high.

Based on the level of evidence assigned to each of the studies, it is important that these levels of methodological rigor are taken into consideration when interpreting the findings of the meta-analysis. Specifically, findings from studies given a Level II level of evidence rating should be considered as providing more methodologically sound results than studies given a lesser rating. Therefore, these issues will be taken into account in the meta-analysis sections presented later in this paper.

Sensitivity of Outcome Measures

As demonstrated in Table 3, the most popular measures used in the Anxiety studies were the RCMAS, CBCL-internalising, the CDI, the STAIC-trait and the FSSC-R. Therefore, these measures are discussed in detail below. Measures employed in four studies or less, will not be discussed, but are provided in Table 3.

Table 3: Sensitivity of Anxiety measures pre treatment to post treatment

	Number of Studies	Significant Pre to Post treatment ES	No Significant Improvement	Mixed Findings
RCMAS	**14**	**11**	**1**	**2**
CBCL-internalising	**13**	**13**	**0**	**0**
CDI	**11**	**7**	**0**	**4**
FSSC-R	**9**	**7**	**0**	**2**
STAIC-trait	**8**	**6**	**1**	**1**

Although the most frequently used measure in the Anxiety studies included in this meta-analysis was the RCMAS, the measure that was most sensitive to improvement across the studies from pre-post treatment was the CBCL-internalising scale. As demonstrated in Table 4, participant's improvements were maintained, with all of the studies finding that there was no significant worsening of the participant's conditions. However the RCMAS and the FSSC-R were the most sensitive measures to further improvements at post-treatment to follow-up, with 27% and 29% respectively reporting improvement. Given the

prevalence and sensitivity of the RCMAS to improvement, this measure was identified to be included in the meta-analysis.

Table 4: Sensitivity of Anxiety measures post treatment to follow-up

	Number of Studies assessing follow-up	Follow-up range	Significant Further Improvement	No Significant further improvements	Mixed Findings
RCMAS	**11**	**3 months to 7.4 years**	**3**	**6**	**2**
CBCL-internalising	**11**	**3 months to 7.4 years**	**2**	**6**	**3**
CDI	**7**	**3 to 12 months**	**0**	**6**	**1**
FSSC-R	**7**	**3 to 12 months**	**2**	**4**	**1**
STAIC-trait	**5**	**3 to 12 months**	**3**	**0**	**2**

For the depression studies, the CDI, BDI, MFQ and the RADS were the most frequently used outcome measures in the depression studies. As demonstrated in Table 5, the CDI and BDI were the most frequently used measures in depression studies. Most of the measures assessed detected significant improvements from pre to post treatment with CBT treatment. However, as presented in Table 6, at follow-up, no measures consistently found significant improvements. The CDI and BDI were included in the meta-analysis portion of this review.

Table 5: Sensitivity of Depression measures pre treatment to post treatment

	Number of Studies	Significant Pre to post tx ES	No Significant Improvement	Mixed Findings
CDI	**4**	**3**	**1**	**0**
BDI	**3**	**3**	**0**	**0**
MFQ	**3**	**3**	**0**	**0**

RADS	**3**	**3**	**0**	**0**

Table 6: Sensitivity of Depression measures post treatment to follow-up

	Number of studies assessing follow-up	Follow-up range	Significant Further Improvements	No Significant further improvements
CDI	**4**	**1 to 9 months**	**0**	**4**
BDI	**2**	**1 to 24 months**	**1**	**1**
MFQ	**1**	**3 to 6 months**	**0**	**1**
RADS	**2**	**1 month**	**0**	**2**

Meta-analysis

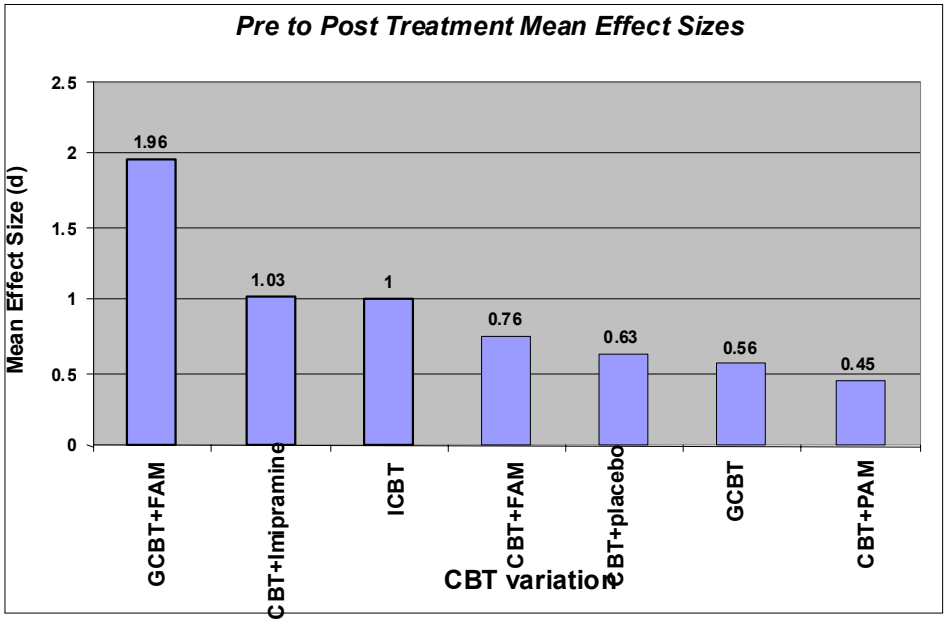
Presented in Table 7 is an outline of the CBT variations reviewed. As presented in Figure 1, of all the CBT variations GCBT+FAM shows the most consistently large effect size. The mean ES reported with this CBT variation was 1.96, indicating that participants improved on average 1.96 standard deviations from pre-to-post treatment on the RCMAS. Individual CBT+drug treatment showed a large effect size, with a mean ES of 1.03. Individual CBT, which was the most commonly employed intervention, showed a mean ES of 1.00, indicating that participants in this sample, on average, improved 1 standard deviation on the RCMAS from pre-to-post treatment. Moderate to large effect sizes were noted in the CBT+FAM, CBT+placebo and GCBT alone conditions, with mean effect sizes of .76, .63 and .56 respectively. Given these results, the addition of a family component to the management of child anxiety with group CBT treatment appears to be extremely beneficial.

Table 7: CBT variations

CBT Variation	Treatment Components
ICBT (Individual CBT)	**CBT program provided to children individually**
GCBT (Group CBT)	**CBT program provided to a group of children**
CBT + FAM (additional family component)	**CBT provided to children as well as their parents and family members (targeted towards management of the child's anxiety)**
GCBT + FAM (group CBT with family component)	**CBT provided to groups of children and their family members**
CBT+PAM (additional parental anxiety management)	**CBT provided to children. In addition, CBT provided to parents to assist with managing parental anxiety**
CBT + Imipramine	**CBT program provided concurrent to drug therapy**
CBT + Placebo	**CBT program provided concurrent to a placebo drug**

As shown in Figure 2, eight studies employed a waitlist condition, six of which found a small mean effect size improvement of .23, indicating that without any treatment at all, children can be expected to improve .23 standard deviations on the RCMAS from pre-to-post treatment. However, two studies employing waitlist conditions found a small mean effect size deterioration of .19 from pre-to-post treatment. In these two studies, participants in the waitlist condition deteriorated by .19 standard deviations on the RCMAS when not treated. This suggests that children with anxiety who are not treated at all (waitlist) make small or no improvements, adding credence to the finding that it is the treatment that is responsible for these large gains, not simply maturational change

Figure 1: Efficacy of CBT Treatment Formats for Anxiety



As can be seen in Figure 3, individual CBT was the only variant using the CDI as an outcome measure for childhood depression. Studies indicated that participants improved an average of 1.17 standard deviations. Contrary to this, the BDI showed extremely large mean ES improvements from pre to post CBT treatment (d = 2.36). There was also large mean ES improvements for children in the CBT+FAM (d = 1.47) and GCBT (d = 1.00) treatment formats.

As shown in Figure 4, children in the waitlist condition showed a small to moderate mean effect size improvement from pre to post treatment on the BDI (d = .31) and a moderate mean effect size improvement (d = .53) with the CDI.

Discussion

The purpose of this meta-analytic review was to assess the literature concerning the efficacy of CBT and its format variations for the childhood internalising disorders. It was hypothesised that different CBT treatment formats would be more suited to either

childhood depression or anxiety. It was found that CBT is an efficacious treatment for childhood anxiety and depression. Moreover, addition of a family component to group CBT is the most efficacious treatment for childhood anxiety. However, adding a family component to CBT when treating children with depression did not result in greater improvements in functioning by post treatment for these children.

Group CBT with an added family component, followed by CBT+ Imipramine and individual CBT, were the most efficacious treatments for childhood anxiety. Several researchers have stressed the importance of the home environment and family context in the maintenance and treatment of childhood internalising disorders (Barrett et al., 2004; Kazdin & Weisz, 1998; Stallard, 2002). The results of this meta-analysis support the improved efficacy of CBT with an additional family component for children with anxiety but not for depression.

It was further hypothesised that children in waitlist conditions may experience improvements due to maturation. We found that children with anxiety do not tend to improve without treatment. However, depressed children in the waitlist conditions tended to make moderate effect size improvements without treatment. This finding is somewhat consistent with Curry (2001)'s qualitative analysis of psychotherapies for childhood depression. He argued that CBT was not more effective than other psychotherapies in the longer term, and that there were high rates of remission.

This has important implications for resource allocation within a community clinic context. Community analyses have indicated that 61% of adolescents with major depressive disorder will go on to receive some sort of treatment (Lewinsohn & Clarke, 1999). Although CBT is clearly an efficacious for childhood depression in terms of the overall magnitude of ES improvement from pre to post treatment, a large amount of this improvement may be obscured by maturational factors.

There are two main (but not mutually exclusive) explanations for this finding. It is known that depression is cyclic (APA, 2000), and as such, may show a substantial remission rate in children. Alternatively, it may be that the use of adult criteria to diagnose childhood depressive disorders is insufficient. This criteria may be catching more children than necessarily warrant a diagnosis because of their current developmental stage or severity of symptoms. Therefore, it is becoming evident that it is time to develop diagnostic guidelines for specifically diagnosing child depressive disorders.

The evidence basis of CBT as an efficacious treatment for childhood anxiety and depression has mounted in the past 20 years. However, it has become evident that a focus on clinical applicability is needed. The Evidence Based Practice (EBP) model argues that while addressing efficacy is an important part of being able to establish a treatment the best evidence based treatment for a given disorder, issues such as theory and assessment need to be addressed. The current review addressed some of the limitations in the literature thus far, by focussing on efficacy and assessment, as well as treatment outcome specificity. We investigated how much weight, in terms of methodological rigor and quality, we could apply to the evidence currently available for childhood internalising disorders.

Figure 2: Maturation in Anxiety Waitlist Conditions from Pre to post treatment

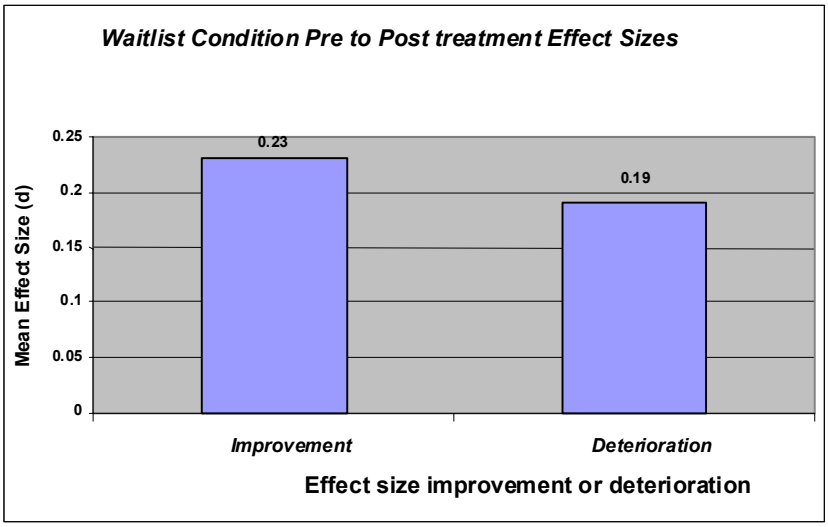


Figure 3: Efficacy of CBT Treatment Formats for Depression

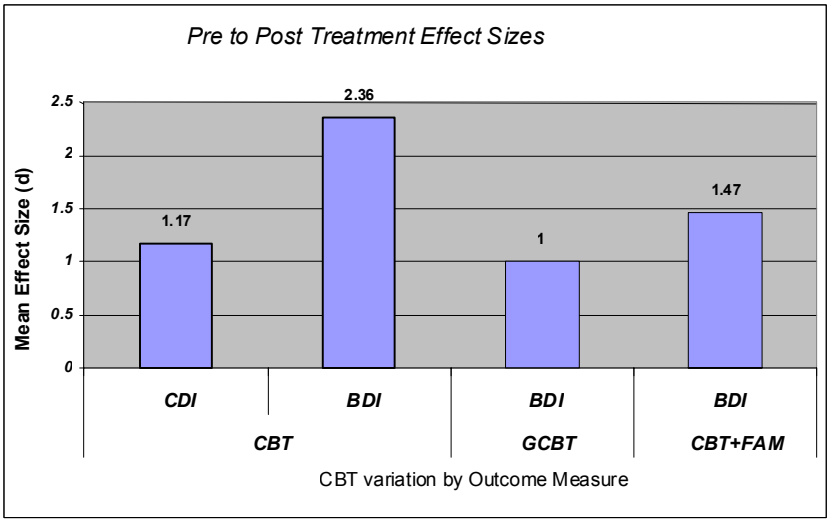
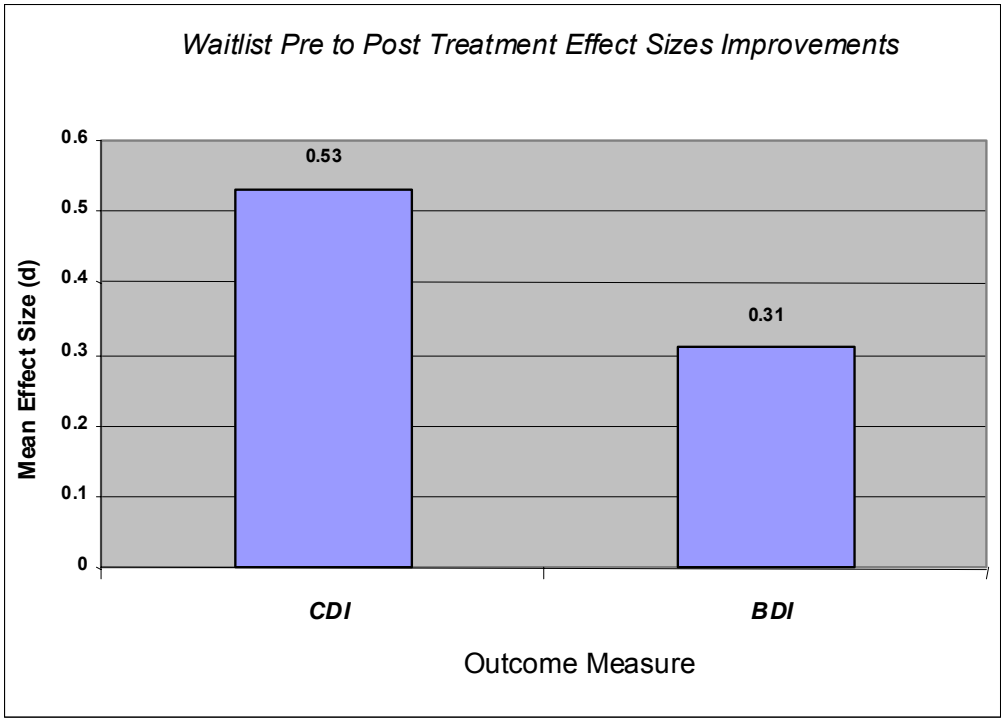


Figure 4: Maturation in Depression Waitlist Conditions from Pre to post treatment



Using NHMRC guidelines for assigning studies with a methodological rigor rating (Level of evidence; NHMRC, 2000), the studies included in this review were assessed on issues such as blinding, randomisation and follow-up assessment. We found that the majority of anxiety studies (72%) were "well controlled" RCT's. Furthermore, 91% of depression studies were "well controlled" RCT's. This indicates that the majority of the research that is available was extremely well conducted.

A focus on issues of assessment is also an important feature of EBP. We wished to determine which measures utilised in the outcome research most reliably return significant positive effect sizes from pre to post treatment and from post treatment to follow-up. Raw ES calculations for the majority of the measures utilised in the active CBT conditions of the studies which reported means and standard deviations (or raw effect sizes) for their measures, were calculated.

The most sensitive outcome measures, and the measures most commonly employed, for childhood anxiety were found to be the RCMAS, CBCL, CDI, FSSC-R and the STAIC. The CDI, BDI, MFQ and RADS were the most sensitive measures in the child depression outcome literature. These results serve as a guide for clinicians when making decisions about which measures are most appropriate and sensitive for assessment of children with anxiety or depression.

Conclusions and Directions for Future Research

The purpose of this meta-analytic review was to address the outcome research targeting the efficacy of CBT for childhood anxiety and depression. An important goal of our review was to disseminate this information in a format that is useful and informative for practicing clinicians. We conclude on the basis of these results that CBT is an efficacious treatment for childhood anxiety and depression, although the strength with which we can make this assertion varies across these disorders based on the consistency of the results, and the quality of the studies. Clearly more research is always required in this area. Given the prevalence and chronic course that these disorders may follow into adulthood, evidence of the quality befitting this vulnerable population must be carried out.

The addition of a family component to group CBT is the most efficacious treatment for childhood anxiety. However, adding a family component to CBT when treating children with depression did not result in greater improvements in functioning by post treatment for these children. Further investigation is warranted into why the family context appears to be an essential target for intervention for anxiety but not for depression.

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CHAPTER 16:
Using Hypnosis in CBT Treatment of Clients with Anxiety Disorder

Dr. Edward Chan Weng Lok

Abstract: Aims and objectives – This paper aims to present the clinical efficacy of Cognitive Behavioural Therapy (CBT) in conjunction with Hypnotherapy (CBTH) to reduce the anxiety symptoms of participants with Anxiety Disorder (AD).Hypothesis – Subjects (A & B) from a treatment group which combine hypnotherapy and CBT will report a greater reduction in anxiety symptoms using Beck's Anxiety Inventory (BAI) upon completion of CBTH and a subjective rating scale (SRC) compared to subjects from a control group which use CBT only. Method – For the treatment group, upon determination of the subjects' anxiety level, clinical interviews were conducted to access their irrational thoughts followed by psycho-educational and coaching sessions. Next, hypnotherapy was used to invoke the stressors to record any irrational cognition and behaviours displayed for rectification through reinforcement of rational cognition and behaviour. For the control group, the same method was employed except for the hypnotherapy session which was replaced by a normal CBT and subjects' self report of their cognition during the in between therapy session. Subjects report their anxiety level using the BAI and SRC in pre-and-post therapy sessions. Results – Both subjects in treatment group reported greater reduction of BAI score and SRC score, but the reduction was greater in the treatment group by one ranking. Conclusion - Clinical hypnotherapy provides an unique opportunity for training participants in applying cognitive behavioural skills and accessing their thoughts when confronted with stressors, thereby managing and overcoming symptoms of anxiety. Traditional CBT sessions require participants to record their cognitions and attempts of cognitive restructuring when faced with stressors in between sessions and report these results to the therapist during the next session. Very often the accuracy and details of such reports is reduced due to the time lag between the stress experience period and the therapy session. Hypnotherapy provides a unique opportunity to observe and coach the anxious participant where the feared object/situation is simulated and their experiential state is directly accessible. This paper will present two case studies using CBTH to train and coach participants to modify their irrational interpretation of bodily sensations and compare results of subjects in a control group with a normal CBT treatment group.

Introduction

Anxiety is one of the most common problems faced by adults and it can occur any time and place. It can be defined as an unpleasant feeling of fear or apprehension which involves cognitive (i.e., negative thoughts or predictions); behavioural (i.e., avoiding certain places/ people); affective (i.e., intense sadness, anxious feelings) and; physiological (i.e., increased heart rate and sweaty palm) components. It affects about six million Americans and was found to be twice as common in women as men (Kessler, Chiu, Demler

& Walters, 2005). In addition, it has been found that anxiety tends to co-exist with a host of other disorders such as depression and substance abuse (Regier, Rae, Narrow, Kaelber & Schatzberg, 1998; Kushner, Sher & Beitman, 1990).

The implications of an anxiety disorder range from an inability to maintain stable employment, social and familial relationships, perform daily living activities and, to enjoy life in general. These however, can be easily avoided as anxiety disorder can be effectively managed with a combination of medication and psychotherapy or either one form of treatment. In a systematic review of 23 randomised comparisons of behavioural or cognitive behavioural therapies with psychotropic medications in treating panic disorder by Furukawa, Watanabe and Churchill (2007), it was found that combined therapy (i.e., psychotherapy and psychotropic medication) was more effective than psychotherapy or psychotropic medication by itself at the end of the acute phase treatment. However, the authors also found that upon completion of the acute phase of the treatment, psychotherapy alone was as effective as the combined therapy and recommended that either one of the above two treatments could be chosen as the first line treatment for panic and anxiety disorder.

The research into the efficacy of hypnotherapy have been sparse and where attempts have been made to gain further insight, this has been fraught with difficulties due to flawed research methodologies and heterogeneity of hypnotherapy styles. However, hypnotherapy has generally been found to be effective in the treatment of schizophrenia, obesity, smoking, and anxiety disorder (Scagnelli-Jobsis, 1982; O'Neill, Barnier & McConkey, 1999). Hypnotherapy is also used to ameliorate the effects of earlier memories that contribute to dysfunctional beliefs (Constance Spencer, Ph.D, 2000).Therefore, it is logical to speculate that the efficacy of cognitive behavioural therapy could be improved by including hypnotherapy when dealing with clients with anxiety attacks. The advantages of combining hypnotherapy with CBT is that it provide us with the opportunity to directly observe the clients' cognition, especially the irrational cognitions and emotional state and 'in vivo' interventions of client's cognitions and emotions and hence assist effective monitoring of the program of the therapy.

During the hypnosis session, the anxiety situation was simulated by the therapist and they could ask the client to report on their current cognitions and the client would report directly the cognitions whilst under the hypnosis session. This methodology would enable the therapist to have access to the client's cognitions, especially the irrational cognitions related to the anxiety disorder. The therapist would also able to suggest alternative rational cognitions for the clients to adopt and modify the irrational cognition immediately. Furthermore, the clients would also be able to report the intensity of their emotional state before and after the cognition intervention, thereby allowing the therapist to assess the efficacy of the intervention. These benefits would not be available in traditional CBT treatment, which would rely mainly on clients reporting the cognition and emotional state they had experienced in between treatment sessions.

Method

Subjects

Treatment Group: There were two subjects in this group. Subject A is a 36 year old female who has developed anxiety disorder as a result of repeated exposure to others' snoring at night. Due to work commitments, subject A has to travel quite frequently and is required to commit to room-sharing arrangement with her colleagues. Some of her colleagues snored very loudly at night which affects her sleeping pattern and as a result, she

was unable to focus on her job and performance began to decline. Her symptoms included inability to relax, worrying about the worst happening, terror, nervousness, heart palpitations and feeling scared. She then begins to worry about her work performance and this further exacerbates her anxiety level. Her pre-therapy BAI (see material section for full reference) score was 42 (Potential Cause for Concern category) and SRC (see material section for full reference) score was 8 (High Level Anxiety category).

Subject B is a late 20's male who has developed anxiety disorder due to his inability to cope with stress. Subject B started smoking, drinking and even consumed narcotics during his university days. While he has stopped consuming alcohol and narcotics, nonetheless he still smokes excessively whenever he experiences the following symptoms: feelings of numbness, an inability to relax, worrying about the worst happening, light-headedness, unsteadiness, feeling terrified, nervous, experiencing trembling hands, a fear of losing control, difficulty in breathing, facial flushes and cold sweats. His pre-therapy BAI score was 44 (Potential Cause for Concern category) and subjective rating scale (SRC) was 9. (High Level Anxiety category)

Control Group: The control group consists of two males and two females. They are in the range of age 20 – 50 years old. The control subjects' pre- therapy BAI score was 43 (Potential Cause for Concern category) with the standard deviation of 2.0 and the subjective rating scale (SRC) was 8, with the standard deviation of 1.0.

Design

As the results of the study were based on only two case studies in the treatment group and four subjects in the control group, no statistical analyses were performed. The dependent variable was the BAI score which was operationalised on a scale of 1 to 4 whereby a score of 1 is defined as 'Not At All', 2 is 'mildly but it doesn't bother me much', 3 is 'moderately – it wasn't pleasant at times' and 4 is 'severely – it bothered me a lot'. The independent variables were hypnotherapy versus subjects' self report of cognition session. The interpretation of the participants' condition was based on the aggregation of all the items in the BAI ranking from 0 – 21 (Very Low Anxiety category), 22 – 35 (Moderate Anxiety category) and 36 and above (Potential Cause for Concern category). Other than BAI ranking subjects also rated their anxiety level generally from their subjective rating scale (SRC) from 0 (No Anxiety), 1 – 3 (Very Low Anxiety Category), 4 – 6 (Moderate Anxiety Category) and 7 – 10 (High Level Anxiety Category).

Materials

The BAI was developed through an assessment of 1, 086 individuals (male = 456; female = 630) from the Centre of Cognitive Therapy in Philadelphia (Pennsylvania) through consecutive routine evaluations (Beck, Emery & Greenberg, 1985). Statistical analyses revealed that the BAI has a moderate reliability level (internal consistency and item-total correlations from .30 to .71) although a further study on 83 participants yielded a correlation of .75 from a one week pre-and-post BAI scores (Beck, Emery & Greenberg, 1985). Evidence for validity was derived from correlations of .51 and .25 with the HARS-R and HRSD-R respectively and .48 with the BDI (Beck, Emery & Greenberg, 1985).

In this study, BAI was administered to both groups to distinguish between adults with anxiety disorder from depression. It consists of a 21 items whereby the subjects indicate the extent to which whey have been bothered by symptoms over the past week such as 'Numbness or tingling', 'Feeling hot', 'Wobbliness in legs' etc from 0 (Not At All),

1 (Mildly but it didn't bother me), 2 (Moderately – it wasn't pleasant at times) and 3 (Severely – it bothered me a lot). The grand score is calculated from the sum of all items with a range of 0 – 63. Subjects with a score of 0 – 21 indicate very low anxiety; 22 – 35 indicates moderate anxiety and scores over 36 indicate a potential cause for concern (Beck, Emery & Greenberg, 1985). The SRC was used by some researchers and hypnotherapists (Jan Scott, J. Mark G. Williams, and Aaron T. Beck, 1989) to enable subjects to monitor their stress and anxiety level (e.g., ask patients to keep records of their dysfunctional thoughts). This study was administrated by a therapist that was well trained in CBT and hypnotherapy. The therapist has a degree and post graduate degree in psychology as well as postgraduate certification in CBT and hypnotherapy and conducted the session for both the treatment and control group.

Procedure

Treatment group: Both subjects were selected on their presenting issues, which was primarily AD and were provided with the same treatment (e.g., therapy). Each treatment was conducted for 50 minutes and involved:

1) Assessment of stressors and anxiety level.
2) Access to irrational thoughts through clinical interview.
3) Psycho-education and coaching sessions.
4) Hypnotherapy.
    a. Hypnotherapy to invoke stressors.
    b. Observation of cognition and behaviour.
    c. Reinforcement of rational cognition and behaviour.
    d. Correction of irrational cognition and behaviour.

During the therapy session, the therapist conducted clinical interviews to gain insights into the clients' irrational thoughts. Through the psycho-education session (i.e., session 3) the therapist guided the clients to think rationally (e.g. '*Yes, I don't like the snoring, but I can manage it. I can still sleep and I can still perform well at work*'), that it is 'normal' to experience anxiety feelings and that these feelings can be managed constructively. The process is repeated several times before hypnotherapy sessions (i.e., session 4) was conducted.

During the hypnotherapy session, the subjects were induced to a hypnotic state where the phobic environment/situation was simulated (e.g., snoring noise from others and being stared at by others when smoking). Subject rated their personal, general and subjective anxiety level from one to ten at this point. They were then asked to identify any irrational thoughts and modify them if necessary to experience the anxiety fully and re-rate their anxiety level. The subjects were asked to reduce their personal subjective rating (i.e., to a score of 5 and below) each time the anxiety level went up.

Control group: The four subjects were selected on their presenting issues, which was primarily AD and were provided with the same treatment, with each therapy session being running for 50 minutes and involving:.

1) Assessment of stressors and anxiety level.
2) Access to irrational thoughts through clinical interview.
3) Psycho-education and coaching sessions.
4) Intervention based on clients' reporting of cognition behaviour in between session.
    a. Report from clients on their cognition and behaviour that experienced during having anxiety and further coaching on cognition and behavioural modification.
    b. Observation of cognition and behaviour.
    c. Reinforcement of rational cognition and behaviour.
    d. Correction of irrational cognition and behaviour.

The treatment procedure is exactly the same as in the treatment group except in session 4 where the hypnotherapy session is replaced with the clients' report of their cognition and behavioural states in between therapy sessions, followed by an appropriate coaching session to modify inappropriate irrational cognitions and behaviours.

Results

Treatment group

Results were based on self-reports and self-rating from subjects. In addition, upon completion of the sessions, the BAI was re-administered to measure the anxiety level of the subjects. Both subjects reported a drop in their anxiety levels in almost all of the symptoms in the BAI compared with the pre-therapy scores. Subject A's pre-therapy BAI score was 42 (Potential Cause for Concern category) and subjective rating scale (SRC) was 8. Subject B's pre-therapy BAI score was 44 (Potential Cause for Concern category) and personal subjective rating was 9.

With subject A, it was reported that while she still does not like the snoring, it is manageable. She was able to reduce her level of anxiety after a few months and was able to sleep without being interrupted by the sound of snoring. During the follow-up sessions, it was found that the subject was able to apply the techniques whenever the stressor was present. Her post-therapy BAI score was 6 (Very Low Anxiety category) and subjective rating scale (SRC) was 4.

Subject B reported that he was able to reduce his stress level and was able to control the urge to smoke. He also reported to being able to modify his thinking so that he felt competent and well-liked and did not feel the anxiety feelings to smoke when conversing with colleagues. Subject B was monitored with follow-up psychotherapy sessions to work on his self-esteem and able to apply the techniques whenever the stressor was present. His post-therapy BAI score was 8 (Very Low Anxiety category) and personal subjective rating was 4. So the BAI score for both treatment group subjects have been moved from Potential Cause for Concern category to Very Low Anxiety category. Also, the subjective rating scale (SRC) moved from a High Level Anxiety category to Moderate Anxiety category.

Control group: The subjects reported a drop in their anxiety levels in almost all of the symptoms in the BAI compared with the pre-therapy scores. The control subjects' pre-

therapy BAI score was 43 (Potential Cause for Concern category) with the standard deviation of 2.0 and the subjective rating scale (SRC) was 8 with the standard deviation of 1.0. The subjects post-therapy BAI score was 32 (Potential Cause for Concern category) with the standard deviation of 3.0 and the personal subjective rating was 4 with the standard deviation of 1.0. So the BAI scores have been moved from Potential Cause Concern category to Moderate Anxiety category. Further, the subjective rating scale (SRC) scores also moved from High Level Anxiety category to the Moderate Anxiety category.

Discussion

On the whole, it was found that both subjects were able to reduce their anxiety intensity to a more manageable scale. This finding was consistent with the literature that reports panic and anxiety disorders may be effectively managed using psychotherapy alone (Furukawa, Watanabe and Churchill, 2007; O'Neill, Barnier & McConkey, 1999). It should be noted that the results from this study should be interpreted with caution and not generalised to a broad-spectrum of clients, as the results here emerge from a combination of two case studies. However, it can be concluded that the treatment of anxiety disorders for the two participants in the treatment group of the study were effective in using a combination of hypnotherapy and cognitive behavioural therapies. The treatment group has shown greater reduction of anxiety as compared to the control group. The reduction for both subjects in the treatment group moved from severe to low anxiety levels. The control group improved, but the anxiety level remained at a moderate level as captured by personal subjective ratings. It can be inferred that the greater improvement in the treatment group was a result mainly of the independent variable, that is, the hypnotherapy session in the treatment group. It can be inferred that the hypnotherapy session in the treatment group is more effective in modifying anxiety levels than traditional CBT interventions based on self reporting of cognitions and behaviours by the subjects in the control group. We can postulate that the hypnotherapy session with the subjects in treatment group enabled the therapist to have more direct access to the irrational cognitions contributing to their anxiety disorder. It also enabled the therapist to intervene 'invivo' whilst the subjects were experiencing the anxiety conditions, so that cognitions were modified to be more rational and thereby enabling lower levels of anxiety.

Future research improve on this study by having including more participants and thereby producing more robust results. It may also prove interesting to examine potential gender differences, as it was reported that the occurrence of anxiety disorders are twice as common in women compared to men (Kessler, Chiu, Demler & Walters, 2005). It may also be worthwhile to include other variables such as age, occupation, specific type of anxiety disorder, degree of severity of the anxiety disorder and the comorbidity effects of other disorders.

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CHAPTER 17:
Assessments of Depressive-Process and Personality for Cognitive Behavior Therapy: Theory and Practice of Client Centered Cognitive Behavior Therapy.

Takashi, Sugiyama.

Abstract: Aims and objective: This paper examines the the effectiveness of Client-Centered CBT (CCCBT) using case studies of Japanese adolescents and adults. CCCBT is based on depressive self-others process theory (Suigyama,2005) and Millon's personality style theory. This depressive process theory has its origins in sociometer theory of self-esteem (e.g., Leary&Drown, 1995), depressive self-focus theory (e.g., Sakamoto, 2000) and depressive interaction theory (e.g., Joiner et al, 1992), and has been tested statistically (e.g., Sugiyama,2004).This theory assesses depressive process in three stages, the prevention stage, the cognitive emotional symptom stage, and the social interaction stage, and therefore offers some effective therapeutic methods for intervention at each stage. **Hypothesis:** If the therapist deals with the client's wishes carefully, the client's 'Sense of Acceptance' would be strengthened, and the therapeutic effects would be heightened (Hypothesis1). Personality assessment based on Millon's theory would reveal individual wishes of interpersonal issue, and would be useful to establish the therapeutic relationship effectively (Hypothesis2). Cognitive restructuring would be available for a case on the cognitive emotional symptom stage (Hypothesis3). **Method:** A single case study to express how to enforce CCCBT and an examination of the clinical effectiveness of CCCBT by paired t-tests on the data derived from 7 adult and adolescent cases. **Results:** In the case study, SDS and GAF showed improvement throughout 10 sessions, spread over 6-months. Examination of the effectiveness by paired t-tests suggests desirable changes occur after CCCBT. **Conclusion:** The result have suggested that chronic depressive symptoms might improve relatively quickly with applying the assessment of the stage of depressive process and personality style to cognitive restructuring.

Introduction

This article reports the outcomes of three psychological studies, examined using statistical evidence for actual psychotherapy cases and tests the utility of the method from the outcomes of these cases. Following are explanations for the three psychological studies and their theories, which provide the background to this objective.

1. Client-Centered Cognitive Behaviour Therapy (CCCBT)

The basic theory of cognitive therapy emphasises that cognition and thoughts create a person's mood (Beck, 1976). However, recent studies on mood-congruent effects in cognitive psychology have revealed that mood can influence cognitive processes (e.g.,

Bower, 1981). Thus, it might be said that a psychotherapist should consider a client's mood in a cognitive therapy session. With regard to this, C. Rogers (1957) suggested three aspects of the therapeutic attitude, which support the client's constructive thinking. These are unconditional positive regard, empathic understanding, and self-congruence. However, there is no psychological explanation for the effect of this theory. Therefore, Sugiyama (2002a, b, 2005a), Sugiyama & Sakamoto (2006) proposed the psychological concept of 'sense of acceptance'. It involves actual feelings such as 'I am of value to others'. Sugiyama (2005) theorised and demonstrated a therapeutic process model of depressive interaction (Figure 1). According to their reports (e.g. Sugiyama, 2002, a, b, 2004), the results of covariance structure analysis reveal that a sense of acceptance makes one's daily mood more positive (Figure 2), and the *R2* has been about 20–40 % (Table1). Considering these results, the three conditions of Rogers would lead to a client's positive mood. By the mood-congruent effect, this positive mood could promote positive and good-adaptive thoughts. Therefore, in cognitive restructuring, a sense of acceptance and the mood-congruent effect would be significant therapeutic factors (Hypothesis 1).

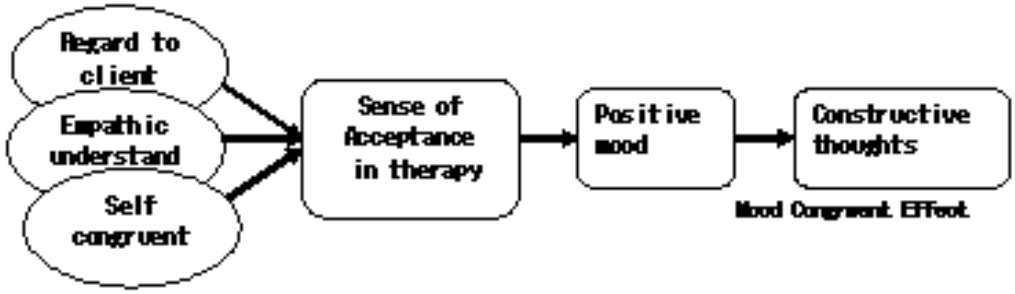
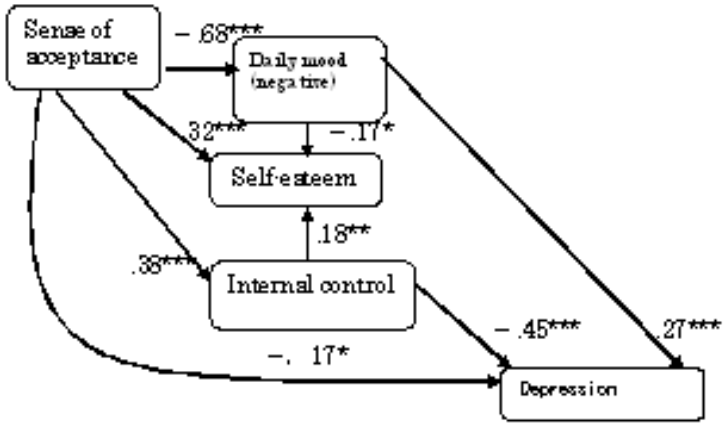


Figure1 : The effect of the three conditions pointed out by C. Rogers



*>.005, **>.001, ***>.0001
Figure2 : The results of covariance structure analysis(Sugiyama,2002a)
GFI=0.99、AGFI=0.99、RMR=0.005、Chi-square=0.5641(df=2 : Prob>chi**2 = 0.75

Table 1: Correlation between sense of acceptance and daily mood (negative).

	n	Correlation	R-Square
Sugiyama, 2002a	350	−0.68***	0.46
Sugiyama, 2002b	186	−0.45***	0.20
Suigyama, 2004	502	−0.48***	0.23

2. Assessment for the creation of the therapeutic relationship

In cognitive restructuring using CCCBT, a therapist would have to be thoughtful of whether the client experiences a sense of acceptance. Then, the therapist would need to understand client's feeling about the sense of acceptance in interpersonal situations. One personality theory, which could reveal the clients feature in interpersonal situations, would be that suggested by T. Millon (Millon, 1985). This theory would have continuities to axis II in DSM-IV-TR and would be highly valid clinically (Figure 2). In this theory, personality is assessed according to four types of reinforcement resources (i.e.,g others, reversal, self, and separation) and two behaviour patterns (i.e., active or passive), and is classified according to eight personality styles. When the eight styles become maladaptive, this theory defines them as personality disorders. Even if a client does not have a personality disorder, the feature in interpersonal situations suggested by this theory would be valid. Based on this theory, the therapist would be able to infer the client's feeling about the sense of acceptance in the therapeutic relationship (Hypothesis 2).

3. Status assessment of depressive process

Some recent psychological studies have revealed the depressive process. Some studies are about self-related cognition process, while other studies are about interaction processes of interpersonal relationships.. Sugiyama (2004), Sugiyama & Sakamoto (2006), based on the sociometer theory of self-esteem, pointed out the rationality of combining a self-process model and an interpersonal process model of depression (Leary & Drown, 1995) , and suggested the depressive self-others process theory (Figure 3). This theory has

its origins in the sociometer theory of self-esteem, the depressive self-focus theory (e.g., Sakamoto, 2000) and the depressive interaction theory (e.g. Joiner et al, 1992). Sugiyama (2004, 2005b) conducted statistical tests using longitudinal psychological studies in a Japanese sample. The theory assesses depressive status in three stages: the prevention stage, the cognitive-emotional symptom stage, and the social-interaction stage, in order to ensure effective therapeutic intervention at each stage. According to this theory, in the first stage, the possible effective therapeutic method would be emotional social support, creating a sense of acceptance from others, and stress management. In the second stage, cognitive restructuring and the examination of behaviour for obtaining security would be effective. In other words, it refers to the client-centered cognitive behaviour therapy (Hypothesis 3). In the third stage, curbing the client's social interactional circulation through cognitive restructuring and some interpersonal therapeutic methods would be effective.

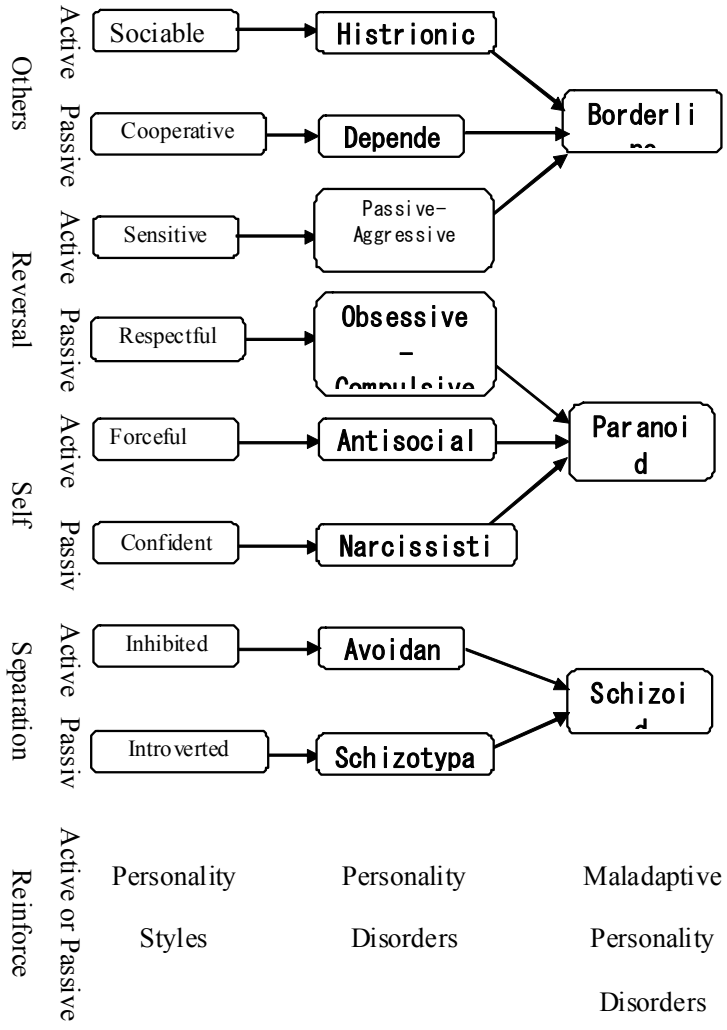


Figure 2. Personality Styles and Disorders based on Millon(1985)

Personality disorders in DSM-IV-TR

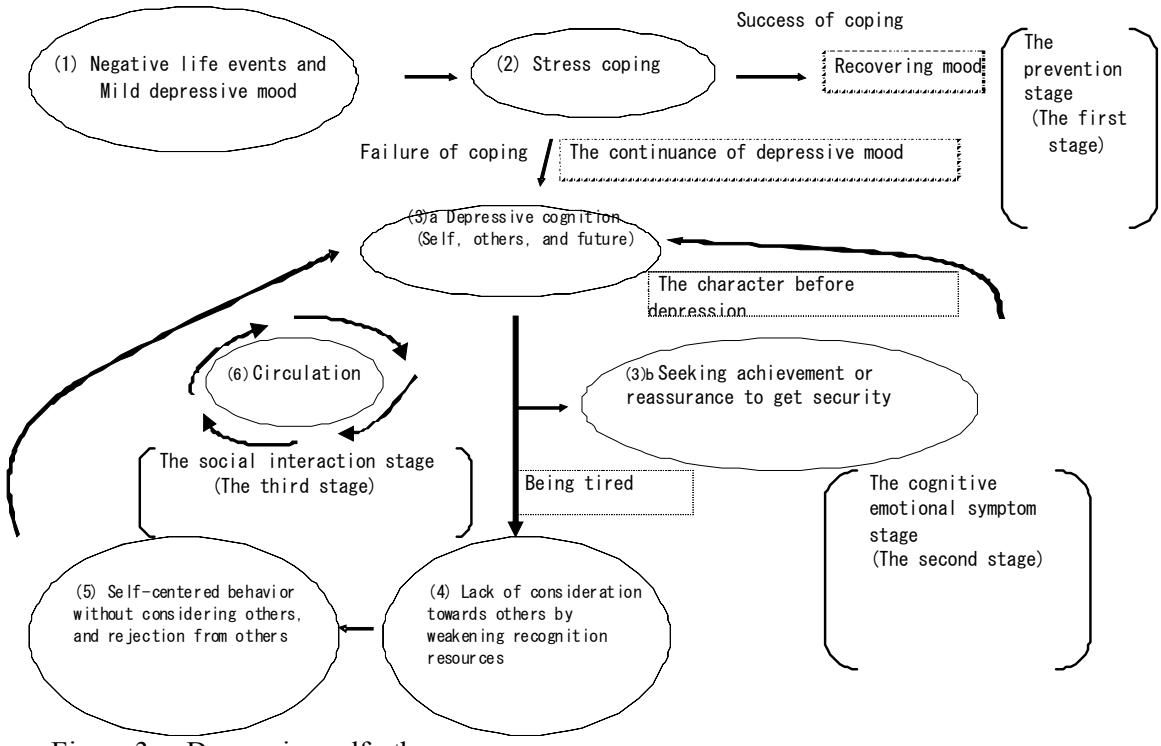


Figure 3. Depressive self-others process

Method

This article contains two studies. The first is a single case report for illustrating how to employ CCCBT. The second is a statistical test of the effectiveness of CCCBT based on seven adolescent and adult cases. The validity of the three background theories of CCCBT have been tested in terms of statistical evidence, but to date, has not been tested with actual clinical evidence. These case studies cannot provide enough statistical evidence, but may provide empirical knowledge to carry psychotherapy out.

In the case report, the author (also the therapist), being conscious of the therapeutic relationship, employed cognitive restructuring to an adolescent in the cognitive emotional symptom stage (i.e., the second depressive stage). For several years, this client has suffered depressive symptoms which interfered with his social and school life, and the client's self-esteem had deteriorated. However, his automatic negative thoughts and interactional behaviours substantially changed through 10 sessions for half a year, and his depressive symptoms and GAF conspicuously improved too.

The second study consisted of practical case studies that enforced CCCBT using the same method as the case report. The author measured the score of GAF and SDS before (time 1) and after (time 2) the enforcement of CCCBT, and compared these scores by paired t-tests. Although this study was not designed to extract the effective treatment factor of the CCCBT, it did examine the effects of CCCBT on GAF and SDS.

1. Assessment and outline of single case report

Basic case information:
Client: sex = male, age = 20, occupation = student.
Main complaint: some depressive symptoms, anthropophobic tendency.
SDS and GAF score before therapy: SDS = 68, GAF = 55 (the difficulties of everyday school attendance and conversation with his classmates).
Therapy structure: a session every other week depending on client circumstances.
The client was cooperative during the therapy.
Therapists: Sex = male, clinical career = over 12 years, training career = training in client-centered therapy (including focusing-oriented psychotherapy) for over 5 years and subsequent training in cognitive-behaviour therapy for over 5 years.

Assessment from the information of first session

1) Personality style

The client had come to therapy on the recommendation of family elders. He was cooperative during the therapy and reported instances, where he was passive and insecure in interpersonal relationships with adults. For example, he had respected and thanked parents or some teachers, who were clearly his supporters; however, he had been extremely afraid of being hurt by others whom he had imagined to be malicious.

When he was with classmates, he felt very uncomfortable because of his fear that these same classmates would laugh at him or scare him. In addition, whenever he was actively experiencing such a crisis of self –esteem, he became closer to the 'inhibited personality style' and avoided interpersonal relationships. On the other hand, if he thought that he was really threatened (even if there was no proof of the classmate's intention to threaten him), he wanted to argue or to exhibit the forceful parts of his personality. In fact, although he wanted to behave forcefully, he never behaved in that manner. Based upon the foregoing, the therapist assessed his personality as in Figure 4. He would adopt a 'cooperative personality style' with someone he trusts because of his tendency to become passive in a secure relationship with a person, and when he was exposed to serious stress, he might become dependent and reliant on others. In addition, he might demonstrate a 'forceful personality style' with his classmates, and might be 'antisocial (uncooperative)' towards people who look down on him. About his 'inhibited' tendency, it might not be due to his personality style, because he did not enjoy being alone and tried to avoid stressful interpersonal relationships. In fact, although he wanted to behave forcefully, he never behaved in such a manner.

2) The stage of depressive process

He did not intend to act out his desire or distress. Rather, he tried to control his forceful desire in order to avoid negative social interactions. His depressive stage might not reach the third stage, and he would remain at the second stage.

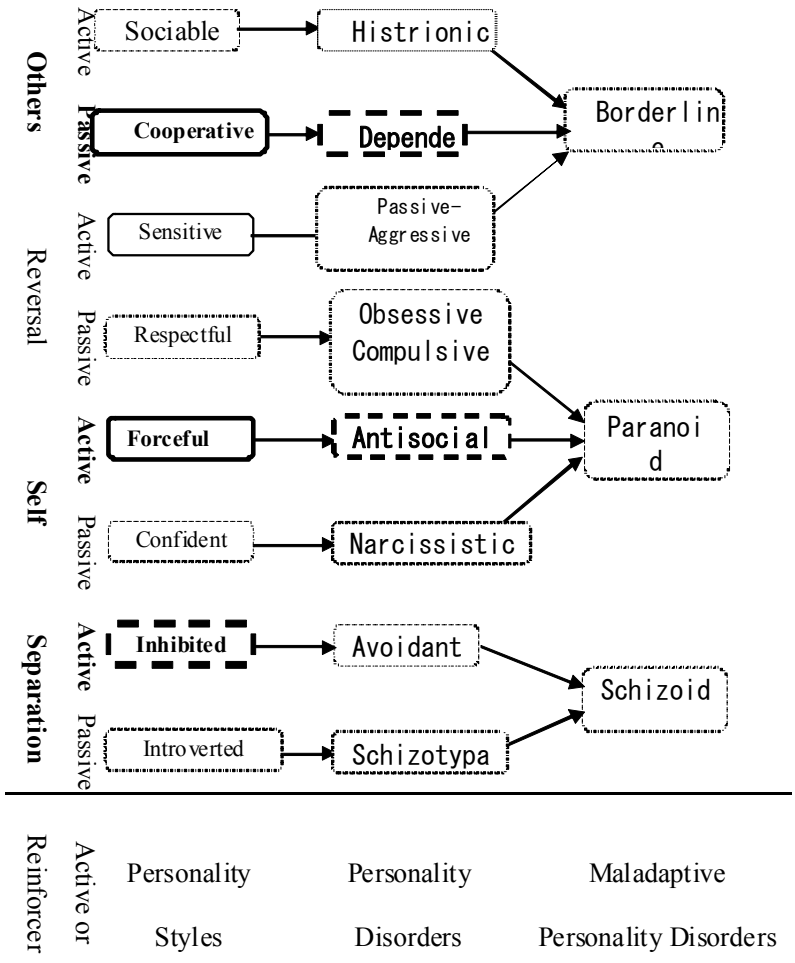


Figure 4. Personality Styles and Possible Disorders of This Case

Remarkable: Occasionally remarkable

3) Suggestions for psychotherapy based on assessment

Since he could be a 'cooperative personality style' with a person who can help him, he would become cooperative with the therapist in the same way as he would with parents or teachers, and might become dependent. The therapist might need to understand the passive desire of the client, and might have to be active and supportive in the therapeutic relationship, (e.g., regarding the client positively, showing hope, suggesting improvement, and providing reassurance). Furthermore, it should be noted that increasing his sense of acceptance would ease his negative mood and promote new adaptive cognition. He would be on the cognitive emotional symptom stage, under the influence of the negative mood, which he had been suffering from as a result of depressive cognition and low self-esteem. He had struggled to keep his self-esteem; however, his persistence in seeking achievement or reassurance was not strong, and he had become 'inhibited' to make up for it. Therefore, it seemed very likely that he would be ready to change his maladaptive way of thinking and behaving. From this, he might have a comparatively good response to cognitive restructuring.

Summary of suggestions from assessments:

1) He might be passive and dependent in the therapy session.
2) The therapist might need to be active in order to create a therapeutic relationship.
3) His actual interpersonal relationships might not have been so serious.
4) Cognitive restructuring might be useful for this case.

The results of assessments suggested that this case would be regarded as a good example for cognitive restructuring based on client-centered cognitive therapy.

2. Outline of examining general clinical effects of CCCBT

Table 2 under 'Result' lists the basic information of the cases (including the reported case) and their main complaints etc. The same therapist (i.e., the author) had treated all these cases from 2004 to 2007. In all of them, the clients had been suffering from a depressive mood before therapy. In each case, the therapist and the client consulted and the therapist assessed that the client had been in the cognitive emotional symptom stage (i.e., the second stage).

Results

Single-case study

After a few sessions, his spontaneous (automatic) thought that his friends want to make a fool of him was revealed. He had been too conscious of this thought, and might have avoided any appropriate behaviour. Therefore, he did have a sense of acceptance by friends. He seemed to have continued confirming automatic thoughts, for example 'I am not of value to others'.

Progress of this case:

1) Building therapeutic relationships and sharing a goal. In the second session, the therapist explained cognitive restructuring, the likely result, and the reason why it might be effective to the client. Furthermore, the therapist told the client that 'I am willing to share your problem and to try to get it better, and I am concerned about the client's suffering'.

The client willingly agreed to the employment of cognitive restructuring. After that, the therapist and the client had further sessions on the method of cognitive restructuring.

2) Revealing the automatic thought and the client's desire and providing reassurance. The automatic thoughts became clear, which provide the background of unpleasantness in the client. Examples of these thoughts include 'other people are going to do an unpleasant thing to me' and 'I am inferior to every other person', and 'I might be made a fool of by others'. On the other hand, while struggling to cover his anthropophobic complex from other people and feeling a sense of burden and fatigue, the client had been wishing to have close interpersonal relationships. That would be his ambivalent difficulties.

As a result of having examined proofs of these automatic thoughts, plausible evidence for them was not found. In this situation, in order to provide reassurance and to support the client's self-esteem, the therapist told him, 'I understand that you were very uneasy, beyond the limits of your endurance. And you might not have been able to stop thinking this way'. The therapist suggested that he test how other people might think in similar situations. Through this testing, we verified the possibility that other people do not seem to think as seriously as indicated by his automatic thought.

On the other hand, the client and the therapist mentioned the origin of his schema as a background of automatic thoughts. The client said that he had suffered bullying and been tormented by classmates in elementary school. The client looked strained and tangled in that session. To support the client's self-esteem, the therapist reassured him by emphasising that suffering bullying was not unusual for a school boy, and that he had already been a good student at the present time. The therapist also showed empathic understanding of the client's regret, vexation and fear of suffering bullying, and showed acceptance of having automatic thoughts and schema. The therapist told him, 'I am proud of your way of thinking because your unhappy thoughts might have been the proof of your successful efforts to survive such a tragic situation at that time. But these thoughts may not be suitable to your present living environment and may be a cause of distress to you'. The client seemed reassured and agreed to cooperate with the therapist to cultivate new thoughts to be suitable to his present living environment.

3) Searching together to find new thoughts. The client and the therapist searched together to find new thoughts. Some new adaptive thoughts were found, such as 'everyone has a small risk of being laughed at', 'I can act to protect myself from anybody making a fool of me', 'If I do not mention the suffering arising from bullying, no one will know about it'. We tested these new thoughts against the evidence of his daily life events, and tried to demonstrate the required behaviour and attitude to retain the new thoughts. It was then shared between the client and therapist and tested by actual events. Thus, he examined the thoughts and behaviours which he should have adopted in some interpersonal situations, and trained himself to perform those through role playing in the therapy session or as homework in daily living. After five sessions, he began to go to school, and actual events, including facts of daily school life, were a matter of examination. After all ten sessions, he was no longer feeling anthropophobic thoughts in school. SDS = 45, GAF (temporary assessment) = 85.

Examining general effects of CCCBT

The main complaints, age group, sex, period, the change on GAF and SDS are in Table2. The result of the paired t-test suggested that the scores changed in GAF (t = 12.44) and SDS (t = -4.84) in a more desirable direction (Table2).

Table 2: Basic case information and the scores changed in GAF and SDS of the result of CCCBT. The GAF scores are a temporary assessment based on one to three months.

no.	Main complaint	age group	sex	times	treatment period	GAF		SDS	
						Time1	Time2	Time1	Time2
1	interpersonal relationship	about20	male	10	half year	55	85	68	42
2	depressive mood	about35	male	15	half year	40	85	58	33
3	depressive mood	about45	female	20	one year	50	75	64	52
4	interpersonal relationship	about30	male	15	half year	60	90	53	42
5	interpersonal relationship	about45	female	20	one year	60	85	63	45
6	depressive mood	about20	female	15	one year	45	85	65	44
7	interpersonal relationship	about25	male	10	half year	55	85	52	51
	Means					51.42**	84.28**	60.42*	44.14*
	Sd					8.01	4.49	6.18	6.36

The reported case. ** : $p < .001$* : $p < .01$

Discussion

In this case, the therapist promptly assessed the personality style of the client, and endeavoured to make him feel good in the therapy sessions. As a result, the client and the therapist were able to examine the negative automatic thoughts, which used to scare him, and the client could feel reassured during the therapy sessions. As a result, cognitive restructuring could progress as soon as possible. The therapist assessed the stage of the depressive process in an early sessions and judged that cognitive restructuring was suitable for the client. The client responded to this therapy method, and his depressive symptoms improved through 10 sessions. For example, his SDS score before therapy suggested a serious depressive condition, and the score after therapy was in the average range of a Japanese male. The change on GAF through sessions suggested that he had improved adaptively. About examining the effectiveness of CCCBT, it is possible to say desirable changes would have appeared after CCCBT enforcement in this case. And this result of the paired t-test suggested that the scores changed in GAF and SDS in a more desirable direction (Table2). It is necessary to carefully interpret these results, since this report is a single case study without a control case, and this examination of effectiveness is without a control group. However, the results would be congruent to the three hypotheses, to say the least.

The basic theory of cognitive therapy emphasisesd that ‘cognition makes mood’; however, some cognitive psychology studies of mood-congruent effecst have been demonstrated by means of evidence that mood influences cognition. It may be possible to

assert that a therapist can promote cognitive restructuring effectively by considering the mood of a client. However, the evidence is insufficient to conclude this, and further studies and examination are necessary.

The personality style assessment based on Millon's theory and the assessment of the stage of depressive process may have a certain effect on the improvement of depression. With regard to Millon's personality theory, there would be few preceding studies to examine the utility of psychotherapy sessions. Most preceding studies of this theory have examined assessments of personality disorders. From the result of the current study, it would be possible to say that the assessment of personality style based on Millon's theory could make psychotherapy more effective. With regard to psychological studies of the depressive process, these studies could point out a depressive factor and suggest some available therapeutic interventions. However, it was difficult to draw a conclusion about depression in an actual clinical session, because there could be various aspects or situations of depression. In considering the welfare of a client, it is not unusual for the therapist to evaluate which method of therapy to choose from among the available methods, particularly in the case of depression. It is important that an effective method be suggested as soon as possible. The assessment based on a depressive self-others process model would suggest some psychosocial phenomenon and some available therapeutic interventions at the second stage. Referencing this assessment, the therapist in the present case judged that cognitive restructuring could be effective and was able to carry out the method without any delay.

A client with low self-esteem might be sensitive to anything that hurt him during a therapy sessions. About the meaning of 'schema', the client's distorted schema had actually been promoting some of the negative automatic thoughts, and could be unsuitable to his daily life. These thoughts might have been very appropriate in past situations where the client had been living; however, such schema would be disagreeable in the current life of a client. In other words, a client might not wish to have it, but cannot help having it. A client might have this disagreeable and distorted schema because he had survived a painful situation. The 'schema' may thus be a proof of his striving and his success against a suffering. Even if the 'schema' were distorted, unsuitable and impracticable, it would still be a part of the client's heart, spirit, life and sense of himself. In summation, psychotherapists should consider the 'distorted schema' as something that symbolises the client's life, and in such cases, the psychotherapist might have to respect the 'distorted schema' as a part of the client himself.

With regard to the limits of this study, a case study might provide empirical knowledge to complete the psychotherapy to a great extent, and might indicate the limit of the statistical clinical psychology study. This study suggests that to treat 'schema' and automatic thoughts respectfully might stop a client from worrying, and promote restructuring and new adaptive thoughts. However, proof of effectiveness is insufficient without statistical evidence. Although the three background theories have been tested against statistical evidence, this study is just a single case report without any statistical evidence. It is, therefore, necessary in future, to examine this method of therapy based on statistical data derived from a greater number of case studies.

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CHAPTER 18:
The efficacy of group Cognitive Behaviour Therapy (GCBT) for major depressive disorders in Malaysia: A preliminary report

Firdaus Mukhtar, Tian P.S. Oei and Mohd Jamil Mohd Yaacob

Abstract: Aims and objectives: The objective of this preliminary report was to investigate the efficacy of Group Cognitive Behaviour Therapy (GCBT) for Malay patients with depression in Malaysia. **Hypothesis:** Mean scores of the Beck Depression Inventory-Malay for the treatment group is significantly lower than the mean scores of the wait-list control group. **Method:** Two hundred and three patients, diagnosed according to DSM-IV with a major depressive disorder, were recruited from local psychiatric hospitals. Ninety of these patients refused to participate in the study. The remainder were randomly divided into group one (*n*=58) who received Cognitive Behaviour Therapy and group two (*n*=55) who acted as a control group. The patients were aged from 20-59 years with a mean age of 40.46 years. The gender ratio was 51 males (45.1%) and 62 females (54.9%). In terms of level of education, 9 (8.0%) patients completed primary school, 84 patients (74.3%) completed secondary school, 13 patients (12.1%) completed certificate/diploma courses, and 7 (6.2%) patients completed undergraduate studies. Group one received eight CBT sessions of 3 hours per week based on the GCBT manual for 4 weeks and group two were offered the same GCBT treatment or given individual at the end of the group one treatment. The Beck Depression Inventory-Malay (BDI-Malay) was administered to patients prior to-treatment, at week 2, post-treatment (week 4) and at follow-up after 3 and 6 months. **Results:** Two-way ANOVA repeated measures were used to analyse the data and the results showed significant main effects for treatment groups (TG), time (T) and interaction of T x TG for BDI. Therefore, the GCBT patients improved significantly and at a faster rate than the control group on symptoms of depression. **Conclusion:** Overall findings showed that GCBT is efficacious and applicable for Malay patients with mood disorders.

Key words: depression, Group CBT, Malaysia, mood disorders, treatment

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Introduction

The World Health Organization has predicted that depression will be among the leading causes of worldwide disability by the year 2020 (Freeman & Oster, 1998; National Institute of Mental Health, 2002; Ohayon, 2007; World Health Organization, 2005). In the Pacific region, the rate of major depression of 1-month or longer ranged from 1.3% to 5.5% while in the previous year the rate ranged from 1.7% to 6.7% (Chiu, 2004). Epidemiological studies indicate that rates of depression in the Asia Pacific, although dropping internally, are comparable to other Western countries. Malaysia is no exception;

in fact, depression is the most common mental illness reported in Malaysia, yet it remains under detected and under treated (Deva, 2006; Jamaludin, 2006; Malaysian Psychiatric Association, 2004).

Moreover, the costs of depression of either the treatment, or the physical and/or psychological burden are high and are reported to be increasing. According to the World Health Organization (2005), 1 out of every 100 people with a depressive disorder dies by suicide and in Malaysia, about 7% to 10% of depressed patients are expected to be at risk in the next 10 to 15 years (Malaysian Psychiatric Association, 2004). It is now well-accepted that two forms of treatment have good efficacy: pharmacotherapy and Cognitive Behaviour Therapy (CBT). Numerous studies including meta-analyses have been reported in terms of the theory and treatment for depression. The most established cognitive theory of depression (Beck, 1976, 1987; Haaga, Dyck, & Ernst, 1991; Kwon & Oei, 1992, 1994; Oei & Kwon, 2007) and CBT (Dobson, 1989; Kwon & Oei, 2003; Oei, Bullbeck, & Campbell, 2006; Oei & Dingle, 2001; Oei & Free, 1995; Oei, Llamas, & Devilly, 1999; Oei & Sullivan, 1999) was proposed 40 years ago. It is now accepted that Individual CBT (ICBT) is the treatment of choice for depression in Western industrialised countries, in particular in depressed outpatients with no psychotic or melancholic features (De Rubeis & Crits-Christoph, 1998; Warman, Grant, Sullivan, Caroff, & Beck, 2005). Similarly Group CBT (GCBT) has also been effective if not more efficacious than ICBT (De Rubeis & Crits-Christoph, 1998; Oei & Dingle, 2007; Oei & Shuttlewood, 1997; Warman et al., 2005; Zettle, Haflich, & Reynolds, 1992; Zettle & Rains, 1989).

However, as most of the literature stems from work with Western populations, the compatibility of Beck's theory of depression with a non-Western population is unknown. Although some work has reported the effectiveness of CBT in Asian countries, such as in Hong Kong (Tang & Lee, 1998), China (Qian & Chen, 1998), Indonesia (Hadiyono, 1998), India (Prasadarao, 1998), and Japan (Sakano, 1998), there is lack of well-randomised controlled studies. Nuha et al. (2006) reviewed the literature in Muslim countries, such as in the Arab population, and found that no CBT had been reported. While GCBT and ICBT have gained popularity in Asia, there is a lack of well-randomised control studies. The question is whether CBT is suitable for the non-Western context, such as in the Malay population in Malaysia, which has different aetiology, psychopathology, cultural, values and belief systems (Oei, 1998). In Malaysia, two religious psychotherapy studies (Azhar & Varma, 1995; Razali, Hasanah, Aminah, & Subramaniam, 1998) and one psychodynamic study (Woon & Teoh, 1976) were conducted two decades ago for patients with depression. In our own review of depression in Malaysia (Mukhtar & Oei, 2007), pharmacotherapy still dominates treatment for depression, even though the majority of the population still prefer traditional healers with studies reporting the belief that supernatural agents or evil spirits are the cause of mental illness. Therefore, the feasibility of CBT for depression in Malaysia, in particular for the Malay society, is worthy of investigation. To date, no randomised controlled trial study of group CBT for depression in Malaysia has been undertaken.

Therefore, the rationale of this preliminary study is that depression is among the leading cause of disability worldwide. Moreover, theories and treatment of depression have been established in Western literature but no study has been reported on the efficacy and feasibility of GCBT for depression in Malaysia. Hence, the objective of this preliminary study is to evaluate the efficacy of GCBT on patients with major depression in Malaysia as this is urgently needed. This report will answer the research question about whether there is any significant difference between the GCBT group and the control group. It is hypothesised that the GCBT group is significantly improved by treatment compared to the control group.

Method

Participants

In this study 113 patients (51 males and 62 females) with major depression were randomly divided into group one (*n*=58) who received CBT and group two (*n*=55) who were the control group. The patients were aged from 20-59 years with a mean age of 40.46 years. In terms of level of education, 9 (%) patients completed primary school, 86 patients (74.1%) completed secondary school, 14 patients (12.1%) completed certificate/diploma courses, and 7 (6.0%) patients completed undergraduate studies. Although 90.5% patients were taking antidepressant medication during the course of therapy, previous literature has shown that overall, preexisting medication regimes did not significantly affect the long-term outcomes of CBT programs (Oei & Yeoh, 1999).

Materials

The Beck Depression Inventory-Malay (BDI-Malay) (Mukhtar & Oei, 2007) was used in this study. The 20-item BDI-Malay is a translated instrument in Malay language that measures symptoms of depression among Malays in Malaysia. The original 21-item BDI (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) was designed to assess the severity of the affective, cognitive, motivational, psychomotor and vegetative components of depression. This measure was validated according to Malay population norms where Cronbach's alpha reliability coefficient of the BDI-Malay was found to exceed .90 and had good concurrent validity. The total score of the BDI-Malay was used in the analysis of the current study.

Procedure

Patients were recruited from psychiatric clinics in major local hospitals that represented both eastern and western Peninsular Malaysia. Initial diagnosis was given by psychiatrists using a structured clinical interview of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Further verification of diagnoses using SCID also was arranged by the first author prior to the treatment. Patients aged between 20 and 60 years, who were Malay literate, had never been treated with CBT and met the DSM-IV criteria for current Major Depressive Disorder (either single episode or recurrent) or dysthymia were selected for participation. Exclusion criteria for the study included a DSM-IV determined diagnosis of bipolar mood disorder or other major psychiatric disorder (e.g., schizophrenia, personality disorder), organic brain disorder, abuse of drugs and/or alcohol, major physical illness and an inability to read, write and speak in Bahasa Melayu. Patients were randomly divided via odd-even numbers into two groups. Group one received eight GCBT sessions of 3 hours per week based on the GCBT treatment manual for 4 weeks and the control group were offered the same GCBT treatment or given individual treatment at the end of waiting-list. The BDI-Malay version was administered to patients prior to treatment, after 4 sessions (week 2), immediately post-treatment (week 4), and at follow-up after 3 (week 16) and 6 months (week 28).

Treatment Manual

The treatment manual is based on the CBT manual for mood disorders developed by Tian Oei (Oei, 2002) and has been translated into Malay by Mukhtar (2004). It consists of eight sessions and the program is detailed in terms of full scripted mini-lectures, class exercises, guided reading and homework tasks. Sessions one and two provide a general orientation to cognitive therapy and teach participants to identify activities that stimulate their achievement and sense of accomplishment to replace their dysfunctional behaviour.

Session three and four consist of teaching participants to identify their automatic thoughts and core irrational beliefs and create a strong and motivational short sentence to pop into their head to alarm their dysfunctional condition. Session five and six consist of disputing or challenging the validity of irrational beliefs and identifying core irrational beliefs using the vertical arrow method. Finally, session seven and eight cover aspects of support system networking and techniques to prevent relapse of depression symptoms.

The program was delivered in all cases by the first author (i.e., at the time a doctorate student of clinical psychology, with completion of the Master of Clinical Psychology in 2003) to groups of 8 to 12 individuals. Throughout the program the following themes were emphasised; (a) participants were responsible for changing their own thoughts and behaviour, and (b) participants had a degree of choice in determining which beliefs they wish to retain and which they wish to reject. The course was structured so that regular monitoring and feedback from the therapist reinforced the participants' acquisition of the various skills. The various skills were spread across a number of sessions to aid this process.

Statistical Analyses

Data was explored using the Statistical Package for the Social Sciences (SPSS) to ensure all relevant statistical assumptions were met. A 2 X 4 repeated measure analysis of variance (ANOVA) (two treatment conditions [GCBT group vs. control group] and five assessment points [pretreatment, week 2, post-treatment (week 4), 3 (week 16) and 6 months (week 28) follow-up]) were conducted for the dependent variable. The analyses explored whether there were significant group, time and interaction effects. A significant group effect showed that there was a significant difference between the two treatment conditions, while a significant time effect showed that there was a significant difference between the five assessment points. A significant interaction effect was shown between the two independent variables (treatment conditions and assessment points) for the BDI-Malay.

Cohen (1988) suggested a commonly used guideline to measure effect size (0.01=small effect, 0.06 =moderate effect, and 0.14=large effect). Finally, statistically and clinically significant, reliable, changes (Jacobson & Truax, 1991) were examined to explore the nature of the differences in the BDI-Malay, between the five assessment points for the two treatment conditions, compared to the normative data distribution.

Results

Assumption testing

Before the main analyses, frequency distribution, box plots, simple correlation and multiple regression analysis were used to assess the patterns of missing data, the presence of univariate and multivariate outliers, multicollinearity and singularity, normality, linearity and homoscedasticity. The normal probability plots were generally linear, indicating homoscedasticity, linearity and normality of the residuals.

Beck Depression Inventory

Mean BDI-Malay scores for the GCBT and the control patients at each assessment point during the CBT program are presented in Table 1. The means and SD for the BDI-Malay for the two treatment groups show a huge decrease for the GCBT group over time while the mean scores for the control group remain almost constant. Similarly, there was a significant difference for the mean scores of the BDI-Malay across time. The results of an ANOVA performed on these data revealed a main effect for group (F (1, 111) = 754.5, p

<.001) with large effect size (.87), and time (F (4, 2.65) = 141.9, p<.001) with large effect size (.56), modified by a significant group by time interaction (F (4, 2.65) = 198.9, p<.001) with large effect size (.64). The interaction occurs because mean BDI scores for both groups over the duration of the CBT program, but the rate of change was faster for the group CBT than the control group. As expected, the GCBT group showed a rapid improvement (i.e., sharper decline in BDI scores) than the control group. A post hoc comparison shows that there was significant difference at all times of assessment except between post-assessment and 3 months follow-up. The rate of improvement for the treatment group was significantly faster than for the control group.

Table 1. Mean scores of BDI-Malay for the GCBT group and control group.

Group	**Group CBT**	**Control Group**
Time	**Mean (SD)**	**Mean (SD)**
Pre-assessment	36.7 (5.81)	36.3 (5.15)
After 4 weeks	23.7 (11.9)	41.0 (6.23)
Post-assessment	6.33 (6.53)	37.13 (4.68)
3 months follow-up	5.55 (7.56)	40.0 (5.45)
6 months follow-up	5.59 (7.33)	42.5 (5.82)

The GCBT group results indicate that 96.6% of patients showed a reliable, statistically significant change and 79.3% showed an improved, clinically significant change. However, the control group showed no improvement in either a reliable statistical or clinical, significant change.

Discussion

Our findings are that the GCBT group consistently produced significant change in symptom measure compared to the control group. The rate of change of the BDI-Malay for the GCBT group is significantly faster than for the control group. The change is maintained at 3 and 6-month follow-up. These findings are consistent with the previous literature for the Western world (De Rubeis & Crits-Christoph, 1998; De Rubeis et al., 1990; Dobson, 1989; Oei et al., 2006; Oei et al., 1999; Oei & Sullivan, 1999). It also shows that the Beck theory may be applied to Malay patients with depression in Malaysia. Thus, it appears that the present study supports the use of GCBT in Malaysia and it may have some implications for Beck's cognitive theory. This latter point will be taken up by the author at a later date.

In terms of clinical implications, this study provides support for the use of GCBT in Malaysia. However, caution must be exercised, as these findings need to be replicated by other groups in order for it to qualify as evidence-based treatment by the American Psychological Association criteria. This was the first study to have compared treatment outcomes of a GCBT group with a control group and the first treatment outcome study to have assessed changes in the BDI-Malay. However, future studies would need to explore other variables such as cognition measures to ensure that investigation of the cognitive behavioral approach could be validated in Malaysia. Also, the first author, who conducted the treatment was also involved in data collection. Future studies would need to ensure that the therapist delivering treatment is not involved with data collection in order to reduce the possible confounding effect of the therapist.

In summary, the present study provided preliminary evidence that GCBT has the potential to significantly alleviate the symptoms of depression. This study showed that

GCBT is efficacious for the treatment of major depressive disorders or dysthymia in Malaysia. Therefore, GCBT can be recommended for use in Malaysia.

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CHAPTER 19:
A Cognitive- Behavioral Approach Based on Zen Buddhism; Effectiveness of Shikanho

Fusako Koshikawa, Ayako Kuboki and Yasutomo Ishii*

Abstract: This paper examines a psychological approach to non-self (*muga*, Japanese; *anatman*, Sanskrit), one of the central concepts of Zen Buddhism, and introduces *shikanho*, a cognitive-behavioral method related to the state of non-self. We also present an experimental study that was conducted to assess the effectiveness of the shikanho technique whose idea was suggested by Zen meditation. In the experiment we investigated how effective shikanho was in influencing negative moods caused by unpleasant events. Sixty university students took part in the experiment, 30 of whom were assigned randomly to the shikanho group, while the other 30 were assigned to a control group. The former group used shikanho when imagining or foreseeing an unpleasant occurrence, while the control group did not. The effects of shikanho were evaluated at two points in time (before and after using the technique) by means of emotional values with respect to verbal associations and POMS (Profile of Mood States). The data were analysed by ANOVA. The measured scores were significantly lower in the shikanho group. These findings suggest that the state of non-self is effective in alleviating feelings of negativity provoked by unpleasant events.

Introduction

In this paper we will begin by examining the important Zen Buddhist concept of 'non-self' from the standpoint of psychology. We will then go on to consider how the idea of 'non-self' can be applied to a cognitive behavioural approach. We then introduce *shikanho,* a technique inspired by the concept of 'non-self' in Zen Buddhism, that involves deliberate changes of perspective, and we report on experimental studies conducted on the effectiveness of this technique.

The psychological features of 'non-self'

'Non-self' is a term that implies denial and transcendence of attachment in general but especially attachment to self. Attachment to self or self-centredness is a state of egoism whose transcendence means a return to the state of things as they really are. From the psychological standpoint, one might say that self-centredness means being enclosed within the framework of one's own cognition, judging whether something is good or bad on the basis of one's own values and criteria, and acting on the basis of such discrimination. In contrast, the state of 'things as they are' within the context of 'non-self' means departing from the framework of one's own cognition, in other words becoming decentralised from oneself as a being who discriminates between things, and seeing phenomena including oneself without making judgements from a meta-perspective that stands above one's own personal values and criteria (Koshikawa 1994, 1998, 2000, 2004).

'Non-self' as a cognitive behavioural approach

The goal of Zen Buddhism and cognitive behavioural therapies is the same, that is to release people from anxiety and distress. The main difference between Zen Buddhism and cognitive behavioural therapy lies in what is adopted as a functional thought or as a rational belief. Cognitive behavioural therapy deals with non-functional thoughts as evident in individual stress situations that the client is confronting, while Zen Buddhism is concerned with the attachment to the self that lies at the basis of all forms of stress and, therefore, emphasises 'non-self'. In other words, cognitive behavioural therapy does not take up the shift from attachment to the self towards 'non-self' as a target of cognitive restructuring. Indeed, if we were to propose a cognitive approach based on the idea that the self does not possess any essence to which attachment is possible, it seems unlikely that people would be immediately convinced that this is a functional and appropriate approach to decrease distress. Moreover, we know that the Buddha was unaware of the concept of 'non-self' prior to his enlightenment. He began with the technique known as *dhyana* (zen) and it was this that led him to the concept of 'non-self'. This means that the more important thing may be to develop a behavioural technique which will make the subject aware of the validity of the 'non-self' state, rather than explaining the concept of 'non-self'. We are currently engaged on the development of a technique that we refer to as *shikanho* ("shi" means just, "kan" means looking and "ho" means technique). This technique involves the use of non-judgmental attention in the manner of mindful meditation, and specifically, in this case, this type of attention is applied particularly to unpleasant events in the past.

Movement of perspective in the shikanho technique

We have recently incorporated deliberate movements of perspective into the procedures of the *shikanho* technique. This is because we wanted to incorporate the idea of continuous decentring into this technique, which I believe is one of the main features of Zen Buddhism in Japan. We also became aware of the need to add procedures of some kind to encourage decentring into the action of looking at things without making judgments. This is because several participants in experiments involving the *shikanho* technique had stated that they found it difficult to see things in an emotionally neutral manner when their feelings of discomfort became particularly strong. This means that there are people who are unable to perform decentring adequately with the current procedures. We therefore introduced a procedure whereby decentring could be continuously repeated by deliberately moving the perspective. The actual procedures involved in this technique are below:

1) Sit in a chair and assume a comfortable posture. Think of an unpleasant occurrence that still affects you strongly, (i.e. an occurrence that offended you, angered you, made you feel disconsolate, etc.), either recently or in the more distant past.
2) While summoning forth the unpleasant memory, try to recall the occurrence and the feelings that it evoked in you as if you were actually present on that occasion.
3) Look at the situation as you imagine it without making any judgments. Do the following to make it easier for you to look on without making judgment. We'll use the word 'front' to refer to the images in the worst of the scenes that you've imagined. Look at these images from an angle 90 degrees to the right; these images will be referred to as 'right'. Move on a further 90 degrees and the images seen from the back will be referred to as 'rear'. Moving on again by 90 degrees, the images seen from the left will be referred to as 'left'. Following signs, front,

right, rear, left, given by the experimenter, view the worst scene from these four directions while rotating at 90 degrees each time. Signals are given once every two seconds, although a change is made once every second if the feelings experienced are particularly unpleasant. A single set lasts 30 seconds. Take a deep breath once the set has been completed.

4) The session will be over when the negative feelings have ceased and the feelings have become neutral.

A study of how these procedures have an effect on negative feelings is the subject of the psychological experiment described below. The reason for presenting corroborative data-based on experiments is that we consider it important that psychological studies of non-self are concerned not merely with examining this concept from an experiential and qualitative standpoint, but also with providing evidence that the state of non-self alleviates human suffering on a quantitative level.

Method

Participants.

Sixty university students were assigned at random to a shikanho group (n=30) and a control group (n=30).

Materials.

1) Scale for measuring emotional values in respect to verbal associations: 7-point Likert scales. The degree of positivity or negativity in respect to 10 words associated in the mind of the participant with the negative event was assessed.
2) POMS (Profile of Mood States, Japanese version; Yokoyama & Araki, 1994).

Procedures

Shikanho group (see Figure 1): (a) Answering scales (baseline assessment). (b) An unpleasant event experienced in the past is recalled in as much detail as possible along with the feelings it evoked. Since this was not a therapy session, the duration for implementation of the technique was only five minutes to avoid causing serious psychological distress. (c) Answering scales (pre-technique assessment). (d) The shikanho technique accompanied by movements of perspective as described above was carried out in eight sets lasting five minutes. (e) Answering scales (post-A assessment). Control group: (a), (b), and (c) as above. (d) During the five minutes that the shikanho group are practising the technique, the control group recall an unpleasant experience once again without using shikanho. (e) Answering scales (post-A assessment). (f) Shikanho is practised. (g) Answering scales (post-B assessment).

Results

In order to examine the effects of the technique, a two-way analysis of variance, one within-subjects factor (i.e., time point; pre vs. post-A) and one between-subjects factor (i.e., shikanho group vs. control group), was conducted using the scores of the scales as the dependent variables. In this experiment, since the control group also practised shikanho after giving the data as the control group, a one-way analysis of variance (i.e., one within-subjects factor, post-A: after non-use of the shikanho vs. post-B: after use of the shikanho) was also performed using the scores of the two time points in the control group. The variables indicating the effectiveness of the technique were as follows.

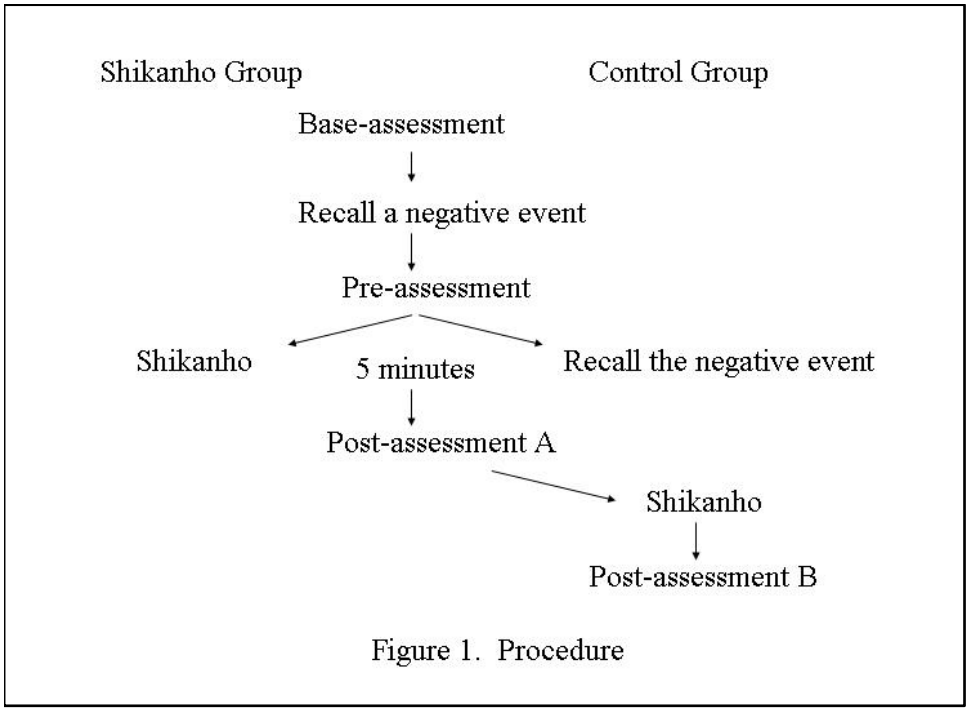

Figure 1. Procedure

(1) Emotional values with respect to verbal associations (i.e., positive-negative). Figure 2 shows the state of changes in emotional values in respect to verbal associations. There was a significant interaction between 2 groups and 2 time points ($p<0.01$). Simple main effect analyses indicated that negative emotional values were less in the shikanho group than in control group ($p<0.01$) and negative emotional values decreased significantly ($p<0.01$) only in the shikanho group. In the case of the control group, negative emotional values decreased significantly ($p<0.01$) after use of the shikanho technique (at the post-2), in which case negativity lessened as far as to the neutral point.

(2) POMS scores. Figure 3 shows change in scores on the Tension-Anxiety scale involved in the profile of mood states (POMS). With regards to the variables for which differences between the two groups were significant at the pre-technique, we employed an analysis of covariance using the scores at this point as the covariate. There was a significant difference (T-A and C: $p<0.01$) or a significant difference tendency (F: $p<0.06$, D and A-H: $p<.0.09$) between the two groups at the post-A, in the case of which the scores were better in the shikanho group than in the control group. In the control group, there was a significant change in a desirable direction in each mood after use of the shikanho ($p<0.01$).

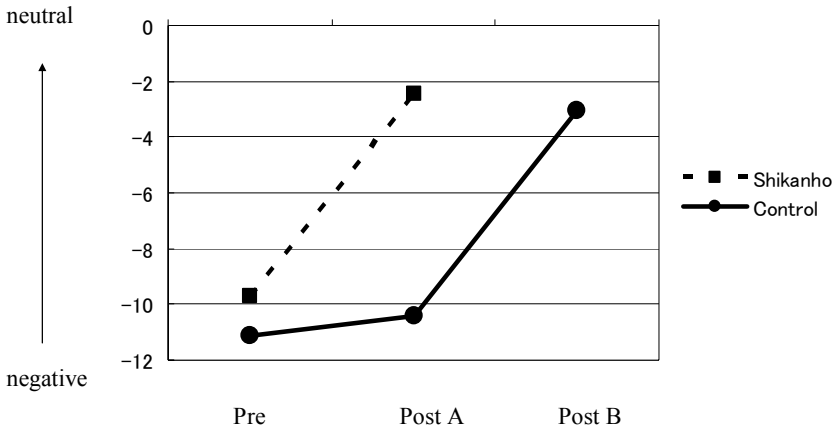

Figure 2 Degree of negativity of ten words associated with the unpleasant event

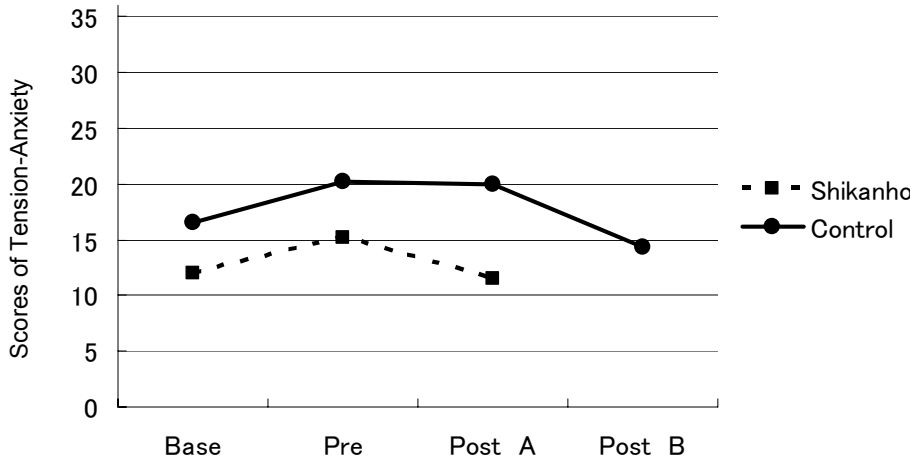

Figure 3 Scores of Tension-Anxiety in POMS

Discussion

As we have seen above, the results of our experiments indicate that the shikanho technique, accompanied by deliberate transfers of perspective, is able to alleviate negative emotional distress in stressful situations. Particularly interesting results were obtained as regards how feelings in respect to verbal associations changed from negative to neutral. In general, when we have an unpleasant experience, we attempt to discriminate on the comfort-discomfort dimension, either consciously or unconsciously, against things that are linked to this experience, as indicated through verbal association. The results obtained on this occasion show that the shikanho technique is able to alleviate such discrimination.

In this study, we examined the effectiveness of this technique in the short-term. As for the long-term effectiveness and the maintenance of them, we have recently reported, in Japanese, that the scores of SDS (Zung Self-rating Depression Scale, Japanese version) and RRQ (Reflection-Rumination Questionnaire, Japanese version) were decreased significantly by practicing this technique for three weeks and the effects were maintained at the follow-up session another three weeks after (Koshikawa and Takanashi, 2006). These results reveal that shikanho is effective not only in short-term but also in long-term and can keep the effects at least for three weeks.

It has been reported that the results obtained employing behavioural techniques can be maintained for longer due to the effects obtained through inclusion of cognitive restructuring (Durham & Turvey, 1987). It seems likely that, having experienced liberation from suffering through this practice of meditation, the beneficial results can be maintained for relatively longer periods. We suppose that they can also be generalised through cognitive restructuring when they are clearly related to an interpretation that these results are due to release from attachment to self. In the future we plan to look into questions such as what effects come about as a result of including cognitive restructuring in the procedures and which functional thoughts are appropriate to use in this sort of cognitive restructuring.

How feasible is it for people to utilise this technique in a real world setting? At the present time, we think the following: when we face a stressful/negative situation in daily life, we can view the real stressful scene from four directions, front, right, back, and left while rotating at 90 degrees each time. This shifting of our view point could be useful to see the situation without making any judgement and as a result the negative feelings would cease and would become neutral before long. The experimental study on this matter is also our task in near future.

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1. This study was supported by a Grant-in-Aid for Science Research (C)(2)(project number : 1451017) from the Japan Society for the Promotion of Science.

2. This theme is discussed in detail in Koshikawa et al., 2006.

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CHAPTER 20:
Cognitive change and social functioning in group cognitive behavior therapy for depression

Miki Matsunaga, Shin-ichi Suzuki, Akiko Kinoshita, Yasumasa Okamoto and Shigeto Yamawaki

Abstract: In Cognitive behavior therapy (CBT) for depression, emphasis is placed on the modification of negative cognitions. Further, a number of studies have suggested that the cognitive changes are associated with reductions in depressive symptoms. It has also been found that social functioning in major depression is impaired. However, it is unclear whether the cognitive changes lead to an improvement in social functioning. The main objective of this study was to examine whether the cognitive changes that occur as a result of group cognitive behavior therapy (group-CBT) are associated with an improvement in social functioning. **Methods:** Twenty-three patients with major depression (twenty males and three females) participated in group-CBT. The group-CBT program involved twelve weekly sessions, with each session lasting ninety minutes. Each group comprised five to six subjects and three instructors. The subjects completed the Beck Depression Inventory (BDI), the Hamilton Rating Scale for Depression (HRSD), 36-item Short-Form Health Survey (SF-36), and the Automatic Thought Questionnaire-Revised (ATQ-R) at pretreatment and posttreatment. **Results:** Using a *t*-test , the pretreatment and posttreatment scores on the BDI, HRSD, SF-36, and ATQ-R were compared. The results revealed statistically significant changes in all the measures In addition, Pearson's correlation was used to examine whether cognitive changes were associated with improved social functioning. The results revealed that the ATQ-R positive scale scores at posttreatment were significantly associated with the SF-36 total sores (r =.62, p <.01) and 4 subscales-vitality (r =.55, p <.01), bodily pain (r =.44, p <.05), general health perceptions (r =.45, p <.05), and mental health (r =.50, p <.05) at posttreatment. **Conclusions:** These results suggest that the modification of negative automatic thoughts during group-CBT is possibly associated with an improvement in social functioning for patients suffering from depression.

Introduction

Cognitive behavior therapy (CBT) for depression emphasises the modification of negative cognitions. A number of studies have suggested that CBT is effective in reducing depressive symptoms and cognitive dysfunctions[1] and that cognitive change are associated with reductions in depressive symptoms.[2, 3] Patients with major depressive disorder (MDD) are also found to have long-lasting impairments in social functioning that are equal to or greater than those of patients with chronic medical illnesses such as diabetes and osteoarthritis[4]. The National Institutes of Mental Health (NIMH) revealed that subjects with

MDD showed higher levels of household strain, social irritability, financial strain, limitations in occupational functioning, poor health status, and absenteeism from work, than those without any depressive disorder[5]. In Japan, the number of individuals who engage in absenteeism from work due to psychiatric disorders is large, and most of these individuals are diagnosed with MDD[6].

However, there are few studies that investigate the impact of CBT on social functioning among depressive patients [7,8,9]. To estimate the impact of CBT during the acute treatment phase, Vittengle et al. measured the social-interpersonal functioning (self-reported social adjustment, interpersonal problems and dyadic adjustments) and depressive symptoms in adult outpatients with recurrent depressive disorder. They found that the responders' social-interpersonal functioning was improved after acute phase CBT and that this improvement was maintained over two years [9]. Furthermore, Scott et al. conducted a randomised controlled trial of CBT with clinical management versus clinical management (CM) alone in 158 subjects with residual depression during the maintenance treatment phase. Further, they explored whether the addition of CBT to CM plus mediation had any differential effects on social functioning. They determined that the addition of CBT produced an improvement of social functioning [8]. However, it remained unclear whether the improvement in social functioning is related to the depressive cognitive change in depressive patients.

In the present study, we examined whether the cognitive changes that occur as a result of group cognitive behavior therapy (group-CBT) were associated with an improvement in social functioning. We hypothesised that social functioning would improve with group-CBT, but not as much as depressive symptoms, and the improvements in social functioning would correlate with a depressive cognitive change.

Method

Participants

Twenty-three outpatients (twenty males and three females) participated in this study. They were recruited at Hiroshima University Hospital. Using the Structured Clinical Interview for the DSM-IV, the subjects—aged between 20 and 60 years—were diagnosed with MDD. Those who were excluded from the sample exhibited the following tendencies: acute suicidal risk, organic brain syndrome, psychotic episodes, antisocial personality disorder, borderline personality disorder, and other serious medical illnesses.

Design and material

All the subjects underwent a group-CBT program and completed the measures at the beginning and end of group-CBT .The following were the measures used in this study:

1) Beck Depression Inventory (BDI) which comprises 21-items as a self-report measure of depression symptoms.
2) Hamilton Rating Scale for Depression (HRSD) is a 17-item scale used by interviewing clinician to assess the patient's depressive symptoms.
3) The 36-item Short-Form Health Survey (SF-36) is a 36-item survey that assesses perceptions about functional status and well being.
4) Automatic Thought Questionnaire-Revised (ATQ-R) is a 40-item self-reported scale designed to assess the levels of automatic thoughts. The ATQ-R comprises both negative and positive scales. The negative scale includes 30 items to assess

the level of a patient's negative automatic thoughts. The positive scale is a 10-item scale that assesses the level of a patient's positive automatic thoughts.

Procedure

The group-CBT program involved twelve weekly sessions, with each session lasting ninety minutes. Each group comprised five to six subjects and three therapists. The program was based on the research conducted by Beck et al.[10] With the exception of one subject, twenty-two subjects received more than one trial of antidepressant medication during the group-CBT. The statistical analysis was conducted using the Statistical Package for Social Science ver.13.0.

Results

Demographic and clinical characteristics of subjects

The demographic and clinical characteristics of the subjects are provided in Table 1.The mean age of the twenty-three patients was 44.32 $\pm$ 9.06 years. The majority of the subjects were male (87%). Seventy percent of them were not attending work at time of the study. Further fifty-six percent of them experienced recurrent depression.

The average duration of the subjects' current depressive episode was 16.09 $\pm$ 9.66 months which was longer than the median durations of major depressive episode reported by Furukawa et al.[11]and Spilker et al.[12]

Pretreatment correlations

Pearson's correlation analyses were conducted to examine the associations among the pretreatment measures of depression, social functioning, and cognitions.

The ATQ-R negative scale scores were significantly associated with depressive symptoms and functional disabilities (BDI ; r = .60, SF-36 total ; r = -.58, p<. 01), whereas, the ATQ-R positive scale scores were not significantly correlated with social functioning (SF-36 total; r = .39, p<.10)

Outcome measures

Using *t*-tests, the pretreatment and posttreatment scores on the BDI, HRSD, SF-36, and ATQ-R were compared. The results revealed statistically significant changes in all the measures (BDI, HRSD, SF-36; p < .01, ATQ-R, p < .05). In addition, the effect sizes in all the measures were large (BDI; d = .74, HRSD; d = 1.12, SF-36; d = 1.04, ATQ-R; d = 1.04). Table 2 presents the means relating to pretreatment and posttreatment measures of depressive symptoms, social functioning, and depressive cognitions.

At posttreatment, the HRSD scores had fallen into the mild depression range. Seventy percent (N=14) of the subjects had fallen into the remission level of the HRSD scores (HRSD$\leqq$7), and the average HRSD score was reduced by 39.1%. These results were very similar to those of other studies on the outcomes of the CBT for depression [13,14,15]. In addition, the SF-36 total scores were significantly improved, and were higher than the mean scores of typical depressive patients and of the general populations [4]. With respect to the ATQ-R, the negative scores following treatment did not improve to the extent as the normative scores (M = 52.91, SD = 18.18)[16]. Nevertheless, the ATQ-R the negative scores and positive scores were also significantly changed. From the results, it was found that depressive symptoms, social functioning and depressive cognitions were significantly

changed. In addition, the improvement of depressive symptoms and social functioning were also clinically significant.

Table 1. Demographic and clinical characteristics of subjects

Gender	male	20
	female	3
Age at intake	44.32 ± 9.06 (29–57)	
Employment status	employed	18 (including 16 absentees)
	unemployed	5
Marital status	married	20
	single	3
Educational status	high school or below	4
	college or above	19
Diagnosis	single episode	10
	recurrent	13
Total no. of lifetime affective episodes	once	10
	twice	8
	more than thrice	5
Dosage	high	4
	adequate	15
	low	4
Duration of the current episode (month)	16.09 ± 9.66 (2–36)	

Table 2 Depressive symptoms, social functioning, and cognition before and after group-CBT ($N = 23$)

Variable	Pretreatment (SD)	Posttreatment (SD)	*p*
BDI	21.96 (8.23)	15.39 (9.60)	**
HRSD	13.78 (4.42)	8.13 (5.68)	**
SF-36	91.55 (13.22)	105.95 (14.43)	**
ATQ-R total score	106.09 (19.03)	87.48 (16.76)	**
negative scale	89.87 (20.49)	68.39 (19.44)	**
positive scale	16.22 (5.02)	19.09 (7.85)	*

** $p < .01$, * $p < .05$

Posttreatment correlations

Pearson's correlation coefficient was used to examine whether the cognitive changes were associated with improved social functioning. The results (Table 3) reveal that the ATQ-R positive scale scores at posttreatment were significantly associated with the SF-36 total sores (r = .62, p < .01) and with the scores of the following four SF-36 subscales: vitality (r = .55, p < .01), bodily pain (r = .44, p < .05), general health perceptions (r = .45, p < .05), and mental health (r = .50, p < .05).

Table 3 Correlations among the measures of depression, social functioning, and cognition at post-treatment

		1	2	3	4	5	6	7	8	9
1	BDI post	—								
2	HRSD post	.76 **								
3	SF-36 total score	−.81 **	−.68 **							
4	SF-36 bodily pain	−.45 *	−.42 *	.53 **						
5	SF-36 general health	−.54 **	−.56 **	.61 **	.57 **					
6	SF-36 vitality	−.71 **	−.49 *	.87 **	.39 n.s.	.45 *				
7	SF-36 mental health	−.65 **	−.59 **	.88 **	.27 n.s.	.38 n.s.	.71 **			
8	ATQ-R negative scale	.60 **	.53 **	−.60 **	−.51 *	−.46 *	−.42 *	−.39 n.s.		
9	ATQ-R positive scale	−.63 **	−.53 **	.62 **	.44 *	.45 *	.55 **	.50 *	−.53 *	—

** p < .01, * p < .05

Discussion

The purpose of this study was to examine whether the cognitive changes that occur as a result of group-CBT were associated with an improvement in social functioning. The present study has confirmed that group-CBT for depression is effective in reducing dysfunctional cognition and improving social functioning. Further, the results have indicated that the increasing level of positive thoughts during group-CBT is possibly associated with an improvement in social functioning.

Although some studies have reported that pharmacotherapy for depression can reduce not only depressive symptoms but also social impairments [17,18], Hirschfeld et al.[19] noted that the impairments in social functioning persisted even after symptoms resolution. Moreover, they suggested that psychotherapy should be available in relieving impaired social functioning. In addition, some studies suggested that improving social functioning was important given the 60-80% prevalence of subjective impairment in patients with partially remitted depression and its association with subsequent relapse[20, 21]. We believe that in clinical practice, it is important to focus on the improvement in social functioning, as well as depressive symptoms and dysfunctional cognitions in order to maintain the effects of CBT for the prevention of relapse or recurrence.

Despite these findings, there were several limitations of the present study that need to be acknowledged. The limitations include the small sample size, the disproportionate gender ratio, and the lack of a control group. Additionally, this study was an open trial, and the participants were recruited from just one hospital. We were unable to recruit a sufficient number of female samples for a large sample size. Therefore, the results of this study might not be applicable to female depressive patients. Thus, there is a necessity for research involving a larger sample size and a control group, as well as an alternative analysis, in order to determine the relationship between cognitive change and social functioning after group-CBT.

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CHAPTER 21:
Positive Psychotherapy for Depressive Patients

S.M.Y. Ho, A.K.K. Tong and W.Y.K. Lai

Introduction

We believe that applying positive psychology to clinical disorders is a natural and, perhaps, necessary development of this (*relatively*) new stream of science, for two reasons. First, one important mission of positive psychology is to study positive subjective experience (Seligman & Csikszentmihalyi, 2000), and an essential criterion to judge if this mission is successful is to see if the scientific discoveries could be applied to real-life settings (Seligman & Peterson, 2002). It is not surprising that many positive psychology researchers have strong interest in testing if the wisdom in positive psychology can generate meaningful changes among normal and clinical populations. Second, positive psychology is largely developed from the recognition of the imbalanced focus of clinical psychology on psychopathology (Gable & Haidt, 2005). It is logical that some clinical psychologists who share the above view would join the movement of positive psychology, and apply the knowledge to their clinical work and research.

Two important papers on positive intervention were published recently (Lyubomirsky, Sheldon, & Schkade, 2005; Seligman, Steen, Park, & Peterson, 2005) together with other important ones (e.g. Linley & Joseph, 2004). Lyubomirsky and her colleagues (Lyubomirsky et al., 2005) tested the efficacy of two happiness intervention strategies namely, *performing act of kindness* and *counting one's blessing*, to increase positive emotions of their participants. In general, both strategies were found to be effective in increasing happiness levels over a 6-week pre- and post-intervention period. However, the effectiveness was moderated by the dosage of the intervention – (i.e. by the intensity and frequency that the participants were asked to do the exercises) – as described below.

For the "*performing act of kindness*" exercise, Lyubomirsky et al. (2005) assigned their participants in two intervention groups. One group was asked to perform five acts of kindness within a single day and the other group to do five acts spread over 7 days. Only the first intervention group (i.e., five acts within a single day) showed an increase in happiness level. For the "counting one's blessing" experiment, participants were also assigned to two modes of intervention. One group was asked to do the exercise once a week and another group to do it 3 times a week. Again, only those in the "once a week" panel reported a significant increase in happiness level. Those in the 3 times per week panel, in fact, showed a slight decrease in happiness level. In sum, Lyubomirsky et al.'s studies showed that the efficacy of positive interventions, similar to other psychological interventions, is affected by the dosage of the strategies employed. However, since both intervention studies measured happiness level over a 6-week period only, they were not able to answer if positive intervention could make people lastingly happier - an important question that Lyubomirsky et al. themselves would like to answer.

Seligman and his colleagues (Seligman et al., 2005) attempted to address the above question by conducting an internet based intervention study on 5 positive psychology

intervention exercises, viz. *gratitude visit*, *three good things in life*, *you at your best*, *using signature strengths in a new way*, *identifying signature strengths*[7]. The five intervention groups were compared to a placebo control exercise group, which asked the participant to write about their earliest memories every night. Each participant was assigned to do one of the above exercises for at least one week. Participants were measured six times during the study period from pre-intervention to six months after intervention. The results showed that the positive intervention exercises had different effects on increasing happiness levels and reducing depressive symptoms. Both the placebo exercise group and the "*you at your best*" intervention group had immediate positive gains in happiness levels. However, the average happiness level of both groups dropped back to baseline levels at later follow-up assessments. The "*gratitude visit*" group had a slightly longer-lasting effect, with an increase in happiness level up to one-month, but no difference from the placebo control group at other post-intervention assessment points. "*Identifying signature strengths*" showed negligible effects on the outcome measures. On the other hand, the "*three good things in life*" and "*using signature strengths in a new way*" panels demonstrated both immediate and lasting effects (up to 6 months) on increasing happiness level and reducing depressive symptoms.

In summary, both studies of Lyubomirsky et al. (2005) and Seligman et al. (2005) are groundbreaking since they demonstrated that: (1) not all positive interventions can produce the same desirable effects, and (2) the efficacy depends on the frequency and intensity of the strategies employed. Accordingly, care must be taken when applying positive interventions to patients suffering from psychological disorders. To ourknowledge, to date there has been no systematic randomised control trail (RCT) study to investigate the efficacy of the aforementioned positive interventions among clinical populations published.

On the other hands, we see that positive intervention techniques are very consistent with existing theories of depression. For instance, according to the low reinforcement model of depression (Lewinsohn, 1975; Lewinsohn & Amenson, 1978), depressed individuals have too little pleasant activities and too many unpleasant activities in their daily life. The lack of pleasant activities may be due to insufficient reinforcement in the environment, or that the reinforcements are present but the individual is not able to appreciate them due to an interfering condition, such as perceptual bias. Positive intervention techniques such as "*Savoring a Beautiful Day*" which asks an individual to set aside a day to indulge in pleasurable activities may be able to increase the pleasurable activities of these patients (Seligman, 2002). Furthermore, both "*Counting One's Blessing*" and "*Three Good Things in Life*" exercises, which ask an individual to contemplate and count the things they are grateful for, should be useful to increase one's sensitivity and awareness towards reinforcing events. Both the attributional style theory (Seligman et al., 1984) and the self-control theory (Rehm, 1990) proposed that depressive individuals have a pessimistic explanatory style for events. More specifically, depressive individuals tend to attribute negative events more internally, globally, and stably than non-depressive individuals (Peterson, Buchanan, & Seligman, 1995). Positive intervention techniques used to increase optimism (Seligman, 1990; Seligman, Reivich, Jaycox, & Gillham, 1995) and hope (Snyder, 2000) should be very relevant to depressive individuals with pessimistic explanatory styles. The well-known Beck's cognitive model of depression (Beck, 1976; Beck, 1995) stated that depressive individuals are characterised by a cognitive triad of

[7] A description of each of these exercises is beyond the scope of this paper. Interested readers are encouraged to read the original article.

negative self-evaluation, negative expectations, and negative interpretations of events. We contend that intervention techniques of *identifying and using one's signature strengths* (Seligman et al., 2005) would be very useful to alleviate these negative cognitive distortions. Recently, David & Szentagotai (2006) proposed that techniques to change a non-distorted cognition into positive distortion could be one strategy to reduce depressive symptom, and positive intervention techniques should have an important role in it.

At least two teams of researchers are actively investigating if positive interventions can help to reduce depressive symptoms among patients. In America, Seligman and his colleagues (Seligman, Rashid, & Parks, 2006) conducted two studies to investigate the efficacy of group PPT and individual PPT. In the first study, 40 students from the University of Pennsylvania with a mild-to-modest symptom range (10-24) on the BDI-II (BDI; Beck & Steer, 1992) were recruited. Participants were assigned randomly into two groups. 19 of them were assigned to a six-week, two-hour-per-week group positive psychotherapy (group PPT) while another 21 were assigned to the no-treatment control panel. At one year follow-up, the average BDI-II score of the participants in the group PPT panel was maintained in the normal range while the average score of the no-treatment group remained at the mild-modest depressed range. In Study 2, the effects of individual PPT on unipolar depression patients were investigated. Outpatients from the Counseling and Psychological Services at the University of Pennsylvania, who fulfilled the DSM-IV criteria for major depressive disorder, were recruited. They were assigned to three groups: individual positive psychology (PPT, n = 11), psychological treatment-as-usual alone (TAU, n = 9), psychological treatment-as-usual plus medication (TAU + Med; n = 12). Individual PPT took place over 14 sessions in 12 weeks, following a manualszed protocol (Rashid & Seligman, in press). The TAU and TAU+Med groups received treatment prescribed by psychotherapists of the clinic. At the end of treatment, Individual PPT had higher remission rates (7 of 11, 64%) than both TAU (1 of 9, 11%) and TAU+Med (1 of 12, 8%). While group PPT (mild-moderately depressed) focused mainly in positive interventions, the individual PPT (severely depressed) focused on both positive and negative symptoms. These two studies showed preliminary evidence for the effectiveness of PPT in reducing depressive symptoms and increasing happiness and life satisfaction.

In Hong Kong, Ho and his colleagues (Ho, Tong, & Lai, 2006) approached the same question (i.e., the efficacy of positive psychotherapy on depression) from a slightly different angle. The researchers were more interested in investigating how positive psychotherapy (PPT) compared to cognitive-behavioral therapy (CBT) - an empirically-supported and popular treatment of depression (Barlow, 2004; Butler, Chapman, Forman, & Beck, 2006; Chambless et al., 1998). The comparison group in Ho et al.'s study, hence, is CBT rather than TAU as in the study of Seligman, Rashid, & Parks (2006). In order to do so, they incorporated the concrete elements that were considered to be essential to successful therapy into each treatment session of both PPT and CBT. These elements included: checking of mood before and after each session, setting of agenda, assigning and reviewing of homework, working on the agenda items, and summarising the session and asking for feedback (DeRubeis & Feeley, 1990; Persons, Joan, & Tompkins, 2001). The PPT was a 10-session individual positive psychotherapy manual based on Rashid et al.'s (2005) protocol but with a stronger focus on discovering and utilising one's signature strengths as well as on counting one's blessings. The CBT manual was adapted from a Chinese manual published before (Tong, Ho, Li, & Lee, 2004) which was a CBT for depressive patients based on the model of Beck and his colleagues (Beck, 1976; Beck, 1995). The research question of Ho et al. was: "with every important component being controlled, how did PPT (which focused on strengths and positive experiences) compare to

CBT (which focused on negative thoughts and cognitive distortions) in terms of efficacy in reducing depressive symptoms among the patients?" Participants in Ho et al.'s (2006) study were recruited from an out-patients clinic of the Department of Psychiatry in one of the largest general hospitals in Hong Kong. All patients were diagnosed by either a psychiatrist or a clinical psychologist of the hospital as suffering from clinical depression based on structured clinical interview and the Beck Depression Inventory II (BDI-II, Beck & Steen, 1987). Patients were assigned to the PPT or the CBT group randomly, and each patient completed the BDI-II five times during the course of treatment. Preliminary results among 8 patients (four in the PPT group and four in the CBT group) showed that the depressive levels of all patients in both treatment groups were reduced to within the normal range of the BDI-II after treatment. The Friedman tests showed that on average there was a significant decrease in depressive level among patients in the CBT group (χ^2 (4) = 12.00, p = .017) but the same results for the PPT group was marginally non-significant (χ^2 (4) = 8.44, p = .077) (Figure 1).

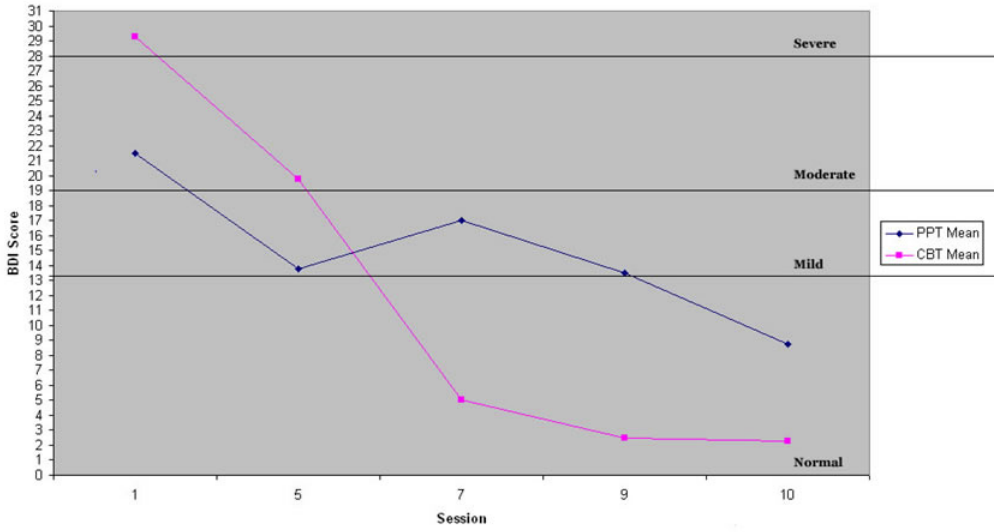

Figure 1. Mean BDI-II scores by treatment

Using the methods proposed by Jacobson & Traux (1991), symptom reduction of all patients in the CBT group achieved clinical significance whereas all but one patient in the PPT group achieved clinical significance. Ho et al. (2006) proposed, from their preliminary results, that PPT was also effective in reducing depressive symptoms among their patient subjects. However, it had higher individual fluctuation in individual outcomes as compared to CBT. On the other hand, patients receiving PPT seemed to have higher compliance as well as better feedback on the treatment than those in the CBT group.

In conclusion, the current findings on the efficacy of PPT on depression are quite encouraging. However, most studies among clinical samples are of small sample sizes and so, the findings are preliminary. Future studies should include a larger sample size, exercise more vigorous controls for allegiance effect (e.g., therapist effect), and includie multiple sites (Barlow, 2004). Researchers may also look into the efficacy of PPT in a variety of disorders and distress other than depressed patients (Seligman, 2006).

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CHAPTER 22:
Making Adolescent lives more functional: Experiences with Cognitive Behaviour Therapy

Aruna Broota & Krishan D. Broota

Abstract: Aims and objectives – To investigate the role of cognitive behaviour therapy (CBT) on (I) the management of aggression, (II) the management of anxiety and depression. Hypothesis – It was hypothesised that the cognitive behaviour therapy would help in the reduction of aggression (in Experiment I) and depression along with its related construct (i.e., anxiety) (in Experiment II) in the experimental group. Method – In each of the experiments, 60 class XI boys (aged 15-17 years) from two public schools of Delhi were taken as a sample. Those schools were selected for from those where permission was obtained from the administration. Subjects were randomly assigned to two groups of 30 each (n=30) (i.e., control and the experimental group). In the control condition each subject was engaged in 20 one hour talking sessions and in the experimental condition, each subject was given 20 one hour therapy sessions. Tools used in the pre-test and post-test were Maudsley Personality Inventory (1959), Pal and Naqvi Aggression Scale (1983), Beck's Depression Inventory (1961), Speilberger's State-Trait Anxiety Inventory (1970) and an Information Schedule. The scores obtained were treated statistically in a 2X4 factorial experiment with repeated measures on the second factor (ANOVA). Results – The results indicated that the subjects receiving cognitive behaviour therapy improved significantly more than those not exposed to the therapy. CBT led to a decrease in the aggression score (in Experiment I). An improvement was seen in the symptoms of depression and its related construct i.e., anxiety (in Experiment II). Conclusion – From the findings of the present investigations, it can be concluded that (1) CBT was found to be an effective tool in the management of aggression in adolescents, (2) CBT helps in the management of adolescent depression, though, not completely alleviating the symptoms, and (3) it also helps in reducing other symptoms that are present or comorbid with depression (i.e., anxiety).

Introduction

Concerns about aggression and violence among young people have reached such a pitch that a note of despair, and sometimes hysteria can be detected in the commentaries appearing in the news media as well as from parents reporting to school counselors and psychologists. Causes are postulated and panaceas prescribed, yet the number of incidents of adolescents performing acts of sadistic bullying both at home and at school, attacks on teachers sometimes, vandalism and even rape seem to be growing.

Whatever the basis, aggression is certainly seen as a problem at the child rearing level. There is a tendency to rectify aggression as though it resides in the child as a form of trait which manifests itself in a generalised way across a variety of situations and relationship, or as an instinctual force or energy, or as a physiological drive. Aggression is a

complex phenomenon which can be effectively managed only if it is understood better and an appropriate strategy used to cover its multi-faceted aspects. The number and the nature of the changes and challenges that occur simultaneously during adolescence require the development of effective coping strategies for adaptive functioning (Peterson & Hamburg, 1986).

Depression in adolescence, too, can be terribly frightening to parents as it can impair normal development in the affected adolescent. Recent studies suggest that adolescent depression is increasing in frequency and constitutes a significant public health problem (Klerman & Weissman, 1984). Management of depression in children and adolescents is a complex issue. Current treatments for children and adolescent depression often involve the use of pharmacotherapy or variants of cognitive behavioural treatment (Kazdin, 1990; Kolko, 1987). Cognitive Behavior Therapy has emerged as one of the most promising innovations for the treatment of aggression and depression. The interventions that fall under this label are goal-directed and time-limited; involve the patient in an active collaboration with the therapist, use of "homework assignments" and skill practice. Cognitive behaviour intervention and attention given to the individual was found to reduce children's aggressive behaviour and improved their pro-social skills (Gresham, 1985). Effectiveness of Cognitive Behaviour techniques to manage aggression have been reported in numerous studies (Arbuthnot & Gordon, 1986; Gresham & Nagle, 1980; Kazdin, 1987b; Kendall & Braswell, 1982; Lochman et al., 1984). A great deal of research has been done which shows that Cognitive Behaviour Techniques are effective in reducing depressive symptoms in children and adolescents (Butler et al., 1980; Clarke et al., 1995).

The present study has thus been undertaken in an attempt to investigate the role of Cognitive Behaviour Therapy in the management of aggression and depression in adolescents. The following hypotheses were formulated to examine this issue:

1. Hypothesis I: "In comparison to the control group, the experimental group will show a reduction in aggression after the Cognitive Behaviour Therapy sessions."
2. Hypothesis II: "In comparison to the control group, the experimental group will show a reduction in the symptoms of depression after the Cognitive Behaviour Therapy sessions."
3. Hypothesis III: "In comparison to the control group, the experimental group will show improvement in the level of anxiety after the Cognitive Behaviour Therapy sessions."

Method

Participants

Experiment I

A sample of 150 11th grade boys from two public schools in Delhi, with similar socio-economic backgrounds, were selected initially. Maudsley Personality Inventory (1959) was administered to all the subjects to rule out any neurotic disorder or emotional instability. Finally, 60 students were selected who were found high on aggression scale (Pal and Naqvi, 1983) and were randomly assigned to two groups (i.e., controlor experimental) with 30 participants in each condition.

Experiment II

A sample of 350 11th grade boys from two public schools in Delhi, with similar socio-economic background, was selected initially. Maudsley Personality Inventory (1959) was administered to all the subjects to rule out any neurotic disorder or emotional

instability. As a result, out of the 350 students, only 240 were selected. Thereafter, the screened group (*N*=240) was administered Beck's Depression Inventory (1961). Sixty students scoring high on Beck's Depression Scale were selected and randomly divided into two groups (i.e., control and experimental) with 30 participants in each condition.

Design

A 2x4 factorial design with repeated measures on the second factor (Broota, 1992; pp.229) was used. Factor A, with two levels, constitutes two groups, Control (a_1) and Experimental (a_2), assigned randomly 30 subjects each. Factor B, with four levels, constitutes the four sets of sessions. Each set constitutes CBT sessions on each of the five days in a set. The dependent variable in Experiment I is the percent change in the aggression scores from the pre-experimental (baseline) stage, whereas, the dependent variable in Experiment II is the percent change in anxiety and depression scores from the pre-experimental stage. Post CBT measures were obtained after the 5^{th}, 10^{th}, 15^{th} and 20^{th} sessions. Therefore, design variables can be interpreted as under:

Factor A:
a_1 = Control Group
a_2 = Experimental Group
Factor B:
b_1= Percentage change after 5 sessions
b_2= Percentage change after 10 sessions
b_3= Percentage change after 15 sessions
b_4= Percentage change after 20 sessions

Materials

1. Maudsley Personality Inventory –MPI (1959)

The MPI assesses neuroticism-stability and introversion-extroversion dimensions of personality. Each of its 48 items has three response alternatives scored 0, 1, and 2 from lower to higher levels of neuroticism and extraversion and any single item contributes to only one of the two dimensions.

2. Pal and Naqvi Aggression Scale (1983)

This scale is an extended form of the scale developed by Chauhan and Tiwari (1971) in which aggression has been taken as a mode of frustration. The scale has 30 items. Each item has multiple choice answers graded on five point scale on the positive dimension and a zero point on the negative dimension.

3. Beck's Depression Inventory-BDI (1961)

This inventory is the most widely used general measure of depressive functioning. It has 21 items that cover various affective, cognitive, motivational, and physiological symptoms associated with depression.

4. Speilberger's State-Trait Anxiety Inventory-STAI (1970)

This inventory is comprised of separate report scales for measuring two distinct anxiety concepts, State Anxiety (A-State) and Trait Anxiety (A-Trait). A-Trait Scale consists of 20 statements that ask people to describe how they generally feel. The A-State Scale also consists of 20 statements, but the instructions require the subjects to indicate how they feel at a particular moment in time.

5. Information Schedule

An information schedule comprised of 53 items was used to collect demographic information and other information related to the subjects behaviour like "Do you share your

secrets/personal thoughts with your friends?", "What do you do when you are angry/depressed?" etc.

Procedure

In both the experiments, class XI boys from two public schools of Delhi were taken as a sample and tests were administered on all of them. Maudsley Personality Inventory (MPI) was used in both the experiments to rule out any neurotic symptoms in the personality of the subjects. Subjects high on neuroticism dimension were eliminated. Information schedule was given to all the subjects to collect preliminary and demographic information.

In Experiment I, after the initial screening through MPI, the aggression scale (Pal and Naqvi, 1983) was administered. Subjects with a score of 90 and above were included in the sample. Thus a total of 60 subjects who were high on aggression scale were chosen and randomly divided into two groups of 30 each, that is, control group (a_1) = 30 and experimental group (a_2) = 30. The scores obtained on the aggression scale were treated as the base scores for both the groups.

In Experiment II, after the initial screening through MPI, Beck's Depression Inventory was administered. Sixty students scoring high on Beck's Depression Inventory were selected and randomly divided into two groups of 30 each, that is, control group (a_1) = 30 and experimental group (a_2) = 30. The initial scores obtained on BDI have been treated as the base scores for both the groups. Thereafter, to the selected group of 60 subjects the STAI was administered. The scores obtained were treated as the base scores.

In both the experiments, each subject of the control group was engaged in 20 talking sessions of one hour duration each. The topics discussed with the subjects of experimental group during the sessions were related to their interests, politics, television programs, movies etc. Care was taken to avoid any type of catharsis. In Experiment I, Pal and Naqvi's Aggression Scale and in Experiment II, BDI and Speilberger's STAI were repeated in the 5^{th}, 10^{th}, 15^{th} and 20^{th} sessions and the percentage of change was calculated with respect to the base scores.

Similarly, each subject of the experimental group was administered 20 sessions of cognitive behaviour therapy. Each session was of 1 hour duration. The first seven sessions were devoted to in understanding the subject, his relationships with his parents, other family members and also his attitude towards school, teachers and peer group was studied. In Experiment I, questions such as "What makes you angry?", "What do you do when you are angry?", "How often do these outbursts occur?" etc were asked. Similarly, in Experiment II, questions such as "What makes you depressed?", "How often do you feel depressed?" etc were asked.

In the sessions eight to twenty, the therapy focused on getting the subjects to discuss their self concept. They were given insight into their aggressive behaviour/depression and asked if and how they would like to alter this behaviour. The subjects were also given relaxation therapy. For subjects who were not expressive of their anger (anger in), this experience entailed increased anxiety. Hence, more intensive relaxation therapy was used on these subjects to manage their anxiety. Subjects were also advised that reduced aggression/depression would lead to improved interpersonal relationships and their overall quality of life. The subjects who were reluctant to change their behaviour were made to imagine where this behaviour would lead them to in future. This projection helped the subjects to understand more clearly the consequences of their negative behaviour which led to thought reconstruction and development of pro-social skills.

Each subject was asked to maintain a diary indicating the number of times the they would get angry (Experiment I)/depressed (Experiment II) in a day; reasons for getting angry/depressed; his actions and; the consequences of his being aggressive/depressed. The diaries of the subjects were used as a cross reference to corroborate their responses to the questions in tests administered to obtain post CBT measures.

Results

Two separate investigations were carried out. The percentage change was obtained by taking the difference between the base scores and the scores obtained after the 5^{th}, 10^{th}, 15^{th} and 20^{th} sessions. The scores obtained have been treated statistically in 2x4 factorial experiment with repeated measures on the second factor (Broota, 1992, pp 299).On the basis of the findings of the present investigations the following observations were made:

Experiment I

Analysis of the data revealed the mean percentage change and this is presented in Table 1.1. The mean percentage change in the aggression score is higher for the experimental group (i.e. 4.45) as compared to the control group (i.e. 2.09). It is observed that CBT helps in the management of aggression.

Table1.1 Mean percentage change in the aggression scores of the two groups

Groups	**b1**	**b2**	**b3**	**b4**
Control (a1)	0.82	1.73	2.51	3.31
Experiment (a2)	1.03	4.22	4.99	7.59

b_1:5sessions, b_2:10 sessions, b_3: 15 sessions, b_4: 20 sessions

The main effect of factor A has been found to be highly significant, F (1, 58) = 82.65; p<.001. This indicates that the two groups (control and experimental) differ significantly with respect to the scores obtained on the aggression scale. The outcome is presented graphically in Figure 1.1. Further, it is observed that factor B is also statistically significant, F (3, 174) = 141.77; p<.001. This indicates that the percentage change at four levels of factor B i.e., after 5^{th}, 10^{th}, 15^{th} and 20^{th} sessions (averaged over A) differ significantly. The percentage change is a linearly increasing function of sessions. The outcome is presented graphically in Figure 1.2. The AXB interaction has also been found to be significant, F (3, 174) = 28.03; p<.001. AXB profile is presented in Figure 1.3. The above results support Hypothesis I (i.e., “In comparison with the control group, the experimental group will show reduction the aggression after the CBT sessions”).

Fig.1.1 Percent Improvement on the aggression score in the two groups (Main effect of A)

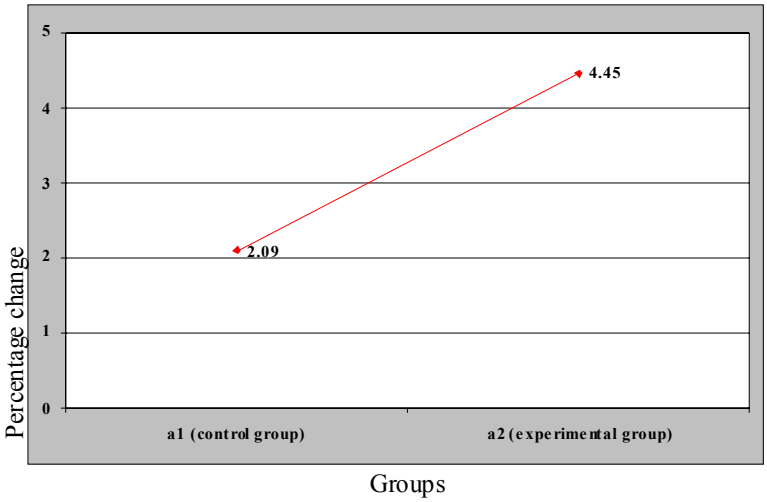


Fig.1.2 Percent change in aggression over sessions (Main effect of B)

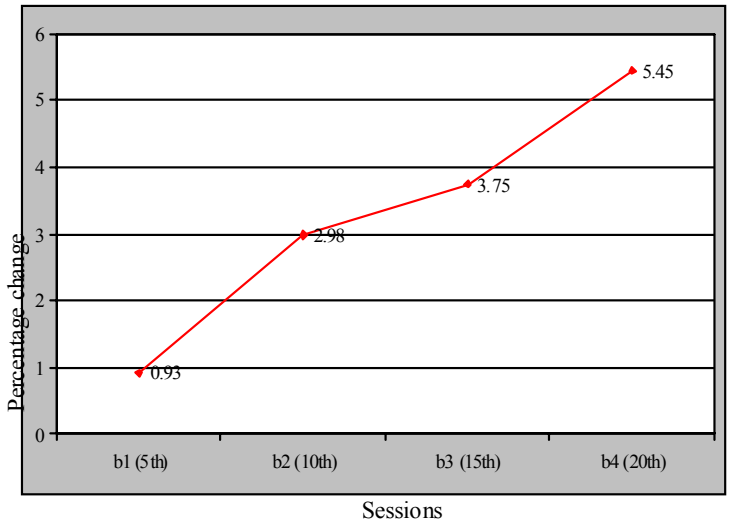
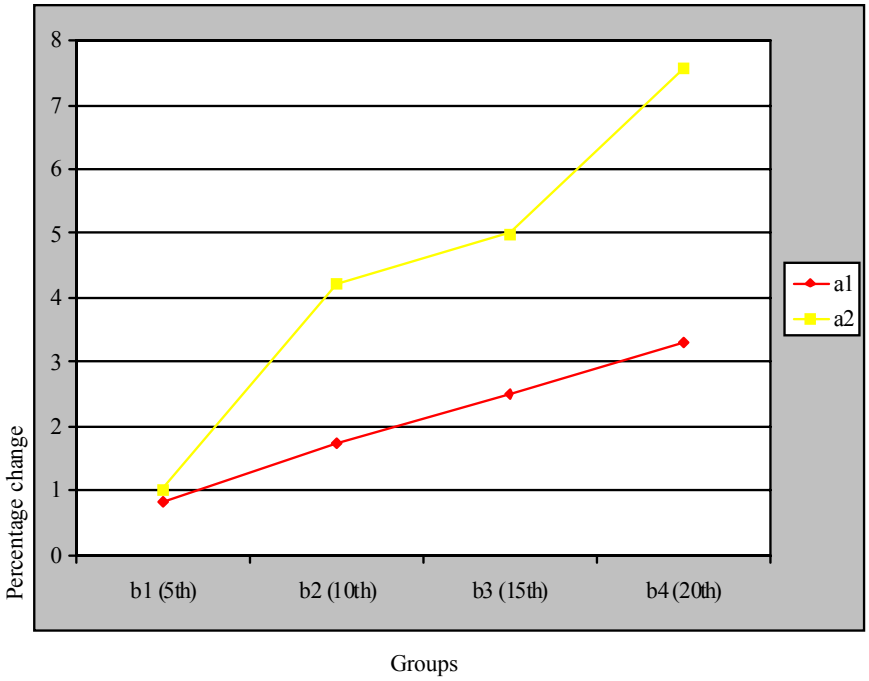


Fig.1.3 AB Interaction Profile (Also simple main effect of B)



Experiment II

The mean percentage change in the depression score is higher for the experimental group (i.e. 5.73) than that of the control group (i.e. 2.61) as can be seen in Table 2.1.It is observed that Cognitive Behaviour Therapy helps in the management of depression in adolescents

Table2.1 Mean percentage change in the depression scores of the two groups

Groups	**b_1**	**b_2**	**b_3**	**b_4**
Control (a_1)	1.03	2.18	3.03	4.20
Experiment (a_2)	1.80	4.60	6.80	9.70

b_1:5sessions, b_2:10 sessions, b_3: 15 sessions, b_4: 20 sessions

The main effect of factor A has been found to be statistically significant, F (1, 58) =85.62; p<0.001. This indicates that the two groups (control and experimental) differ significantly. The outcome is presented graphically in Figure. 2.1. Further, it is observed that factor B is also highly significant, F (3, 174) = 98.22, p<0.001. This indicates that the outcome subsequent to the four sessions is significant. The outcome is presented graphically in Figure. 2.2. The AXB interaction has also been found to be highly significant, F (3,174) = 17.65; p<.001, thus, supporting Hypothesis II (i.e., "In comparison to the control group, the experimental group will show reduction in the symptoms of depression after the CBT sessions"). AXB interaction profile is presented in Figure. 2.3.

Fig.2.1 Percent change in the depression scores (Main effect of A)

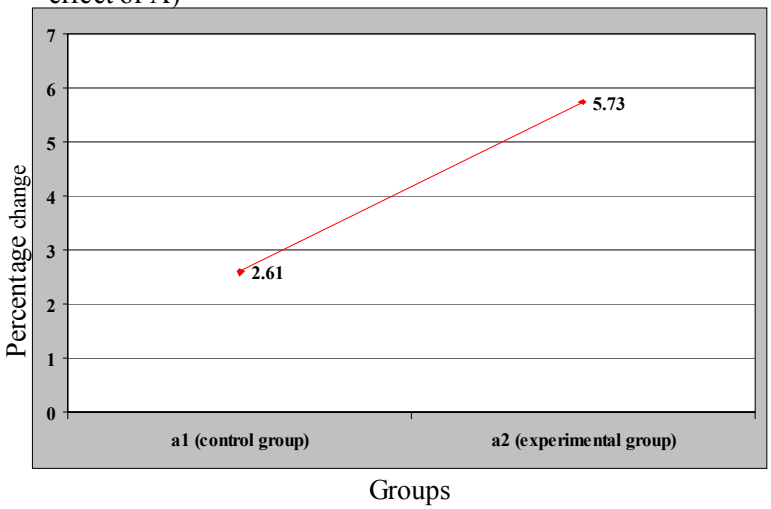


Fig.2.2 Percent change in depression scores over sessions (Main effect of B)

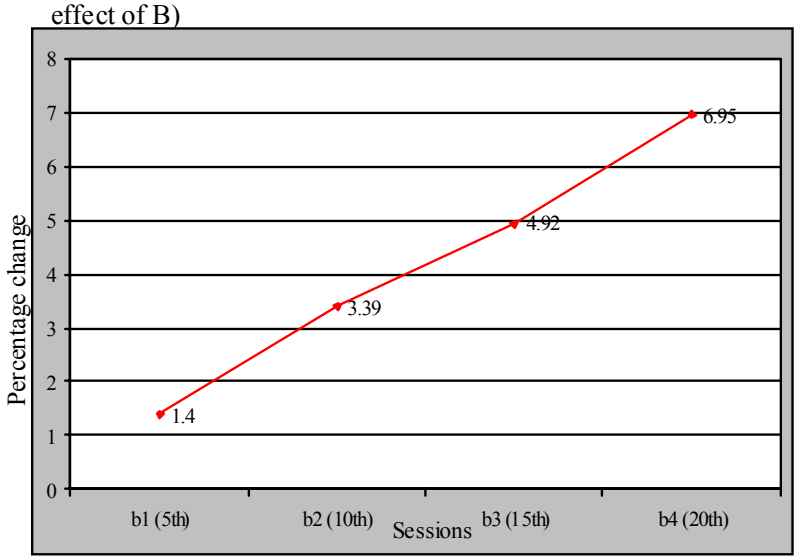
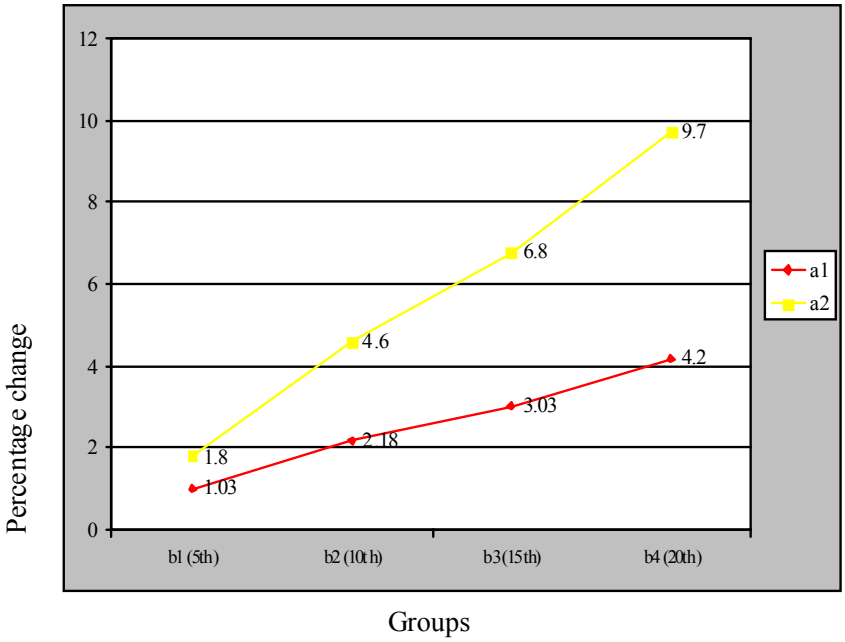


Fig.2.3 AXB Interaction Profile depression (Also simple main effect of B)



The reduction in the symptoms and the level of anxiety was also seen with the progression of the sessions in the CBT as compared to the group with no CBT sessions, (i.e., the control group). The mean percentage change in the two groups on State-Anxiety is presented in Table 2.2

Table2.2 Mean percentage change in the state-anxiety scores of the two groups

Groups	**b1**	**b2**	**b3**	**b4**
Control (a1)	1.06	1.90	2.90	4.08
Experiment (a2)	1.90	3.10	5.60	7.50

b_1:5sessions, b_2:10 sessions, b_3: 15 sessions, b_4: 20 sessions

The main effect of A has been found to be significant, F (1, 58) = 66.97; p<.001. This indicates that CBT helps in the improvement of symptoms and level of anxiety. This indicates that the two levels of factor A control group (i.e., where no therapy is given) and experimental group (i.e., in which therapy is given) averaged over B, differ significantly. Graphical representation of the results is given in Figure. 2.4. Further it is observed that main effect of B is also statistically significant. This indicates that the results obtained after 5^{th}, 10^{th}, 15^{th} and 20^{th} sessions are significant, F (3,174) = 106.68; p<.001. The outcome is presented graphically in Figure 2.5. AXB interaction is also found to be significant, F (3,174) = 18.10; p<.001, indicating the differences in the improvements between the 20 sessions for both the groups. AXB interaction profile is presented in Figure.2.6.

Fig.2.4 Percent change in the state-anxiety scores (Main effect of A)

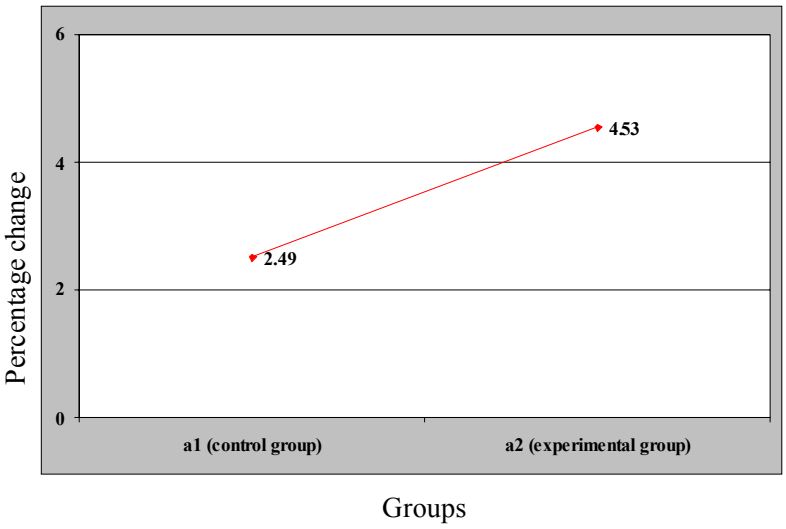


Fig.2.5 Percent change in state-anxiety scores over sessions (Main effect of B)

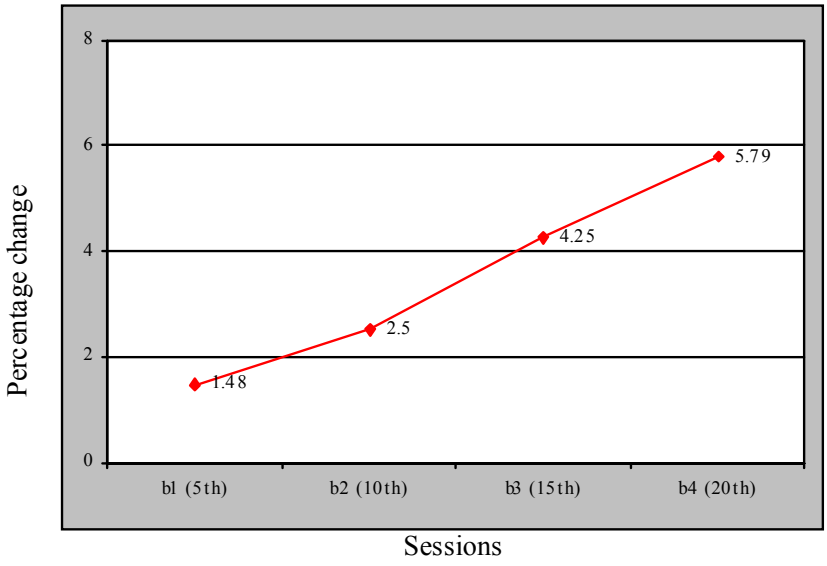
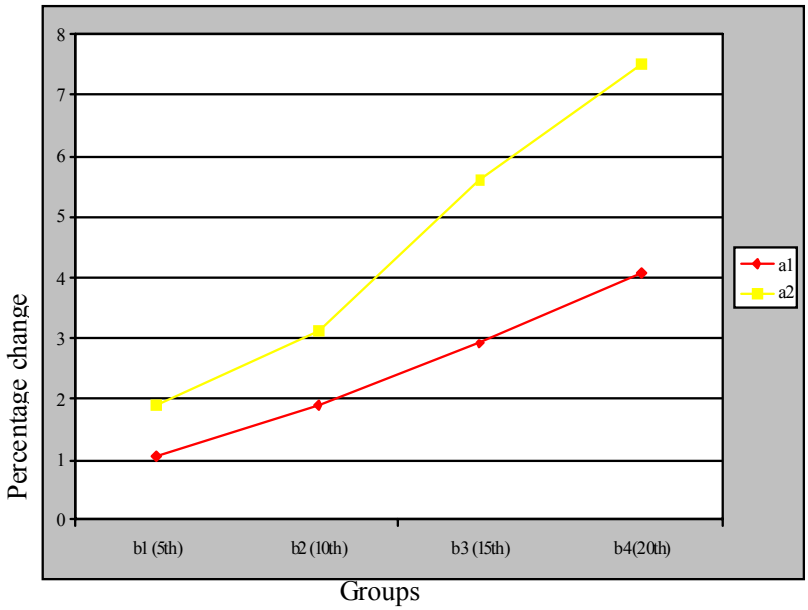


Fig.2.6 AXB Interaction Profile state-anxiety (Also simple main effect of B)



The mean percentage change in the two groups on Trait-Anxiety after the 5th, 10th, 15th and 20th sessions with respect to the base scores is given in Table 2.3.

Table2.3 Mean percentage change in the Trait-Anxiety scores of the two groups

Groups	b1	b2	b3	b4
Control (a1)	1.06	1.90	2.90	4.08
Experiment (a2)	1.90	3.10	5.60	7.50

b_1:5sessions, b_2:10 sessions, b_3: 15 sessions, b_4: 20 sessions

The main effect of factor A has been found to be significant, F (1, 58) = 72.40; p<.001. It is evident from the results that there is a significant difference in the improvement of trait anxiety between the two groups again indicating that CBT helps in the management of the symptoms of anxiety significantly. The results are graphically presented in Figure 2.7. Significant difference is also found between the improvement of the two groups after 5th, 10th, 15th and 20th sessions, F (3, 174) = 161.72; p<.001. Figure. 2.8 graphically represents the obtained results. AXB interaction is also found to be significant indicating the differences in the improvement between the two groups after the 20 sessions, F (3, 174) = 18.23; p<.001. The AXB interaction is graphically presented in Figure. 2.9. The above results support hypothesis III ("There will be an improvement in the level of anxiety in the experimental group as compared to the control group").

Fig.2.7 Percent change in the trait-anxiety scores
(Main effect of A)

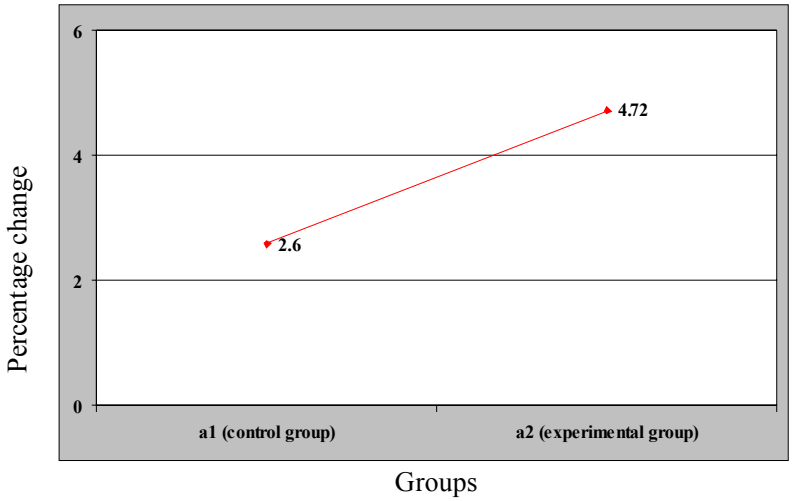


Fig.2.8 Percent change in trait-anxiety scores over sessions (Main effect of B)

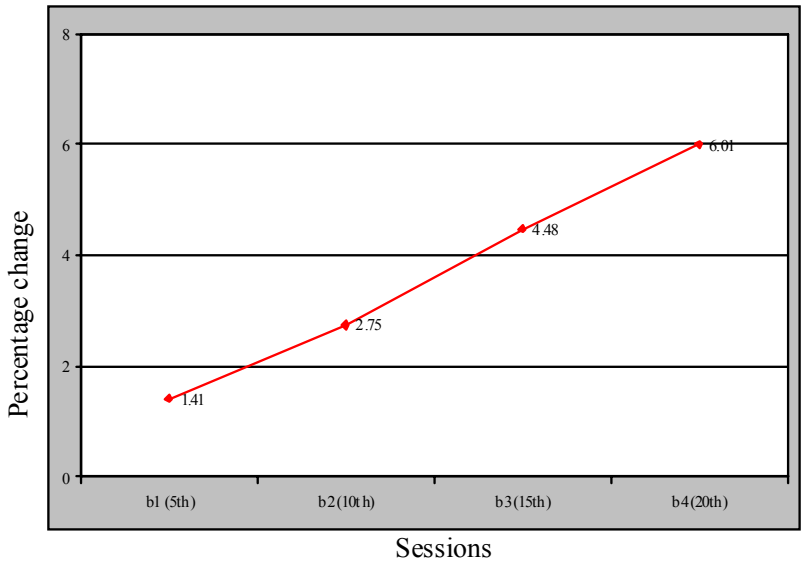
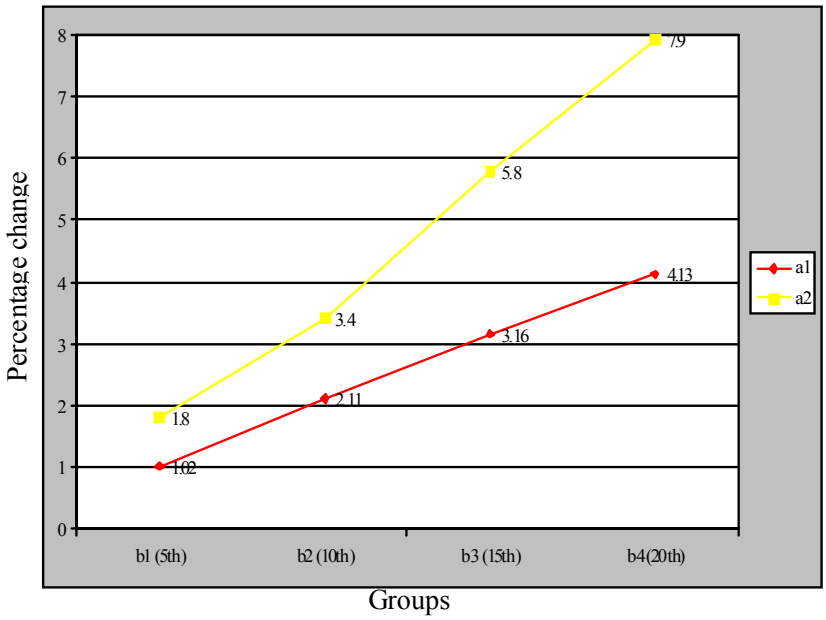


Fig.2.9 AXB Interaction Profile trait-anxiety (Also simple main effect of B)



Discussion

The results of the present study clearly demonstrate the efficacy of the Cognitive Behaviour Therapy in the management of adolescents high on aggression and depression. The experimental group significantly improved at post-treatment with substantial reduction in aggression in Experiment I and depression and anxiety in Experiment II, as compared to the control group which had only been given talking sessions on predetermined topics so that catharsis could not take place.

In Experiment I, the results indicated that there is a significant reduction in the aggression scores of the subjects in the experimental group as compared to the those on the control group [$F(1,58) = 33.10$; $p<.001$]. The results confirm the findings of the several outcomes of the studies which have been completed with aggressive, impulsive and conduct disordered children and adolescents. The findings reveal that cognitively based treatment has led to a significant reduction in aggressive behaviour at home and in the community and these gains are evident up to 1 year later (Baer &Nietzer, 1991; Durlak, Fuhrman & Lampman, 1991). Similar results were obtained in the study carried out by Dumas, 1989; Kazdin, 1987b; Kendall, 1991 and Miller & Prinz, 1990.

Aggressive and antisocial children evidence deficits in interpersonal problem solving skills (e.g., Generating solutions to problems), lower level of cognitive development (e.g., Moral reasoning) and maladaptive cognitive strategies (e.g., Impulsivity, attribution set) (Dodge, 1985; Kendall & Braswell, 1982). Cognitive behavioural treatment that focusses on these processes have produced therapeutic changes (Arbuthnot & Gordon, 1986; Kendall & Braswell, 1982; Lochman, Burch, Curry & Lampron, 1984) and consequently represent a promising treatment (Kazdin, 1987b).

In Experiment II, the value of F obtained on Beck's Depression Inventory is highly significant [$F(1,58) = 85.62$; $p<.001$]. These findings can be associated with the fact that before starting the sessions, symptoms like indecisiveness, poor concentration, short

attention span, excessive guilt etc. were present in most of the subjects. For example some of the subjects came up with the complaints such as, “I always forget after keeping my things”, “I wish I were a better person. I am no good.” However after conducting the sessions it is observed that there is reduction in these symptoms in the subjects who are in the experimental group. For example, after the sessions, many adolescents said “I feel I am at peace with my own self”, another said “I am not a bad person”, and yet another said “I think I can achieve something now.” These findings are consistent with the outcomes reported in various studies on Cognitive Behavioural Interventions done with depressed adolescents and college students (Goe, 1975; Kahn et al., 1990; Reynolds and Coats, 1986).

The results also indicated a reduction in both State Anxiety [$F(1,58) = 66.97$; $p<.001$] and Trait Anxiety [$F(1,58) = 72.40$; $p<.001$] scores in the experimental condition. The experimental group very often quoted, “I used to pull my hair. Now it has reduced. The way you listen to me no one else does at home. I can sleep better and I have less bad dreams now. I am less restless now (after the 8th session).”"I used to feel very tense over studies. Now I feel better (after the 10th session).” “I used to bite my nails. I still do. But now it is much less (after the 11th session).”

While this study is not conclusive and has its own limitations, it does prove that Cognitive Behaviour Therapy is a useful tool in the management of aggression and depression. In fact, the investigator observed that even talking sessions without using therapeutic strategies also had positive effects on the subjects. This may have been just due to the fact that these adolescents got attention and a mechanism to express some of their thoughts to someone. The sample included in the study had both the parents working. Nobody in the family had time nor the patience for each other as narrated by the participants. For example, three participants said “Mom was either cooking or cleaning or fighting with Dad or beating us and cursing us when ever at home. Otherwise Mom was outside the house for work or with friends, shopping.” The adolescents were neglected. To find some social expressions, they were members of their own peer group which had no quality of life like facilities to play organised games like cricket, basket ball etc. as the elders in the neighbourhood were intolerant of these kids making noise in the parks in the vicinity. They did play a little of this only in the school hours. The parents were harsh to them and were also beating them for any of their socially and morally unacceptable behaviours like stealing, beating up younger boys or bullying the elderly at home or in the neighbourhood, etc

A large number of Indian psychotherapists are using cognitive behaviour therapy as their approach in dealing with their clients. This approach may be following the Beckian principles like using the DRDT or the Ellisian principles like disputing the irrational beliefs or any other western author like Meichanbaum’s SIT technique. But regardless of which approach is,selected, it is blended with the Indian family system or the Indian societal system. For example, whenever aggression was discussed, the need for social approval was also discussed because in the Indian family and society, need for social approval is very strong. In the sessions, no suggestions were ever given to the children that they should ask their parents to move out of the extended family system if it was difficult to cope with an angry interfering grandmother which is a very Indian phenomena. Tolerance, patience and accommodation were facilitated in the adolescents which was necessary for the social and moral development in the adolescents and also worked to keep the family together. Also, breathing exercises have always been recommended as part of behaviour intervention in CBT which are also a part of Yoga techniques and which give good results in anger and anxiety management.

Limitations of the study and suggestions for future research

Some of the limitations of the present study are as follows:-

1. A larger sample can be used to establish the authenticity of the effect of CBT.
2. Girls could be involved as well as gender comparisons could be made.
3. Parental counseling and interviewing could also be included, which was not possible both because of the design and time constraints, as the subjects were to appear for their examinations.
4. Group therapy could also be used to improve inter-personal skills.
5. Social skills training therapy could also be used as part 2 of the study besides individual CBT sessions so that the adolescent learn to control their anger and anxiety and find new ways of communicating to express themselves. This would also help the subject to learn negotiating skills for later use.

Conclusion

CBT was found to be an effective tool in management of depression and aggression in adolescents. The therapy tries to address the problem through behaviour modeling and also tries to rectify wrong cognitive processes which were either genesis of the problem or aggravating an existing one imbibed by the adolescents through imitating the behaviour seen in mass media, westernisation and the family setting. It may also be mentioned that there is an urgent need to counsel parents, teachers and adolescents to help them manage the problem before it becomes acute. The study has very strong implications for immediate action at the school and family level.

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CHAPTER 23:
Efficacy of a Cognitive-Behavioural Group Therapy Program on Taiwanese School-Age Children with Attention Deficit/Hyperactivity Disorder

Huei-Lin Huang, Shun-Chi Huang, Chia-Chen Chao, Pin-Chen Yang and Cheng-Chung Chen

Abstract: ims and objectives: To examine the effect of a cognitive-behavioural group therapy (CBGT) program on children with attention deficit/hyperactivity disorder (ADHD). **Hypothesis:** The post-test scores of ADHD core and peripheral symptoms are lower than the pre-test scores. **Method**: From 2001 to 2005, 37 ADHD children (grades 2-5) and their parents were recruited for this study. Twenty-nine parent-child sets, in six groups, completed a 22-session CBGT program. A semi-structured interview was conducted with each parent before the program. The Child Behaviour Checklist (CBCL), Teacher Report Form (TRF), Child Attention Profile, and Disruptive Behaviour Rating Scale were completed by parents and teachers at the first session (pre-test) and session 21 (post-test). **Results:** (1) All the CBCL and TRF post-test scores were lower than the pre-test scores, except somatic complaints on the TRF. (2) Scores on the CBCL scales of internalising syndromes (i.e., anxious/depressed), externalising syndromes (i.e., rule-breaking behaviour and aggressive behaviour), thought problem, and total problem were significantly reduced after treatment. (3) Scores on the TRF scales of attention problem (i.e., hyperactivity-impulsivity) significantly reduced after treatment. (4) The DSM-oriented scale scores of affective and ADHD problem on the CBCL as well as of ADHD problem on the TRF were also significantly reduced after treatment. **Conclusion**: The results support the positive effect of a CBGT program on ADHD children. Future research should evaluate the effect of such a program on parenting behaviours and explore the implications of parenting concepts indigenous to Chinese culture.

Keywords: attention deficit/hyperactivity disorder, cognitive-behavioural therapy, Child Behaviour Checklist, group therapy, Taiwan

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Introduction

Attention-Deficit/Hyperactivity Disorder (ADHD), usually first diagnosed in childhood, is a disorder with a prevalence rate of approximately 3-7% (American Psychiatric Association, 2000). Children with ADHD have deficiencies in the self-control and self-regulation needed to match environmental demands. Interpersonal conflicts frequently appear in these children's interactions with their parents, teachers, and peers (Mash & Barkley, 1998). Their disruptive behaviours not only affect family function but

also increase parental stress. On the other hand, parental cognitions (e.g., inappropriate attributions of ADHD children's behaviours, external control, and perceptual distortions) and parenting style (e.g., inappropriate reinforcement, vague and frequent commands, and poor supervision of the child) further contribute to family relationship difficulties (Bloomquist & Braswell, 1990).

Barkley (1997a, 1998) proposed that the underlying mechanism of ADHD symptoms is a behavioural inhibition deficit. Behavioural inhibition consists of inhibiting the prepotent response, interrupting the ongoing response, and controlling the interference. With adequate behavioural inhibition, nonverbal working memory, internalisation of speech, self-regulation of affect/motivation/arousal, and reconstitution can function well, as can motor control, fluency, and syntax.

In their conceptual model of ADHD, Rapport, Chung, Shore, & Isaacs (2001) further suggested that the core symptoms of ADHD (i.e., inattention and hyperactivity-impulsivity) could induce such secondary features as interpersonal problems, noncompliance, academic failure, and low self-esteem. Research evidence has shown that cognitive-behavioural therapy (CBT) can improve both the core symptoms (Froelich, Doepfner, & Lehmkuhl, 2002; Horn, Ialongo, Popovich, & Peradotto, 1987; Ialongo et al., 1993; Pfiffner & McBurnett, 1997) and peripheral features of ADHD (Fehlings, Roberts, Humphries, & Dawe, 1991; Horn, Ialongo, Greenberg, Packard, & Smith-Winberry, 1990; Horn et al., 1987; Miranda & Presentación, 2000).

CBT for ADHD children usually employs many cognitive strategies, such as self-instructional training, problem-solving, and affective education, as well as behavioural techniques, including *in vivo* exposure, relaxation training, modeling, contingent reinforcement, and role play (Miranda & Presentación, 2000; Kendall, Panichelli-Mindel, & Gerow, 1995). Among all the CBT techniques, self-control was the most successful in helping children with ADHD acquire specific coping strategies to manage their angry reactions arising from provocative interactions with peers (Barkley, 2002). In addition, parental involvement is crucial in preventive interventions for children with ADHD (Braswell et al., 1997) because it can result in improvement in (1) parental dysfunctional attributions regarding their children's maladaptive behaviour and (2) generalisation and maintenance of the CBT techniques (Bloomquist & Braswell, 1990).

Based on the literature, a cognitive-behavioural group therapy (CBGT) program for Taiwanese school-age ADHD children and their parents was designed and conducted. The purpose of this study was to examine the effect of this CBGT program on the core and peripheral symptoms of ADHD children. It was expected that the post-test scores of ADHD core symptoms and peripheral symptoms be lower than the pre-test scores.

Methods

Participants

From 2001 to 2006, 37 child-parent sets, referred by child psychiatrists at a medical center in southern Taiwan, participated in six CBT groups. All the children had been diagnosis with ADHD and were in grades 2 to 5. All the parents had at least a high school-level education. Exclusion criteria for children were: mental retardation and autism, and for parents: any psychiatric disorder. All ADHD children were on methylphenidate during the period of this study. All parents gave informed consent to participate in the study and permission for their children's teachers to complete the behavioural ratings on their children.

Design

This study used pre-post single group design to examine the treatment outcome of a CBGT program. This CBGT program was the product of an integration of three source materials: (1) the multi-component school-based cognitive-behavioural intervention for ADHD children (Bloomquist & Braswell, 1990), (2) the parent training program of Barkley (1997b), and (3) observational data at home and school from previous studies of the authors (Huang, Lin, Weng, & Wang, 2000).

The CBGT program consisted of 22 sessions of group therapy. Sessions 1 to 21 were conducted weekly and session 22, a booster session, was conducted three weeks after session 21; each session lasted 90 minutes. This program included 3 parent and 18 parent-child sessions. The first 3 sessions, for parents only, focused on helping parents understand ADHD, identify dysfunctional parental attributions, attend to their child's good behaviour, and learn problem-solving strategies. In the parent-child sessions, training topics included problem-solving and self-instruction (sessions 4 to 8), interpersonal problem-solving (sessions 9 to 11), anger and frustration management (sessions 12 to 15), poor effort control (sessions 16 to 18), and negative thought/feelings management (sessions 19 to 20). In session 21, program review and relapse prevention were conducted; children shared and celebrated their acquisition of CBT techniques in group through performance and activities. In the booster session (session 22), the program was reviewed again to consolidate their learning, and problems encountered in using CBT techniques were discussed.

Each session consisted of steps conducted in the following order: (1) Homework was checked and tokens awarded for good work. (2) All children, except each session's target child, set themselves a behavioural goal. Based on the target child's progress, the therapist assigned a developmentally more challenging goal for him/her and with its fulfillment the target child could earn twice as many tokens as other children that session. Every child was the 'target child' an equal number of times over the treatment course (i.e., about 3-4 times on average depending on group size). (3) The therapist repeated group rules and norms. (4) Session topic and handouts were discussed and CBT techniques rehearsed through role play. (5) Homework assignments were given. (6) Participants practiced relaxation exercises. (7) Prizes were given for every 100 tokens earned during previous sessions. (8) The "star child", the child receiving the most tokens that session, then chose the type of play for the following play time, wherein therapists prompted, or guided, children to use CBT techniques in group play.

At the end of session 20, the total tokens that each child had earned in previous sessions were tallied and ranked accordingly. Parents and therapist then collaboratively selected a prize for each child based on the child's preference and the tokens earned by him/her. In session 21, children traded their tokens for the prize.

Materials

Four kinds of instruments were used in this study.

1) Semi-structured interview schedule (Barkley & Murphy, 1998) This interview schedule was used to collect data from parents about their child's developmental history, medical history, behavioural problems, and DSM-IV diagnoses.
2) Child Behaviour Checklist (CBCL) and Teacher's Report Form (TRF) (Achenbach & Edelbrock, 1983, 1986; Achenbach & Rescorla, 2001)

The CBCL/TRF was completed by parents and teachers to report on the children's problematic behaviours at home and at school, respectively. Both checklists have good

reliability and validity (Biederman et al., 2001). The Chinese versions of the CBCL-1983/TRF-1986 have shown promising reliability and validity (Huang, Chuang, & Wang, 1994; Yang, Soong, Chiang, & Chen, 2000). At the time of data collection the Chinese versions of CBCL-1983/TRF-1986 were given to all the parents and teachers to fill out. With the development of the new CBCL/TRF-2001 and its capacity to produce factor structures similar across genders and informants (Dumenci, McConaughy, & Achenbach, 2004; Ferdinand, et al., 2004), the authors decided to use the CBCL/TRF-2001 classification to analyse data collected from the CBCL-1983/TRF-1986 and other measures so that scores of six DSM-oriented scales (i.e., affective, anxiety, somatic, attention deficit/hyperactivity, oppositional defiant, and conduct) could be computed. Therefore, information collected from the interviews, behaviour observations, and behaviour ratings in the study were integrated into the CBCL-1983/TRF-1986 to complete the modified and additional items in the CBCL/TRF-2001.

3) Child Attention Profile-Parent Form/Teacher Form (CAP-PF/TF; Barkley, 1990) The CAP was completed by parents (CAP-PF) and teachers (CAP-TF) to rate the children's inattention and hyperactivity. It consists of 12 items, derived from the TRF, and includes two subscales: inattention (7 items) and hyperactivity (5 items).
4) Disruptive Behaviour Rating Scale-Parent Form/Teacher Form (DBRS-PF/TF; Barkley & Murphy, 1998). The DBRS was completed by parents (DBRS-PF) and teachers (DBRS-TF) to report on the children's problematic behaviours at home and at school, respectively. It consists of 26 items in three subscales: inattention (9 items), hyperactivity-impulsivity (9 items), and oppositional-defiant behaviour (8 items). Both rating forms have good reliability and validity (Barkley & Murphy, 1998).

Procedure

Before the first training session, all children were evaluated with the WISC-III and parents were interviewed using the semi-structured interview schedule. The CBCL/TRF, CAP, and DBRS were completed by parents and teachers at sessions 1 (pre-test) and 21 (post-test). A description of this CBGT program was also sent to the teachers by parents at the first session.

Twenty-nine parents completed all the measures. Five teachers did not complete the TRF post-test, two teachers resigned, and one child transferred to a new school; therefore, only 21 teachers completed all the rating scales. In total, 29 CBCL and 21 TRF protocols were included in final analysis.

Results

Of 37 parent-child sets, eight (22%) dropped out of the program at different times during the training; their data were not included in final analyses. The remaining 29 sets (78%) completed the program and their data were analysed using SPSS-10. Statistical procedures included the *z* test, $\chi 2$ test, and paired *t* test.

Demographic Characteristics of ADHD Children and their Parents

Table 1 presents the demographic data of ADHD children and their parents in terms of their participating status. Neither child IQ and demographic variables, nor parental ages and education levels, differed significantly between participants and drop-outs.

In our final sample of 29 ADHD children, there were 25 boys (86%) and 4 girls (14%), with an average age of 105 months (SD = 14.3; range: 82-134). The range of IQs were 75-121 for FIQ, 81-121 for VIQ, and 74-128 for PIQ. Fourteen children (48%) had comorbid oppositional defiant disorder (ODD) and one (3%) conduct disorder (CD). In our final sample of 29 parents, there were 27 mothers (93%) and 2 fathers (7%), with an average age of 39 years (SD = 4.4; range: 32-50). About half of the parents (52%) had above high school education and about two-thirds (66%) had full-time job.

Syndrome Scales of CBCL and TRF

Table 2 presents the pre-test and post-test scores on the syndrome scales of CBCL and TRF. On all syndrome scales except the somatic complaints scale in the TRF, the post-test scores were lower than pre-test scores. However, the profile of pre-post differences in CBCL scores was different from that of pre-post differences in TRF scores. For the CBCL, significant pre-post differences showed in subscales of internalizing syndromes, anxious/depressed, externalizing syndromes, rule-breaking behaviour, aggressive behaviour, thought problem, and total problem. For the TRF, significant pre-post differences showed in subscales of attention problem and hyperactivity-impulsivity.

Table 1: Demographic Data and IQ of Participants and Drop-outs

	Participants (n = 29)		Drop-outs (n = 8)		z/χ^2
	f (%)	*Mean (SD)*	*f (%)*	*Mean (SD)*	
			ADHD children		
Age (month)		105 (14.3)		103 (12.4)	0.36[a]
Gender					1.24[b]
Boy	25 (86.2)		8 (100.0)		
Girl	4 (13.8)		0 (0.0)		
Comorbidity					
ODD	14 (48.3)		2 (25.0)		1.38[b]
CD	1 (3.4)		1 (12.5)		1.01[b]
WISC-III					
FIQ		103 (10.3)		105 (12.6)	0.07[a]
VIQ		106 (10.2)		106 (10.1)	0.50[a]
PIQ		101 (11.5)		101 (14.1)	0.11[a]
			Parents		
Age (year)		39 (4.4)		38 (3.9)	0.93[a]
Gender					0.58[b]
Father	2 (6.9)		0 (0.0)		
Mother	27 (93.1)		8 (100.0)		
Education					0.29[b]
High school	14 (48.3)		3 (37.5)		
> High school	15 (51.7)		5 (62.5)		
Occupation					1.45[b]
Full-time job	19 (65.5)		7 (87.5)		
Homekeeper	10 (34.5)		1 (12.5)		

[a]z-test was used here. [b]χ^2 test was used here.

Table 2: Pre-test and Post-test Scores on the Syndrome Scales of CBCL and TRF

Syndrome scale	CBCL (n = 29)			TRF (n = 21)		
	Pre-test	Post-test		Pre-test	Post-test	
	M (*SD*)	*M* (*SD*)	*t*	*M* (*SD*)	*M* (*SD*)	*t*
Internalizing syndromes	12.28 (8.11)	9.48 (7.82)	3.15**	11.14 (10.43)	9.71 (9.99)	1.08
Anxious/depressed	6.76 (4.69)	5.17 (4.34)	3.00**	7.43 (6.72)	6.76 (6.48)	0.68
Withdrawn/depressed	2.14 (1.83)	1.76 (1.94)	1.23	2.95 (2.46)	2.05 (2.06)	1.91
Somatic complaints	3.38 (3.51)	2.55 (3.32)	1.71	0.76 (2.43)	0.90 (2.66)	-0.72
Externalizing syndromes	20.90 (8.71)	17.66 (10.08)	2.35*	17.52 (13.76)	15.14 (9.67)	1.05
Rule-breaking behaviour	6.59 (3.20)	5.38 (3.50)	2.27*	3.86 (3.79)	3.43 (2.69)	0.69
Aggressive behaviour	14.31 (5.91)	12.28 (6.96)	2.12*	13.67 (10.31)	11.71 (7.46)	1.09
Social problem	7.45 (3.07)	6.59 (4.26)	1.21	4.71 (3.61)	4.52 (3.09)	0.35
Thought problem	5.72 (3.63)	3.34 (2.97)	4.30**	2.14 (3.89)	1.29 (2.51)	1.40
Attention problem	11.14 (3.43)	10.00 (3.67)	1.57	21.90 (9.29)	17.95 (8.70)	2.33*
Inattention	-	-	-	11.57 (5.61)	9.52 (5.21)	1.96
Hyperactivity-impulsivity	-	-	-	10.33 (4.68)	8.43 (4.04)	2.16*
Total problem	64.72 (23.17)	52.52 (27.14)	3.04**	59.10 (36.78)	49.95 (29.87)	1.78

*p < .05. **p < .01.

The DSM-oriented Scales of CBCL and TRF

Table 3 presents the pre-test and post-test scores on the DSM-oriented scales of CBCL and TRF. On all DSM-oriented scales except the somatic problem scale in the TRF, the post-test scores were lower than pre-test scores. The profile of pre-post differences was similar for both the CBCL and TRF—that is, post-test scores on the ADHD problem subscale were significantly lower than pre-test scores for both the CBCL and the TRF. For both the inattention and hyperactivity-impulsivity subscales in the TRF, the post-test scores were significantly lower than pre-test scores. In addition, for the affective problem scale in the CBCL, the post-test scores were also significantly lower than pre-test scores.

Table 3: Pre-test and Post-test Scores on the DSM-Oriented Scales of the CBCL and TRF

DSM-oriented scale	CBCL (n = 29)			TRF (n = 21)		
	Pre-test	Post-test		Pre-test	Post-test	
	M (*SD*)	*M* (*SD*)	*t*	*M* (*SD*)	*M* (*SD*)	*t*
Affective problem	5.45 (3.29)	4.17 (3.40)	3.35**	2.81 (3.01)	1.95 (2.27)	1.56
Anxiety problem	3.07 (2.31)	2.48 (2.05)	1.79	2.62 (2.69)	2.19 (2.27)	1.18
Somatic problem	1.62 (2.18)	1.45 (2.32)	0.45	0.52 (1.78)	0.71 (2.05)	-1.16
ADHD Problem	10.14 (2.23)	8.59 (2.57)	2.95**	14.29 (5.16)	11.71 (5.02)	2.62*
Inattention	-	-	-	6.14 (1.71)	5.10 (2.17)	2.75*
Hyperactivity-impulsivity	-	-	-	8.14 (3.80)	6.62 (3.28)	2.09*
Oppositional Defiant problem	5.52 (2.32)	5.00 (2.59)	1.25	4.71 (2.95)	4.05 (2.13)	1.28
Conduct problem	7.83 (4.18)	6.90 (4.91)	1.38	5.76 (5.16)	5.00 (4.05)	0.92

*p < .05. **p < .01.

Discussion

Consistent with previous findings (Purdie, Hattie, & Carroll, 2002), the results of this study support the positive effect of a CBGT program for ADHD children. The results of this study are also consistent with the predictions from both models of ADHD by Barkley (1997a) and Rapport et al. (2001) that a CBT group can improve core and peripheral symptoms of ADHD. Many components in this CBGT program may have contributed to its efficacy. First, the five steps of problem-solving training that teaches ADHD children how to apply problem-solving and social skills to interpersonal problems help reduce their core symptoms. Second, teaching ADHD children how to manage anger and modify negative thoughts about themselves further ameliorates their peripheral symptoms. Third, the daily practice of autogenic relaxation with parental participation and monitoring at home was especially effective in reducing the anxiety level of the ADHD children. Fourth, there were many opportunities for children to practice their acquired CBT techniques during play time. Finally, parents, as co-therapists, helped prompt, assist, and monitor their children in using CBT techniques in daily life. Overall, the participants were eager to learn in the group and their attendances were good; in case of absence, individual make-up sessions were provided before the next group meeting.

This study also provides some interesting findings. For example, it is noted that the patterns of pre-post differences were not as consistent for syndrome scales of the CBCL and TRF as for DSM-oriented scales. This might imply that the DSM-oriented scales of the CBCL and TRF, derived from experts from 16 cultures (Achenbach & Rescorla, 2001), are better tools for evaluating treatment outcomes of CBT on ADHD children than the syndrome scales of the CBCL and TRF, developed from an empirically-based paradigm and bottom-up approach (Achenbach & Rescorla, 2001; Ferdinand, et al. 2004).

Nevertheless, the findings of this study should be interpreted with caution, given certain limitations in its research design. Due to ethical considerations and difficulty recruiting participants, a control group was not included here. It is an ethical concern to have parents of a control group repeatedly evaluate their children's symptomatic and disruptive home behaviours without providing needed services. Of course, one should not ignore the possibility of developmental change over time when evaluating the treatment outcome. However, this issue might not be so critical here because of the short-term nature of this CBGT program. There is no apparent reason to predict that significant developmental changes should occur within such a short period of time given no obvious intervention, especially when all the target children were still within the same developmental stage. Even if any developmental change did occur, it should be negligible. This point is supported by the fact that most developmental measures are designed to assess developmental change over a period of at least six months. In addition, some research evidence has shown the CBCL to have substantial stability over a 4-year period (Biederman et al., 2001)

There are many interesting issues worthy of exploration in future studies. First of all, it is not clear how this CBGT program affected the participating parents, who served as both participants and co-therapists in this training. In future research, the outcome measures should include not only parental ratings of ADHD children's behaviours but also self-report of parenting behaviours/styles so that the behavioural changes of both ADHD children and their parents can be evaluated. Secondly, it is not clear how some concepts from indigenous Chinese psychology can be applied to our understanding of and intervention for Taiwanese ADHD children. Huang and Huang (2002) have pointed out that the emphasis on hierarchical parent-child transactions and the parental duty to socialise their children in Chinese culture might serve important functions in social development of Chinese children. Chao et al. (in press) have suggested that the concept of "*ren*" (forbearance) from indigenous Chinese psychology is similar to the concept of "behavioural inhibition" in Barkley's model (1997a). Through the socialisation process, it is believed that the psychological mechanism of "*ren*" gradually develops and becomes functional. Future studies that compare parental perceptions of parent-child transactions and child-rearing practice before and after CBT programs for Taiwanese ADHD children and their parents might help us further understand the implications of these indigenous concepts to Taiwanese parenting of ADHD children.

Acknowledgements

This research was supported by the National Science Council (NSC94-2413-H037-011). The authors are grateful to Hanvey Hsiung for his assistance in editing this manuscript. Deepest gratitude goes to all the children and their parents who made this project possible by sharing their experiences with us.

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CHAPTER 24:
A Study of School-Wide Social Skills Trainingfor Elementary School Children

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Abstract: The present study examined the effects of school-wide social skills training (SST) on children's social skills and psychological stress responses. Five hundred all grade children answered the Self-rating Scale of Social Skills for Elementary School Children (Shimada, 1998), and the Stress Response Scale for Elementary School Children (Shimada, 1998). Shimada's Skills scale consisted of 15 items, 3 subscales: "Pro-Social Behaviour", "Withdrawal Behaviour", and "Aggressive Behaviour". The Stress Response scale consisted of 20 items, 4 sub scales: "Physical States", "Depressive-Anxious Feeling", "Irritated-Angry Feeling" and "Helplessness". Children participated in a 45-minute session of SST once. The training program was designed to increase children's greeting behaviour. As a result of training, in the first graders, there were significant improvements on "Pro-Social Behaviour" from pre test to post and on stress responses from pre test to post. In the second graders, there were significant improvements on "Pro-Social Behaviour" from pre test to post and on stress responses from pre test to post. These results suggested that school-wide SST was effective, in the first and second graders, to enhance "Pro-Social Behaviour" and to buffer some psychological stress responses.

Keyword: school-wide social skills training, elementary school, psychological stress responses

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Introduction

In recent years, the number of children with trouble with their friends and delays in social development is increasing (Sato, Tatsumoto, 1999). In Japan, cross-age play in a group has not been seen since mid-1970's, and the number of playmates in a group was reduced to half till 1990. With the spread of video games in 1990's, the style of play has changed from playing to enjoy emotional exchanges in a group to playing to exchange information of the games among a small number of friends. The decreased number in a play group and changes in the style of play resulted in a sharp decline in opportunities for learning adequate social skills and exercising acquired skills (Kobayashi, 2005). With the deteriorated social skills, the relationships with friends became a stressor, and children showing various stress responses are increasing (Shimada, 1998).

In the schools of our country, social skills training (SST) in a group has been implemented in a class to prevent children's maladjusted behaviour and stress (Fujieda, Kobayashi, 2001). SST is a psychosocial training program aimed at improving and enhancing psychological health and social adaptation by resolving problems in relationships and developing good relationships. Shimada et al. (1996) reported that elementary schoolchildren's social skills show a high buffering effect on school stress,

suggesting the possibility of reducing school stress by arming them with adequate social skills. Since group SST is training provided in a class setting, a situation similar to a daily life scene can be set. It is known that such a setting enhances training effects (Sato et al, 2000). In group SST, since all the children in a class learn the common skills, they are more likely to notice behavioural changes in each other, with effects by modeling and feedbacks by each other expected. Feedbacks obtained in a daily life are thought to facilitate generalisation of the skills acquired (King & Kirschenbaum, 1992). On the other hand, training in a class setting alone may not be able to maintain its effects for the following reasons: children are not able to have adequate feedbacks from children and teachers in other grades; and the environment that promotes exercise of the social skills may change due to class changes.

In this study, we aim at providing SST involving not only a class but also the whole school, and examine effects on children's social skills and stress responses. Followings are the merits of SST involving the whole school. (1) Modeling effect by other children: children are able to observe and learn from children in other classes and grades, who are acting out the skills they have learned, besides those in their class. (2) Feedback from teachers: since teachers know which skills children in each grade are learning, teachers other than a class teacher are expected to give considerations and be involved in skill practice by children not only in a class setting but also in daily instructional activities. (3) Reduced resistance to acting out a learned skill: with more opportunities for children in other classes and grades to act with the skill they have learned, the resistance to acting out the learned skill will be reduced. (4) Continuous and progressive guidance can be provided: establishment of guidance plans tailored to children's stage of development allows phased and continuous guidance to the sixth-grade as well as progressive guidance for improving skills.

Method

Participants

All the children of a public elementary school were participated in a 45-minute session of SST once. The numbers of children were five hundred.

Materials

1. The Self-Rating Scale of Social Skills for Elementary School Children (Shimada, 1998). This scale consisted of 15 items. There are three sub scales: "Pro-Social Behaviour", "Withdrawal Behaviour", and "Aggressive Behaviour". High reliability and validity are confirmed by Shimada (1998).
2. The Stress Response Scale for Elementary School Children (Shimada, 1998). This scale consisted of 20 items. There are four sub scales, and they were named "Physical States", "Depressive-Anxious Feeling", "Irritated-Angry Feeling", and "Helplessness". High reliability and validity are confirmed by Shimada (1998).

These questionnaires were executed before and after the SST program. The post test was executed one week after from the SST execution day.

Procedure

1) *Selection of target skill*
   The target skill decided with the teachers was the "Greeting Skill".
2) *Outline of SST*

Group SST based on the coaching method (Oden & Asher, 1977) was executed once by using the class time of 45 minutes. The coaching method consists of the following six elements. Explanation of importance of use of appropriate social skills; presentation of the problem scene by the trainer's role play; modeling of appropriate social skills; behavior rehearsal by children; feedback and social reinforcement from trainer and; recommendation of use of the social skill in daily life. One graduate student took charge of the progress of the class, and other graduate students and the home room teacher took charge of presenting the model, and the feedback when children were doing the behaviour rehearsal.

3) *Prior Preparation*

The scenario of a concrete roll play scene was made beforehand. Graduate students actually performed based on the scenario, and the correction was added and it was decided as a final scenario. Moreover, prior training of two and a half hours was done with the teachers at the school. The professor who made the research of social skills a specialty, lectured on the purpose and the procedure of the social skills training in the first half of prior training. In the latter half, the syllabus book was distributed to all teachers, graduate students treated teachers as pupils, and executed the SST program. One graduate student had the program progressed as the main trainer, and two graduate students did the roll play as the sub trainer. The main trainer executed the program while explaining items such as "Verbal Instruction", "Modeling", "Role Play", and "Behavioural Rehearsal". After the program had ended, the questions and answers were done.

4) *Composition of Program*

In the first grader and the second grader, the program was composed aiming at "The point of a good greeting is learnt, and the skill learnt in daily life is used". From the third grader to the sixth grader, the program was composed aiming at "The point of a good greeting is learnt, and good friendship in daily life is maintained"

The content of study and promise (Complaint and it did not speak ill, and it did not laugh and felt shy) of a social skills were confirmed first. Next, it questioned on "Greeting", and the opinions that the children had expressed were written on the blackboard. And, the role play of "Bad example" by the home room teacher and one graduate student was presented as follows, and the opinions of "Where was bad?", "What feelings was the other party?", and "Where how should be done?" were requested from the children. Afterwards, "Good example" was presented by the role play. It was requested that children were divided into the group of three people, and the behaviour rehearsal by the same scene as the role play be done after modeling by the role play. Graduate students and the home room teacher checked whether the behaviour rehearsal was appropriately done, and gave positive feedback and the social reinforcement to the children for whom the skill was appropriately used during the behaviour rehearsal. As the summary of the program, the main trainer encouraged to use the skill in daily life.

Results

Factor Analysis of Scales

The factor analysis of the scale of social skills was done in each grade. From the first grader in the fourth grader, this scale consisted of 14 items. And there are three sub scales which can be named "Pro-Social Behaviour", "Withdrawal Behaviour", and "Aggressive Behaviour". For the fifth grader and the sixth grader, this scale consisted of 14 items. And there are three sub scales which can be named "Pro-Social Behaviour", "Withdrawal Behaviour", and "Aggressive Behaviour". The factor analysis of the scale of stress response was done in each grade. For the first grader and the second grader, this scale

consisted of 19 items. And there are four sub scales which can be named "Physical States", "Depressive-Anxious Feeling", "Irritated-Angry Feeling", and "Helplessness". For the third grader and the fourth grader, this scale consisted of 16 items. And there are four sub scales which can be named "Physical States", "Depressive-Anxious Feeling", "Irritated-Angry Feeling", and "Helplessness". For the fifth grader and the sixth grader, this scale consisted of 20 items. And there are four sub scales which can be named "Physical States", "Depressive-Anxious Feeling", "Irritated-Angry Feeling", and "Helplessness".

Analysis Objects

The children who failed in filling in the questionnaires, or were absent from the classes were excluded from the analysis objects. The numbers of valid response people are shown at each the following analysis because the numbers of each standard of valid response people were different.

Table 1 and Table 2 show the score of social skills and the score of psychological stress responses before and after the SST program. One factor analysis of variance of which the factor was the measurement time was used for the analysis of data.

1) The Change of the Score in the 1st Grader and the 2nd Grader

In the first grader, significant differences were admitted in the score of social skills before and after the program (N=55). "Pro-Social Behaviour" rose (F [1, 54] = 7.19 p < .01) and "Withdrawal Behaviour" decreased (F [1, 54] = 4.38 p < .05). Moreover, significant differences were admitted in the score of psychological stress responses before and after the program (N=48). "Irritated-Angry Feeling" (F [1, 47] = 4.73 p <.05) and "Physical States" decreased (F [1, 47] = 6.73 p < .05). Total score of psychological stress responses were decreased (F [1, 47] = 4.54 p < .05).

In the second grader, significant differences were admitted in the score of social skills before and after the program (N=75). "Pro-Social Behaviour" rose (F [1, 74] = 5.92 p < .05). Total score of social skills rose (F [1, 74] = 6.59 p < .05). Moreover, significant differences were admitted in the score of psychological stress responses before and after the program (N=67). "Depression-Anxiety Feeling" decreased (F [1, 66] = 3.24 p < .10) and the "Irritated-Angry Feeling" (F [1, 66] = 3.01 p < .10). Total score of psychological stress responses decreased (F [1, 66] = 3.30 p < .10).

Table1 Changes in Social Skills before and after SST Program

	Pro-Social Behavior (a)			Aggressive Behavior (b)			Social Withdrawal Behavior (c)			Total Score (d)		
	Pre-test	Post-test	*p*	Pre-test	Post-test	*p*	Pre-test	Post-test	*p*	Pre-test	Post-test	*p*
1st Grade n=55	19.89 (5.36)	22.16 (5.46)	**	5.67 (1.97)	5.67 (2.39)		4.82 (1.84)	5.55 (2.30)	*	44.40 (5.72)	45.95 (6.78)	
2nd Grade n=75	21.24 (5.18)	22.72 (4.98)	*	5.55 (2.32)	5.25 (2.33)		4.85 (2.49)	4.77 (2.47)		45.84 (6.62)	47.69 (6.69)	*
3rd Grade n=65	20.66 (4.97)	21.57 (4.79)		5.80 (1.88)	5.42 (2.02)	†	5.28 (2.48)	4.79 (2.29)	*	44.59 (6.60)	46.37 (6.20)	**
4th Grade n=52	21.46 (4.25)	23.46 (4.76)	**	6.92 (2.84)	6.60 (2.60)		5.79 (2.80)	5.69 (2.62)		43.75 (6.82)	46.17 (6.88)	**
5th Grade n=73	20.38 (3.70)	20.55 (4.83)		7.15 (2.41)	6.49 (2.68)	*	6.33 (2.75)	6.01 (2.61)		46.90 (5.74)	48.04 (7.39)	
6th Grade n=73	21.45 (3.18)	21.78 (3.87)		6.73 (2.45)	6.80 (2.38)		6.89 (3.14)	6.62 (3.00)		47.84 (6.02)	48.37 (6.95)	

( )*SD* † $p < .10$, * $p < .05$, ** $p < .01$

(a) 1st and 2nd Grade= 7 items, 3rd and 4th Grade= 7 items, 5th and 6th Grade= 7 item
(b) 1st and 2nd Grade= 4 items, 3rd and 4th Grade= 4 items, 5th and 6th Grade= 4 item
(c) 1st and 2nd Grade= 3 items, 3rd and 4th Grade= 3 items, 5th and 6th Grade= 4 item
(d) 1st and 2nd Grade= 14 items, 3rd and 4th Grade= 14 items, 5th and 6th Grade= 15 iter

Table2 Changes in Psychological Stress Responses before and after SST Program

	Depressive-Anxious Feeling (a)			Helplessness (b)			Irritated-Angry Feeling (c)			Physical States (d)			Total Score (e)		
	Pre-test	Post-test	*p*	Pre-test	Post-test	*p*	Pre-test	Post-test	*p*	Pre-test	Post-test	*p*	Pre-test	Post-test	*p*
1st Grade n=48	11.21 (3.61)	10.54 (3.81)		9.33 (3.38)	9.19 (2.66)		7.77 (3.47)	6.75 (2.59)	*	6.90 (2.74)	5.84 (2.43)	*	34.42 (9.44)	32.33 (8.70)	*
2nd Grade n=67	9.76 (4.85)	8.97 (4.53)	†	9.93 (4.43)	9.15 (4.73)		7.10 (3.40)	6.52 (3.37)	†	5.66 (2.61)	5.66 (3.09)		32.45 (13.45)	30.30 (14.38)	†
3rd Grade n=55	8.93 (3.25)	8.31 (3.99)		8.89 (3.45)	7.66 (3.51)	**	7.27 (3.23)	6.67 (3.17)	†	3.40 (1.44)	3.62 (1.93)		28.49 (8.65)	26.26 (11.00)	*
4th Grade n=53	9.15 (4.38)	8.26 (3.84)	*	8.36 (3.25)	8.19 (3.57)		8.17 (4.09)	7.51 (3.87)	*	4.02 (1.79)	3.83 (2.08)		29.70 (11.07)	27.79 (11.31)	†
5th Grade n=69	7.83 (3.01)	7.36 (3.08)		9.81 (3.84)	9.19 (4.33)	*	10.14 (3.90)	9.61 (4.50)		10.38 (3.50)	9.49 (3.96)	*	38.16 (11.19)	35.65 (13.44)	†
6th Grade n=71	8.73 (3.86)	8.94 (4.20)		10.04 (3.97)	10.34 (4.14)		11.03 (4.21)	11.28 (4.70)		11.21 (3.87)	11.49 (4.52)		41.01 (13.27)	42.06 (15.34)	

( )*SD*　† p <.10,　* p <.05,　** p <.01

(a) 1st & 2nd Grade= 6 items, 3rd & 4th Grade= 5 items, 5th & 6th Grade= 5 items / (b) 1st & 2nd Grade= 6 items, 3rd & 4th Grade= 5 items, 5th & 6th Grade= 5 i
(c) 1st & 2nd Grade= 4 items, 3rd & 4th Grade= 4 items, 5th & 6th Grade= 5 items / (d) 1st & 2nd Grade= 3 items, 3rd & 4th Grade= 2 items, 5th & 6th Grade= 5 i
(e) 1st & 2nd Grade= 19 items, 3rd & 4th Grade= 16 items, 5th & 6th Grade= 20 items

2) The change of the score in the 3rd Grader and the 4th Grader

In the third grader, significant differences were admitted in the score of social skills before and after the program (*N*=65). "Aggressive Behaviour" (F [1, 64] = 7.19 p < .01) and "Withdrawal Behaviour" decreased (F [1, 64] = 4.94 p < .05). Total score of social skills rose (F [1, 64] = 9.87 p < .01). Moreover, significant differences were admitted in the score of psychological stress responses before and after the program (N=55). "Irritated-Angry Feeling" (F [1, 54] = 3.53 p < .10) and "Helplessness" decreased (F [1, 54] = 9.50 p < .01). Total score of psychological stress responses were decreased (F [1, 54] = 5.43 p < .05).

In the fourth grader, significant differences were admitted in the score of social skills before and after the program (N=52). "Pro-Social Behaviour" rose (F [1, 51] = 10.61 p < .01). Total score of social skills rose (F [1, 51] = 13.30 p < .01). Moreover, significant differences were admitted in the score of psychological stress responses before and after the program (*N*=53). "Depression-Anxiety Feeling" decreased (F [1, 52] = 6.58 p < .05) and the "Irritated-Angry Feeling" (F [1, 52] = 4.17 p < .05). Total score of psychological stress responses decreased (F [1, 52] = 3.68 p < .10).

3) The change of the score in the 5th Grader and the 6th Grader

In the fifth grader, significant differences were admitted in the score of social skills before and after the program (*N*=73). "Aggressive Behaviour" decreased (F [1, 72] = 6.56 p < .05). Total score of social skills rose (F [1, 72] = 3.60 p < .10). Moreover, significant differences were admitted in the score of psychological stress responses before and after the program (*N*=69). "Helplessness" (F [1, 68] = 4.51 p < .05) and "Physical States" decreased (F [1, 68] = 5.76 p < .05). Total score of psychological stress responses were decreased (F [1, 68] = 6.60 p < .05).

In the sixth grader, significant differences were not admitted in the social skill scores and the psychological stress response scores before and after the program.

Discussion

The purpose of this study was to examine the effects of school-wide SST on children's social skills and psychological stress responses. Some social skills have improved except for the sixth grader after the SST program. It is thought that it was appropriate to select "Greeting Skill" this time. The improved skills were different according to the grades. The improvement of "Pro-Social Behaviour" and "Withdrawal Behaviour" in the first grader, the improvement in the second grader of "Pro-Social Behaviour", "Withdrawal Behaviour" and "Aggressive Behaviour" were improved in the third grader, "Pro-Social Behaviour" was improved in the fourth grader and "Aggressive Behaviour" was improved in the fifth grader. Though there is no consistency between grades, these results will be able to suggest that the learning of "Greeting Skill" is effective to improve their social skills.

Additionally, except for the sixth grader, some stress responses have decreased. Because of having learned the skill, the chance to use the skill has increased and positive reactions came to return from the other party. It is thought that the stress responses have decreased by the interpersonal relationship having been improved. It is known that the stressor concerning friendship strongly influences the expression of the stress response (Shimada, 1998). These results suggest that learning the skill is effective to decrease stress responses. In the sixth grader, it seems that the stress responses have not decrease because the factor that relates to the stress responses becomes complex as the age go up. It is necessary to examine factors other than social skills.

Some effects for the improvements of the social skills and decrease stress responses were shown by training of "Greeting Skill" only once. However, it cannot be declared that the change in the social skills and the stress responses were the effects of this program because in this research, external variables such as the stressor which influences the use of the social skill and the expression of the stress response was not treated. In addition, more basic problems such as maturation effects, testing effects have been not considered. Simply taking the pre test may have alerted the children to such behaviour. In this study, the comparative control group was not set. It is very difficult to set the comparative group when it intervenes with all children in the school. In such educational circumstances of Japan, it can be mentioned that it is very profitable for children and teachers that the effects were admitted by intervention once.

Finally, in this research, though the graduate student executed the program, the home room teacher also joined the program in the future so that the home room teacher may execute the social skills training. So that the social skill training is widely done in the future, it will be necessary to develop the social skills training program that the home room teacher is able to execute, and to construct an effective prior training program for the home room teacher.

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CHAPTER 25:
Effects of the Cognitive and Behavioural Approach on the Prevention of Depression in Children in the 5th Grade.

Shunsuke Koseki, Kouji Minosaki and Kazuyoshi Sasaki

Abstract: The purpose of this study was to decrease levels of depression in children by administering Cognitive Psychological Education (CPE) based on Ellis' ABC theory. Thirty-nine 5th grade children participated into the CPE group, including two 45-minutes sessions at the interval of one week. Seventy-nine 5th grade children who studied in the same school served as the control group and were compared with the CPE group. The depended variables were depression score, automatic thought score, and schema score. Compared to the control group, depression scores at follow-up were significantly lower (significant level was .05), while automatic thought and schema turned scores were significantly more functional in the CPE group after controlling for baseline scores. Therefore, this suggests that the CPE decreased depression, and the effect was brought about by the functional change of automatic thought and schema. It is proposed that the CPE reduces depression in children.

Key words: children, depression, cognitive psychological education, ABC theory

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Introduction

Recently, a lot of studies have reported that the number of children who tend to be depressed is increasing. Sato & Arai (2004) researched with the DSRS（Depression Self-Rating Scale for children; Murata, et al., 1996), the number of depressive children among the 4th, 5th and 6th grade of the capital and four prefectures in Japan. As a result, 11.6% of 3,324 children (10.0% of the boys and 13.5% of the girls) exceeded the cut-off score. Similarly, it was reported that the children exceeding the cut-off score of DSRS were 7.8% of 3,331 children from the 1st grade through the 9th grade, and the percentages increased as they get older (Denta, 2005).

In overseas epidemiologic studies, Charman (1994) reported that 6.9~7.8% out of 268 students exceeded the cut-off score of depression in Britain. Furthermore, Ivarsson & Gillberg (1997) reported that 7.1% of 524 adolescents exceeded the cut-off score of depression in Sweden. These studies on children's depression have been greatly increasing as the DSM-III of 1980 made clear that the diagnosis standard of children's depression was similar to that of adults.

When a child goes into depression, it may often cause not only emotional troubles such as sorrow or unhappiness, but also changes in behaviour such as worse grades or staying indoors (Murata, 1993). Moreover, Denta (2002) reported that the initial symptoms of depression are: no pleasure, loss of concentration or sleeplessness; and the terminal

symptoms of depression are: brain freeze, restraint of action, suicidal ideation/suicidal thought/thought of suicide, or feeling of despair. Therefore, it is necessary that children get interventions to decrease the depressive state or to prevent it.

Up to now, only cognitive behavioural therapy has been proven as an effective psychotherapy reducing children's depression (Task Force on Promotion and Dissemination of Psychological Procedures, 1995). One of the programs which prevent children from depression state is called the FRIENDS program (Barrett & Shortt, 2003；Barrett, et al., 2000) and it is divided into 10 sessions. And it has achieved the effect of prevention of depression and phobia by means of the Social Skills Training (SST) for Problem Solving Training, which increases functional automatic thought by the Cognitive restructuring procedures and using the Self-Monitoring to learn the Positive Self-Talk, exposure, relaxation and so on.

Though it is obvious that cognitive behavioural therapy works well for children's depressive state, there are no studies in Japan, which administer the program for prevention of children's depression and verify the effectiveness of the cognitive behavioural therapy. Moreover, overseas cognitive-behaviour prevention programs, such as FRIENDS, are comprehensive, however the problem is that they haven't investigated how each process influences the prevention of depression.

On the other hand, the basic researches have also advanced in Japan, and some models concerning the occurrence of children's depression have been reported. For example, Sato & Shimada (2004) proved in accordance with Beck's model of depression that the schema activated by stressors influenced symptoms of children's depression. In addition, Sato, Ishikawa & Arai (2004) reported that the strength of depression was influenced by negative interpretations of the scene, such as "I quarreled with my friend", which is the same result in adults.

Considering the circumstances mentioned above, the purpose of this study was to focus on cognitive aspect of the program as a part of inclusive programs improving children's depression state, and to examine if the intervention driving children's negative cognition to change really decreases depression score.

The Wilde's practice program (1996) which made up a cognitive behavioural approach has the similar points of view. This program offered the psychological education based on Ellis's ABC theory for each class of the 4th grade children. In this study, participants received some sentences that might induce non-functional thought and they were asked to determine if their thought were functional or non functional by raising their hand. They then learned how to identify these sentences ase non-functional thought and practiced how to change a non-functional thought to functional. As a result, these procedures changed non-functional thought for the better.

However, it was possible that participants couldn't image the scenes exactly in Wilde's procedures (1996) because the scenes were presented as sentences. Moreover, it was not obvious whether all of the participants, including those who were not raising their hand, could understand the content because the answers to the automatic thoughts were required by raising their hand. Therefore, the scenes in which non-functional thought might happen easily were presented by role play in this research. In addition, work sheets in which pictures were drawn to learn distinction of feelings and thoughts were used to better understand their feelings and thoughts by them-selves. As a cognitive psychological education (CPE), the content was based on Ellis's ABC theory to have children learn that there were the thoughts between events and feelings. This CPE is expected to promote more functional, direct automatic thoughts, as based on Beck's model, which results in subsiding depression and in changing non-functional schema.

Therefore, the objective of this study was to examine if this kind of CPE enables to change thought when an unpleasant feeling occurs, to control occurrence of negative feeling and to induce depressive reaction to decrease. In addition, whether it promotes transformations of automatic thoughts and schema was also examined.

Method

Participants

A class of 39 children in the 5th grade (20 boys and 19 girls) were assigned to CPE group and had 2 CPE sessions of 45 minutes each. 79 children in 2 other classes in the 5th grade (43 boys and 36 girls) of the same school were assigned to control group to be compared with the CPE group.

Intervention time

These sessions were executed in the 3rd and the 4th weeks of February, 2005. Children were asked to fill in questionnaires in the 2nd week of February (before the session 1, as a pre-test), the 1st week of March (after the session 2, as a post-test) and the 5th week of May, 2005 (after 15 weeks, as a follow-up test). Note that the reorganisation of class members for the new school year was carried out in April, 2005, which means that the members of the classes at the follow-up period were different from the session 1 and 2.

Materials

1) DSRS (Murata et al., 1996) 18 items: Higher score on DSRS indicate higher depression tendency. High reliability and validity are confirmed by Murata et al. (1996), and suggests. a possible diagnosis of depression if the score exceeds 16 points (i.e., the cut-off point).
2) Automatic Thought Inventory for Children (ATIC: Sato & Shimada, 2005): consists of 16 items with 4 subscales: Negative View of Self and Hopeless Thought - as negative automatic thoughts factors; Expectancy for Future and Expectancy for Support - as positive automatic thought factors. High reliability and validity are confirmed by Sato & Shimada (2005).
3) Dysfunctional Attitudes Inventory for Children (DAIC: Sato & Shimada, 2005): 13 items, shows that the higher the score of DAIC is, the higher the nonfunctional schema tendency is. High reliability and validity are confirmed by Sato & Shimada (2005).

All questionnaires (above) were administered collectively during class. Also, comprehension tests were given to the CPE group, to check their understanding level concerning the content of the CPE class. The contents were I: Existence of automatic thought (“Do you understand that there are thoughts between events and feelings?”), II: Occurrence of feelings (“Do you understand that feelings were occurred from thoughts?”), III: How thoughts influence on feelings (“Do you understand that the feelings may also change if the thoughts change?”), IV: Looking back on thoughts (“Can you look back on your thoughts when you feel bad?”).

Moreover, the comprehension tests which were mentioned above and another question; V: Maintenance of understanding (“Some of you took part in the class of Mechanism of Feelings during the 3rd term of last school year. Did you take part in?”); were given to both groups at the follow-up period (the 5th week of and May, 2005).

Procedures

The CPE group had two CPE sessions. Each session took 45 minutes. One well-trained graduate student taught the CPE concerning the ABC theory as a main trainer (MT), and the other three graduate students took part in the class as sub-trainers (ST) to assist. The control group had two normal classes by their homeroom teachers. Before CPE sessions, we explained the content of the classes to teachers. And the content of the classes and the purpose of the research were told to the participants' parents with a notice handed out by the school.

The purpose of the 1st session was to understand: "The feelings come from the events through the thoughts". To put it concretely, a ST outlined an event, "My eraser disappeared!" and played "Who stole my eraser!?" with an expression of anger. Each of participants considered the automatic thoughts by writing on their work sheet (Appendix1), and noticed that the event "My eraser was disappear!" didn't cause the feeling "anger" directly, but this feeling came from the thought "There is no doubt someone stole my eraser".

The purpose of the 2nd session was to understand "Even if the event is the same, the feeling may change if the thought changes". Concretely speaking, the ST outlined the same event as session 1 and played "Where did I drop my eraser? I'm at a loss." with an expression of sadness (Appendix2). The MT derived a series of procedures in which the feeling of sadness arose from the thought "I dropped my eraser somewhere" when the event "My eraser disappeared!" happened. Afterwards, comparing the 1st session, a child raised his hand and said "Even if the events were the same, the feelings were different because the thoughts between the events and the feelings were different".

During the 1st session, the trainers also role-played to demonstrate to the children that the feeling of gladness came from the thought "I have a kind friend who helps me" when an event "My friend helps me with carrying the heavy package" happened. During the 2nd session, they showed them that the feeling of great sadness arose from the thought "My friend should dislike me." when an event "My friend who promised me to go home together hasn't come", but the negative feeling stemmed from the thought "My friend might forget our promise."

When children were filling out the worksheets, ST checked answers individually, and gave an advice "What did he say in the play?" to children wondering what to fill in so that they could write the "thought". Afterwards, several participants raised their hand and answered what kind of thoughts connected to what kind of feelings. As a summary of these sessions, the MT explained "When you feel bad in your daily life, it is good to seek other thoughts. If you find other thoughts, you may feel better". The brief overview of the investigation and investigation time are shown in Fig.1. The contents of the sessions are available in Appendix 1 and 2.

Results

Analysis objects

The children who failed in filling in some parts of the questionnaires and who were absent from the classes were excluded from the analysis objects. The numbers of valid response are shown at each analysis because the numbers of each standard of valid response were various.

I) The change of the score of depression

The children of the CPE group (N=33), and the control group (N=70) were analysed to examine the effects of the CPE classes in reducing depression. An ANCOVA, controlling for the effects of baseline values was employed to compare differences in mean scores and standard deviations of DSRS for the two groups (see Table1).

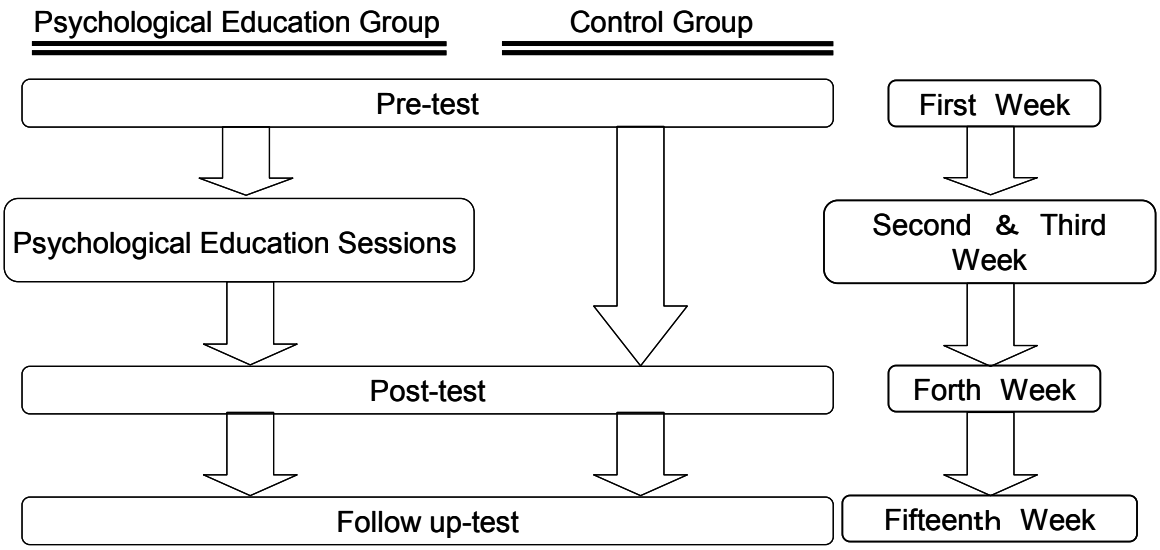

Fig.1 The Flow Chart of the Tests and Sessions

As a result, the main effect of the CPE group was not significant at the post-test, but the DSRS score of the CPE group was significantly lower than that of the control group (F[1,100]=111.42, p<.05)at the follow-up test. Also, the main effects of the covariance values were significant at both post-test (F[1,100]=136.97, p<.001)and the follow-up test (F[1,100]=45.07, p<.001). Therefore, the score of DSRS of the CPE group was significantly decreased at the follow-up test.

Table 1 Group Differences in Mean Scores and Standard Deviaions for Each Measure(ANCOVA, controlling for the effects of baseline values)

	Pre-test		Post-test		Follow-up test		Post-test	Follow-up test
	CPE Group	Control Group	CPE Group	Control Group	CPE Group	Control Group	*F*	*F*
Depression Score（DSRS）	11.00	9.37	9.58	9.00	8.39	9.66	.87 n.s.	4.86 *
	(5.29)	(5.18)	(4.21)	(5.92)	(5.36)	(5.83)		
Automatic Thought Score（ATIC）								
Negative View of Self	3.41	2.00	2.91	2.31	3.09	3.42	.00 n.s.	4.67 *
	(1.92)	(1.76)	(2.10)	(2.20)	(1.63)	(1.42)		
Hopeless Thought	1.56	1.13	1.81	1.17	1.78	3.11	2.48 n.s.	16.67 ***
	(1.66)	(1.24)	(1.55)	(1.40)	(1.65)	(2.21)		
Expectancy for Future	4.81	5.43	5.03	5.22	6.31	6.53	.42 n.s.	.12 n.s.
	(2.10)	(2.06)	(2.05)	(2.20)	(1.59)	(1.81)		
Expectancy for Support	5.56	6.54	6.03	6.58	7.13	6.82	.00 n.s.	4.13 *
	(1.80)	(1.52)	(1.83)	(1.57)	(1.08)	(1.48)		
Schema Score（DAIC）	21.03	20.00	19.09	19.06	17.94	19.97	1.03 n.s.	7.83 **
	(4.00)	(5.56)	(6.28)	(5.65)	(4.72)	(5.99)		

（　　）＝*SD*.　　*p<.05 **p<.01 ***p<.001

II) The change of the score of automatic thoughts

The children of the CPE group (N=32), and the control group (N=72) were analysed to examine the effects of the CPE classes on changing automatic thoughts. An ANCOVA, controlling for the effects of baseline values, was employed to compare differences in mean scores and standard deviations for each ATIC's sub-scale between two groups (see Table1).

As the result of the analysis of "Negative View of Self" which is one of the negative automatic thoughts' sub scales, the main effect of the CPE group was not significant at the post-test, but the Negative View of Self score of the CPE group was significantly lower than that of the control group（F[1,101]=4.67, p<.05) at the follow-up test. Also, the main effects of the covariance values were significant at the post-test（F[1,101]=13.94, p<.001), and the follow-up test（F[1,101]=11.82, p<.001). Thus, the scores of Negative View of Self were significantly more functional in the CPE group.

As the result of the analysis of "Hopeless Thought" which is one of the negative automatic thoughts' sub scales, the main effect of the CPE group was not significant at the post-test, but the Hopeless Thought score of the CPE group was significantly lower than that of the control group（F[1,101]=16.67, p<.001) at the follow-up test. Also, the main effects of the covariance values were significant at the post-test（F[1,101]=21.93, p<.001), and the follow-up test（F[1,101]=26.69, p<.001). Therefore, the scores of Hopeless Thought were significantly more functional in the CPE group.

As the result of the analysis of "Expectancy for Future" which is one of the positive automatic thoughts' sub scales, the main effects of the CPE group were not significant at the post-test and the follow-up test. Also, the main effects of the covariance values were significant at the post-test（F[1,101]=207.37, p<.001), but they were not significant at the follow-up test. Therefore, the significant differences of the Expectancy for Future between the CPE group and the control group were not shown.

As the result of the analysis of "Expectancy for Support" which is one of the positive automatic thoughts' sub scales, the main effects of the CPE group were not significant at the post-test, but the Expectancy for Support score of the CPE group was significantly higher than that of the control group（F[1,101]=4.13, p<.05) at the follow-up test. Also, the main effects of the covariance values were significant at the post-test（F[1,101]=40.88, p<.001), and at the follow-up test（F[1,101]=13.04, p<.001). Therefore, the scores of Expectancy for Support were significantly more functional in the CPE group.

III) The change of the score of schema

The children in the CPE group (N=33) and the children in the control group (N=69) were analysed to examine the effects of the CPE classes concerning change of the schema. The ANCOVA, controlling for the effects of baseline values were executed to compare differences in mean scores and standard deviations for DAIC between two groups (see Table1).

As the result, the main effect of the CPE group was not significant at the post-test, but the DAIC score of the CPE group was significantly lower than that of the control group（F[1,99]=7.83, p<.01;Table 1) at the follow-up test. In addition, the main effects of the covariance values were significant at the post-test（F[1,99]=126.10, p<.001) and the follow-up test（F[1,99]=55.45, p<.001). Therefore, the scores of schema were significantly more functional in the CPE group.

IV) The results of the comprehension tests

The results of the comprehension tests which were conducted after each CPE session for the CPE group (N=38) were shown in Table 2. According to the results, 75% of participants evaluated that they could understand the contents of the classes well. Moreover, it seems that most of the participants felt the efficacy to change the thoughts by themselves, because more than 90% of participants answered "I can do it" or "I may do it" to the 4th question which was about "Looking back on thoughts" ("Can you look back on your thoughts when you feel bad?").

Table 2. Results of the Review Checklist Immediately after Classes

Q1 Do you understand there is the thought between the event and the feelings?	
Not understood	1(3%)
Not understood so much	0(0%)
Understood a little	5(13%)
Understood	32(84%)
Q2 Do you understand the feelings were occurred from thought?	
Not understood	1(3%)
Not understood so much	1(3%)
Understood a little	5(13%)
Understood	31(81%)
Q3 Do you understand the feelings will aiso change when the thoughts change?	
Not understood	1(3%)
Not understood so much	0(0%)
Understood a little	5(13%)
Understood	32(84%)
Q4 Can you look back on your thoughts when you feel bad?	
I don't think so.	0(0%)
I don't think too much so.	2(5%)
I think a littleso.	28(74%)
I think so.	8(21%)

In addition, a comprehension test was given with the follow-up test for the CPE group (N=34) and the control group (N=70). The results are shown in Table 3. The results indicated that 80% of participants in the CPE group remembered the contents of the CPE sessions. Therefore, it became clear that most of the participants in the CPE group remembered the contents even three months after the sessions.

Table 3 Results of the Review Checklist at the Time of Follow Up

Q1 Some students took part in the class of Mechanism of Feelings at the 3rd term of last year. Did you take part in?		
	Psycho. Edu.	Control
I took part in that classes.	31(91%)	1(1%)
I didn't take part in that classes.	0(0%)	49(70%)
I don't remember.	3(9%)	20(29%)

Q2 Do you know there is the thought between the event and the feelings?		
	Psycho. Edu.	Control
Yes	28(82%)	10(14%)
Forgot	5(15%)	11(16%)
No	1(3%)	49(70%)

Q3 Do you know the feelings were occurred from thought?		
	Psycho. Edu.	Control
Yes	25(74%)	19(27%)
Forgot	8(23%)	6(9%)
No	1(3%)	45(64%)

Q4 Do you know the feelings will aiso change when the thoughts change?		
	Psycho. Edu.	Control
Yes	25(74%)	10(14%)
Forgot	5(15%)	10(14%)
No	4(11%)	50(72%)

Q5 Can you look back on your thoughts when you feel bad?		
	Psycho. Edu.	Control
Yes	24(71%)	9(12%)
No	6(18%)	11(16%)
I don't know well.	4(11%)	50(72%)

Discussion

The purpose of this study was to prevent children from depression by Cognitive Psychological Education (CPE), based on ABC theory and changing their automatic thoughts to be more functional when they felt bad. Results of the pre-tests indicated that reactions of depression did not immediately show a significant decrease in the CPE group. However, the score of depression was significantly decreased at the follow-up test in the CPE group. It is possible that promoting a change in negative automatic thoughts by giving the CPE sessions worked well to reduce the depression score. The score of the CPE group was almost constant, while the score of the negative automatic thoughts in the control group tended to increase. Therefore, it is suggested that the execution of the CPE sessions promote change in the automatic thoughts of Beck's model and results in controlling negative automatic thoughts that work for the reduction of the depression score.

On the other hand, concerning the positive automatic thoughts, the score of the Expectancy for Support increased at the follow-up test, but the score of the Expectancy for Future stayed the same as the control group. It is suggested that many of the supportive scenes for interpersonal relationships, such as "My friend helped me to carry a pack" or "My friend lent me his eraser when I lost mine" made it possible to treat interpersonal scenes more positively. On the contrary, scores on the Expectancy for Future increased not only in the CPE group, but also in the control group. Thus, it is necessary to discuss how the CPE sessions get involved in the Expectancy for Future, since these results were influenced by the surplus factor of the measurement times.

Moreover, not only the negative automatic thoughts score, but also the schema score were significantly more functional in the CPE group as shown in Table1. Sato, Shimada & Arai (2004) suggested that the schema concerning the depression may be formed at the elementary school age, so it is possible that changing non-functional schema into functional may improve the depression symptoms. Therefore, it is possible that executing the CPE sessions leads to a change in non-functional schema and has the effect preventing the long-term depression.

As can be seen, it was suggested that the CPE sessions, based on ABC theory, for 5th grade children might reduce depression, though there was a time lag in the effect appearing . It was also indicated that the effects of the reduction on depression might be brought about by the functional change of automatic thoughts and schema.

In relation to the reduction effect on the depression score, these were not shown at the post-test, but were shown at the follow-up test executed after three months. It is suggested that time was needed to promote the cognitive restructure, to change the schema more functionally or to reduce the score of depression. Therefore, it is estimated that it took time for the students to apply what they had learnt in their daily lives and to experience the effects of this application.

On the other hand, it cannot be denied that the differences between the CPE group and the control group at the follow-up period were influenced by the surplus factor. Aftertime, it is necessary for the treated contents and coping ways to prove that there is a time lag between the CPE sessions and the effects, by observing the change of depression with the self-monitoring. Also, it is suggested that presenting the scenes by role plays and using work-sheets that help make the participants understand how to separate feelings and thoughts were effective for the 5th grade children, according to Table 2 and Table 3.

However, this research was carried on for only three months and the maintenance of the effects by the CPE sessions were not studied enough. It appears that in the future it is necessary to investigate not only the effects of the short-term reduction of depression, but also the effects of the long-term prevention of the onset of depression, by means of the accumulation of the long-term follow-up data.

Moreover, it is suggested that the CPE sessions, which were conducted via the group intervention of each class, had the effect of reducing depression, but it remains necessary to examine the effectiveness of the intervention as an application to individuals. In particular, more consideration is needed about whether it is possible to apply the CPE sessions to the children meeting the criteria for depression prognosis.

The effectiveness of cognitive behavioural therapy in treating the problem of children's depression is unwavering. On the contrary, the accumulation of the basic studies, like the current investigation, are indispensable for constructing the structures of treatment packages.

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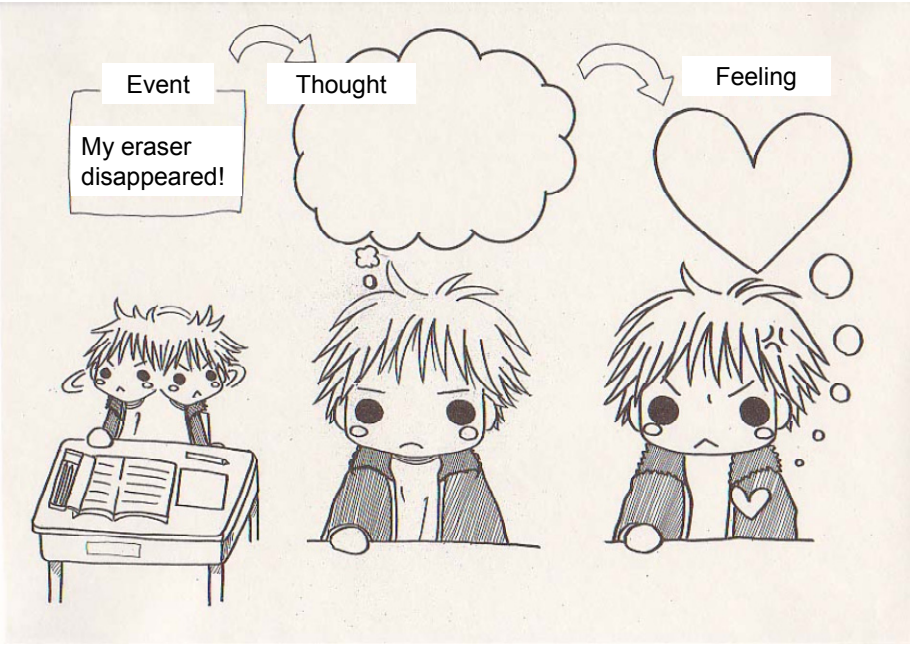
Appendix 1: The Work-sheet of the session1 “My eraser disappeared!” Angry



Appendix2 The Work-sheet of the session2 “My eraser disappeared!” Sad