Culture-related Depression in Taiwanese Women and the Application of The BodyMind Approach<sup>TM</sup>

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## Abstract

This research explores the connection between modernisation and depression in women in Taiwan from two perspectives, those of modernisation and individualisation, and the duality between body and mind. Many researches indicate that in a personally oriented society, individualisation can be connected to depression. However, can this assumption explain the increase of depression in Chinese culture, which is more socially oriented such as it is in Taiwan? In addition, after the abolition of Martial Law in 1987 in Taiwan, personally oriented values have developed rapidly. Can psychological conflict between personal and social orientations relate to depression, and can depression be associated with less resilient individuals regarding this conflict? The duality between body and mind is also hugely accentuated in modernisation. It might generate difficulty in the treatment of depression, because depression normally combines both psychological and physical symptoms such as medically unexplained symptoms (MUS). The BodyMind Approach<sup>™</sup> (TBMA), which is based on the union between body and mind, is an effective treatment for MUS and depression in England but it has not been practised in Taiwan as yet. Is it also effective in Taiwan? Moreover, is it possible that psychological and physical characteristics represent each other? If so, are there any movement characteristics for women with depression and MUS?

Personal construct psychology (PCP) is adopted as the methodology and methods, and the participants are women with depression and MUS in Taiwan. Results from this study suggest that women in Taiwan who have a higher personal orientation are less likely to suffer MUS and depression. High personal orientation might help them to confront social pressures. However, conflict and tight construing are not correlated to depression. Moreover, TBMA is found more effective for decreasing symptom distress in MUS than reducing depression. Furthermore, it was found that there were different movement qualities between women with depression and those without depression, and these movement qualities changed over the course of the TBMA intervention. This research provides contributions regarding the effectiveness of TBMA on depression for women with MUS and an understanding of the connection between modernisation and MUS/depression for women in Taiwan, and supports a dialogue between Western and Chinese cultures.

Key words: Depression, medically unexplained symptoms, women, personal construct psychology, personal/social orientations, Taiwan, The BodyMind Approach<sup>™</sup>

# **Glossary of Terms**

**Arc-like:** Movement particularly refers to the change of shape. This movement usually connects to the environment in an arc.

**Bound flow:** The fighting side of the flow factor in effort category; movements are constrained, controlled, contained, etc.

Carving: Three-dimensional carving movement.

Conflict: Conflict in terms of PCP refers to conflicting and inconsistent ways of construing.

**Direct space:** The fighting side of the space factor in effort category; movements are linear, channeled, pin-pointed, etc.

Flexible space: The indulging side of the space factor in effort category; movements are indirect, multi-focused, expansive, etc.

Free flow: The indulging side of the flow factor in effort category; movements are unconstrained, uncontrollable, fluid, etc.

Horizontal dimension: Movement with the directions of right and left side in space.

**Individualisation:** The process of modernisation can be perceived as a process of individualisation, which refers to the development of individuality.

**Isolation movement:** Movement in which only one part of the body moves while other parts of the body keep still.

**Kinesphere:** The reach one can make into the space around the body and which can be accessed without changing or shifting the body.

Light weight: The indulging side of the weight factor in effort category; movements are fragile, feather-like, lifted-up, etc.

**Medically unexplained symptoms (MUS):** MUS are physical symptoms that are psychologically related. MUS cannot be medically identified, and are usually accompanied by

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depression. Some similar terms describe medically unidentified physical symptoms such as psychosomatic, somatisation and somatoform disorders.

**Modernisation:** Modernisation is a process which leads a traditional community to become a modern society (Tönnies, 1957). "Modernisation can be seen as the general mechanism by which the social transformation from agricultural dominance to domination by trade and industry takes place, and the permanent continuation of this process" (Charlton & Andras, 2003, p.5).

**Personal construct psychology (PCP):** Personal construct psychology is based on a constructivist approach, and was proposed by Kelly in 1955. He proposes that in order to make sense of the world and anticipate future experiences, people keep "devising, testing and revising" their construct system (Hardison & Neimeyer, 2012, p.4).

**Personal/social orientations:** Lu (2008) proposes personal and social orientations to present people's self-view in Chinese culture. Social orientation refers to social connection, self-cultivation, social sensitivity and self-adaptation in different circumstances, whereas personal orientation refers to independence: acting on one's own, competition and consistency.

**Repertory grid technique:** Repertory grid technique is the most frequently used research method in personal construct psychology. It is a technique for the researcher to explore the client's construct system.

Sagittal dimension: Movement with the directions of forward and back in space.

**Shape flow:** The change of shape flow movement is self-motivated, representing the flow of consciousness. This movement could be amoebic or habitual, such as shrugging, biting nails, and rubbing.

**Spoke-like:** Movement which particularly refers to the change of the shape. This movement usually connects to the environment in a direct line.

**Strong weight:** The fighting side of the weight factor in effort category; movements are powerful and grounded.

**Sudden time:** Fighting pole of the time factor in effort category; movements such as quick, hurried and urgent movement, etc.

**Sustain time:** Indulging pole of the time factor in effort category; leisurely movements such as lingering, prolonging, etc.

**The BodyMind Approach<sup>TM</sup> (TBMA):** The BodyMind Approach<sup>TM</sup> is a therapeutic group intervention which is proposed by Payne (2009a). It is derived from dance movement psychotherapy, and is designed to treat medically unexplained symptoms.

**Tight construing:** In personal construct psychology, tight construing refers to a strategy of construing which results in unvaried predictions; the higher the level of the tightness, the more tightly organised and one-dimensional the individual's construing.

Vertical dimension: Movement with the directions of up and down in the space.

**Whole coordination movement:** Movement in which each part of the body is well co-operated and connected with other parts.

# **Chapter One: Introduction**

#### 1.0 Background to the research

This research aims to explore the connection between modernisation and depression in Taiwanese women from two characteristics of modernisation: individualisation and the duality between body and mind from the perspective of personal construct psychology (PCP). The content of the connection between modernisation and depression can differ between the Western world and Chinese culture, and people's psychological construct systems in the Western world and Chinese culture can therefore be different. In addition, based on the inseparability between body and mind, the characteristics of the psychological construct system of people with depression might be presented in the aspects of body and movement. Yet this presentation might also have cultural specificity, especially in Chinese culture in which the philosophy of the union between body and mind is still well accepted. Consequently, a therapeutic intervention which can be adopted into Chinese culture is needed, and The BodyMind Approach<sup>TM</sup> is employed in this study (Payne 2009a).

The connection between depression and modernisation is of great concern to mental health researchers and professionals (Colla et al., 2006). It seems to be a common phenomenon that the depressed population has increased through the development of modernisation (Hidaka, 2012). Some researchers in the Western world propose that modernisation stimulates the development of individualisation, which is highly related to depression, because individualisation encourages the formation of individualistic characteristics/personal orientation which may lead to isolation and lack of social support (De Leo & San Too, 2014; Durkheim, 1966).

Apart from individualistic characteristics/personal orientation, Berry (1990) proposes that psychological conflict between two different values such as individualistic/personal orientation and collectivistic characteristics/social orientation can lead to depression. In Personal Construct Psychology (PCP), Sheehan (1981, 1985) found less conflict in depressed people, while Feixas et al. (2009) found that inner conflict is not associated with depression. However, Feixas and his colleagues found high conflict in depressed people by utilising a different measure of conflict (Feixas et al., 2014a, 2014b). Moreover, there are researchers who emphasise resilience in the process of adjusting to these two different value systems (Henderson & Milstein, 2003; Masten & Reed, 2002; Pan, 2008). Resilience is a process of

adaptation when people experience difficult situations (Luthar, Cicchetti & Becker, 2000), which can refer to loose and tight constructs in the field of personal construct psychology. Loose constructs can refer to the pole of being resilient, and tight constructs can refer to the other pole of being rigid. A low level of resilience in the process of adopting different values can be an indicator of depression (Dowrick et al., 2008; Edward, 2005; Gray, Luna & Seegobin, 2012). Personal construct psychologists also propose that people with depression seem to have 'tighter' (more rigid) construing (Winter, 1992, 2003).

However, some questions arise. Firstly, the positive connection between individualistic characteristics/personal orientation and depression might not be globally generalised. Depression is not a fixed concept. It can be differently perceived, presented and generated in different cultures (Kleinman & Good, 1985), and the process of individualisation may also vary (Delanoë et al., 2012). Accordingly, the connection between inner conflict and depression might also be different in different cultures. However, most related research has been conducted in the Western world, and therefore it is valuable to explore these connections in a different culture. Secondly, similar to the previous concern, most research regarding the connection between overall conflict, tight construing and depression in PCP has been conducted in the Western world. Thirdly, the connections between conflict, resilience, somatisation and depression have generally been considered separately in previous research, and this separation might overlook the possible connection between these factors. Fourthly, the existing research in relation to the connection between depression, overall conflict and tight construing in PCP has not been conducted in relation to psychological individualistic/personal orientation and collectivistic characteristics/social orientation, and therefore it is valuable to be further researched in this context.

#### 1.1 The duality between body and mind

Apart from individualisation, another characteristic of modernisation is the concept of mind/ body separation (Barker, 2003), which has greatly influenced the treatment of depression. Due to this influence of modernisation, physical and psychological departments are also separated in modern medical systems. Consequently, the treatments of depression also can be generally divided into physical and psychological interventions, such as medication and cognitive behavioural therapy (CBT). Nevertheless, both medication and CBT seem to have their limitations as effective treatments of depression. Hong and Lee (2008) suggest that

medication is less able to effectively decrease the medically unexplained symptoms (MUS) which usually accompany depression. In addition, although there are many research studies indicating that CBT is effective in depression, there are also researchers concerned that the effectiveness of CBT might be over-estimated (Parker and Fletcher, 2007), and its long-term effectiveness on MUS is limited (Sumathipala et al., 2008).

In order to increase the effectiveness of treatment for both psychological and physical symptoms of depression, Payne (2009a, 2009b, 2009c; Payne & Stott, 2010) proposes The BodyMind Approach<sup>TM</sup> (TBMA) as an alternative treatment integrating physical and psychological interventions. TBMA is a treatment responding to two characteristics of modernisation – individualisation and the separation between body and mind – which are the main consideration in this research. TBMA is based on the concept of the union between body and mind, and aims to decrease both psychological and physical symptoms of depression. TBMA<sup>TM</sup> is derived from dance movement psychotherapy, which "aims to integrate the clients' emotional, social, physical and cognitive aspects of self through movement" (Association for Dance Movement Psychotherapy UK, 2015, p.1). In order to achieve this integration, TBMA facilitators encourage the participants to be aware of their own movement qualities and body symptoms, to find connections between these movements and inner experiences, and to construe and/or re-construe their physical and psychological symptoms in their own construct system. In addition, TBMA<sup>TM</sup> adopts Authentic Movement (AM) group work to facilitate the participants to increase their level of awareness with movement in the benign gaze of the other participants and/or the facilitator. They may experience the support of the others while moving alone. Apart from AM, other techniques such as drawing, sharing and writing also aim to facilitate the participants to have a clear boundary between self and others, but not to disconnect self from the environment. Therefore, in this modern time when people tend to be more individualistic/personal-oriented and isolated than in pre-modern times, TBMA groups seem to provide people with depression with an opportunity to find a balance in the relationship between self and others through movement.

TBMA was quite effective for MUS and psychological depressive symptoms in Payne's pilot study (2009c). Nevertheless, three concerns were generated. Firstly, there are not many research studies about TBMA, and its effectiveness therefore requires further examination. Secondly, TBMA is currently practised mainly in the UK, and its effectiveness outside the UK is unknown. Thirdly, TBMA is based on the concept of the union between body and mind;

however, how does this union present? Can a person's system of psychological construct be represented in movement?

## 1.2 Situation in Taiwan

Based on the concerns mentioned above, Taiwan was considered an appropriate location for this research. The number of Taiwanese people with depression who seek treatment is increasing (Shang, Liao & Li, 2003), especially after Taiwan's establishment of democracy in 1987 (Rin, 2007). There is a debate in Taiwan as to whether or not individualistic characteristics can decrease or increase depression in Taiwan; some researchers support the former (Yeh, 1989; Yang, 1985 cited in Yeh, 1989) while some other researchers support the latter (Wu, Wang & Ou, 2010; Yao, 1985). However, most related research was conducted decades ago, and the situation might change in the future. Researchers such as Lu (2003) and Yang (Yang et al., 2010) have focused on the formation of a bi-cultural self between individuality and collectivistic characteristics. Nevertheless, although Lu (2003) proposes that people in Taiwan have formed a 'bi-cultural self' which is the combination of individualistic characteristics/personal orientation and collectivistic characteristics/social orientation, its potential impact on mental health in the process of formation has received little empirical examination. However, some researchers propose that inner conflict might be generated under the influence of the two-value system in modern times (Luo, Lee & Zhan, 2003; Yao, 1985). It is also worth noting that there seems to be relatively more research regarding the connection between conflict and depression targeting the female population in Taiwan. This might be because the number of women with reported depression in Taiwan is greater than that of men (Luo, Lee & Zhan, 2003). In addition, Taiwanese women seem to experience greater pressure from the tension between individualistic/personal orientation and collectivistic characteristics/social orientation, probably due to high social expectations regarding these two value systems toward women (Wu, Wang & Ou, 2010).

As for the association between tightness and depression, although researchers suggest a close connection between lack of resilience in dealing with conflict/stress and mental health problems (Henderson & Milstein, 2003; Masten & Reed, 2002; Pan, 2008), such research conducted with women in Taiwan has been scarce. Furthermore, as mentioned above, although the connection between tight construing and depression has been examined by some personal construct psychologists, few researches are targeted on the population of women. In addition,

tight construing has not been particularly examined in relation to individualistic and collectivistic characteristics, and this connection has not yet been explored in the context of Taiwan.

Moreover, it is not only worth practising TBMA in Taiwan so that the effectiveness of TBMA can be examined, but, in addition, the connection between psychological construct systems and movement qualities can also be examined at the same time. Taiwan seems to be suitable for the practice of TBMA because, firstly, Chinese culture which greatly influences Taiwan emphasises the union between body and mind, and this concept still deeply influences Taiwanese people in modern times. Secondly, many researchers have shown that MUS are more prevalent in Chinese culture than in the Western world (e.g., Kleinman, 1977; Zong, 1996), and there are more women than men with MUS (Zhang, Hu & Ye, 2006). TBMA, which was initially designed to treat MUS, might be an appropriate treatment. Thirdly, TBMA can perhaps help participants in Taiwan to find a balance between self and connecting to others; in other words, a balance between individualistic/personal orientation and collectivistic characteristics/social orientation can be explored by using Taiwanese research participants.

1.3 Research questions

Based on the discussion above, seven research questions were explored in this research:

• How do collectivistic and individualistic characteristics relate to depression in Taiwanese women?

• How does conflict between collectivistic and individualistic characteristics relate to depression in Taiwanese women?

• How does psychological rigidity relate to depression in Taiwanese women?

• How does the BodyMind Approach reduce depression and MUS in Taiwanese women?

• Is rigid movement related to tight psychological construing in Taiwanese women?

• Are there movement differences between people with depression and without depression?

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• Are there changes in movement over the course of therapy?

#### 1.4 Methodology and Research methods

This research adopts personal construct psychology (PCP), which is a constructivist approach, as the basis for its methodology. This choice is based on the following reasons. Firstly, the connection between modernisation and depression is collectively construed by society, and can be construed differently for people who are in different cultures. Therefore, this connection is not an eternal truth and cannot be separated from the social and cultural context. Personal construct theorists assume that people can always construe things in different ways and they interpret reality through their constructs in order to better predict the outer world. This ontological position meets the fundamental concern of this research. Secondly, the union between body and mind is an important basis of this research; PCP proposes that the duality between body and mind does not exist. People construe things in daily life and the world not only in a cognitive way, but also in a non-verbal and bodily way. In fact, most of the time, it is difficult to tell the difference. People perceive things with their whole body and mind. Thirdly, the repertory grid technique, which is commonly used in the field of PCP, has been adopted as a research method. This technique can examine the participants' conflict and tight construing in regard to individualistic and collectivistic characteristics. In addition, it can evaluate the changes in the construct systems of the participants throughout the TBMA sessions in order to explore the effectiveness of the TBMA intervention. Fourthly, PCP provides not only quantitative methods but also qualitative methods. Personal construct psychologists propose that "meanings cannot be disconnected from their context" (Viney & Nagy, 2012, p.55), and the context of the participants and even the researcher him/herself cannot be excluded from the research. Therefore, PCP provides a ground to make qualitative observation and quantitative calculation.

## 1.5 Research design

The population of women with depression is twice that of men with depression in Taiwan, and women seem to experience more personal struggle between individualistic and collectivistic characteristics than men in Taiwan (Hu, 1990). For this main reason, Taiwanese women were selected as the research participants for this study. There were four phases of the research. A survey was conducted in the first phase. The Taiwanese Depression Scale and the scale of 'individuality-orientation self-view and social-orientation self-view' were employed.

137 women without depression and 36 Taiwanese women with depression completed the survey. The second phase of the study was a repertory grid interview, along with the completion of two other self-report scales, the Taiwanese Depression Scale and the Screening for Somatoform Symptoms-7 (SOMS-7). 12 Taiwanese women with depression and 12 Taiwanese women without depression completed the interview. The third phase was a 12-week TBMA intervention group, followed by the fourth phase, a post-group and two follow-up interviews. There were two groups, one for 12 women with depression and the other for 12 women without depression. All the participants completed the interview in the second phase.

#### 1.6 Research results

The research results will be discussed in three aspects. Firstly, some research results directly related to the seven research questions will be considered. The research results suggest that personal orientation is negatively correlated to depression, which is different from the research results conducted in the Western world. In addition, there is insufficient evidence suggesting whether conflict and tight construing regarding personal and social orientations are connected or not connected to depression. Moreover, TBMA seems to be more effective in reducing MUS than depression in this study, because the decrease of MUS was more significant than that of depression between assessments. Furthermore, the changes of MUS and depression between assessments are correlated, which might suggest that depression can be decreased along with the decrease of MUS in TBMA groups. As for the connection between tight construing and rigid movement, it was found that only vertical movement correlated with tight construing.

Secondly, some research results suggested possible collective psychological and physical characteristics which might represent certain cultural specificities in women in Taiwan. For example, it was found that women in Taiwan were more social-oriented than personal-oriented, which is different from the research results conducted in some Western countries such as the United States and the United Kingdom, in which people tend to be more personal-orientated (Chiao & Blizinsky, 2009). Moreover, there seems to be a phenomenon that although the somatisation scores are highly correlated to depression, the somatisation scores for women without depression in this study are even higher than those in Germany, according to Rief and Hiller's research (2003). This result is consistent with the existing research indicating that the prevalence of somatisation in Chinese culture is greater than in Western culture. Furthermore,

it is found that light movement quality is commonly used by both women with depression and without depression in this study, and there is no evidence indicating that people with depression use more light movement than people without depression, which the research conducted in the Western world suggests (Davis, 1981; Koch, Morlinghaus & Fuchs, 2007; Stanton-Jones, 1992). This research shows that a quality of light movement might not be a movement characteristic of depression in Taiwanese women, but a cultural phenomenon of women which might illustrate certain psychological meanings that are worth exploring.

Thirdly, some research results indicate some possible psychological and physical characteristics for women with depression in Taiwan. For example, it was found that apart from the correlation between depression and the distance between actual self and ideal self as is suggested in Western literature (Winter, 1994), elements in a repertory grid relating to social relations and the perception of the social roles are associated with depression in this study. This shows that in this highly social-oriented society, how women perceive their social roles might be connected to the condition of mental health. The study found that people with depression tend to use less sagittal movement than people without depression, which might illustrate that people with depression have less social interaction with others than people without depression. Accordingly, less use of sagittal movement seems to be a characteristic of Taiwanese women with depression tend to use less vertical movement, which might relate to an intra-psychic relationship (Amighi, 1999).

## 1.7 Research contributions

The research contributes in three fields. Firstly, by pointing out possible psychological and physical characteristics of Chinese culture, this research provides further understanding of this culture in the field of cultural psychology. Secondly, this study provides some contribution in the field of cultural psychopathology, by exploring the connection between depression and the possible psychological and physical characteristics of Taiwanese women through adopting repertory grid techniques which have not been widely used in this field. Thirdly, this research contributes to the field of psychotherapy, as the effectiveness of TBMA in Taiwanese women is examined.

In addition, this study also contributes to the field of PCP. Firstly, the connection between depression, conflict and tightness are examined in a different culture, which can stimulate more

discussion about the study on cultural specificity and generality. Secondly, the existing researches about conflict and tightness in the field of PCP are not related to personal and social orientations, and therefore this study can provide more understanding regarding conflict and tightness.

#### 1.8 Research limitations

There are several research limitations such as small sample size, the insensitivity of the movement coding system, and use of a depression scale the reliability and validity of which have not been widely examined. Although the research limitations will not be discussed in detail in the Introduction, two of these limitations need to be mentioned here in advance. Firstly, in this research, the two terms 'Taiwan' and 'Chinese culture' are interchangeable. This is because Taiwan is hugely influenced by Chinese culture, and Taiwan is considered as a part of Chinese culture (Fan, 2000). However, Taiwan is only a part of the Chinese Cultural sphere, which is very likely to be heterogeneous. For example, although China and Taiwan are both considered to be in the Chinese Cultural sphere, cultures in the two countries are not necessarily the same. Accordingly, it is better to perceive 'Chinese culture' in the context of Taiwan in this study. Moreover, it is not appropriate to generalise the results of this study to other countries which are also hugely influenced by Chinese culture.

Secondly, there are comparisons between Chinese culture and Western culture in the thesis, and the concept of cultural dichotomy which is used by mainstream psychologists is adopted in this research (Hofstede, 1980; Lu, 2007; Markus & Kitayama, 1991). However, this method has been criticised by some psychologists, because the meaning of 'culture' is fluid, and cultures become more and more complicated due to globalisation (Hermans & Kempen, 1998). Although the concept of cultural dichotomy is criticised, it is adopted in this research. This is because the concept can help to explore the five research questions. As for the problems of cultural dichotomy, these can be the subject of further research.

### 1.9 Map of the thesis

There are nine chapters in this thesis. The first chapter provides a general picture of the thesis. The second chapter is the Literature Review, followed by Chapter Three, the research methodology and methods. In addition, the first three research questions relating to the connection between individualisation and depression are proposed.

Chapter Four is the discussion of the results from phases one and two, the survey and the pre-group repertory grid assessment. Chapter Five discusses the therapeutic implications and refers to literature relating to the treatments of depression and TBMA, followed by raising research questions four and five regarding the intervention. Chapter Six is the discussion of the results, responding to research question four, the effectiveness of TBMA as an intervention. Chapter Seven is the discussion of the results responding to research question five, the examination of the possible connection between movement and psychological construing. Chapter Eight is case studies, where the discussions regarding the research results above are further examined in an individuality context. Chapter Nine provides the conclusions of the thesis, along with an outline of research contributions, limitations, and reflections.

# **Chapter Two: Literature Review**

#### 2.0 Introduction

In this chapter, the literature relating to the connection between modernisation and depression is reviewed from two aspects: individualisation and the dualism between body and mind. Individualisation is seen as a product of modernisation, and the connection between individualisation and depression is discussed from three points of view: firstly, the connection between individualistic characteristics/collectivistic characteristics and depression; secondly, the connection between psychological conflict and depression; thirdly, the connection between rigidity and depression. In addition, the cultural influence with respect to the three aspects is discussed in relation to women in Taiwan. Moreover, another characteristic of modernisation, the dualism between body and mind, is addressed with respect to the treatment of depression in women from three aspects. Firstly, there will be discussion of the inseparability between body and mind from the point of view of personal construct psychology and movement analysis. Secondly, it is discussed that the treatments based on the dualism between body and mind may have limited effectiveness on depression, and it is difficult to effectively treat MUS which usually accompany depression. Thirdly, it will be argued that treatments based on the dualism may not be the most appropriate when there is a cultural emphasis on the union between body and mind, as in Chinese culture. The union between body and mind in Chinese culture is explored from two aspects, Chinese medicine and the prevalence of MUS.

This review provides a framework for the generation of the seven research questions. However, only three of seven research questions will be discussed in the next chapter. The other four research questions are related to adopting The BodyMind Approach (TBMA) as a therapeutic implication, which will be further discussed in Chapter Five.

#### 2.1 Modernisation

Modernisation is a process which leads a traditional community to become a modern society (Tönnies, 1957). The core element of pre-modern society is community, whereas individuality is a core element in modern society. Therefore, the process of modernisation can be perceived as a process of individualisation (Elias, 1991), and its relation with depression is a major concern in this thesis. The population of people with depression has increased dramatically in recent decades. At least 350 million people suffer from depression, and

depression is the leading cause of disability worldwide (World Health Organisation, 2014). As for women, researches show that except for certain countries such as India, Iraq, New Guinea and Rhodesia (Weissman & Klerman, 1977), the number of women with depression are nearly as twice as men (Sprock and Yoder, 1997), and depression might affect approximately one in three women in the community (World Health Organisation, 2014). In addition, depression seems to be closely connected to depression under the influence of modernisation as individualisation heightens isolation which can generate depression, as will be discussed below.

From a sociological perspective, modernisation brings freedom and the emphasis on equality which are now almost universally sought values, but it also brings isolation and a decrease in social support (Elias, 1991; Giddens, 1991). As Elias suggests, the psychogenesis of modernisation is characterised by a high degree of individualisation and isolation (Elias, 1991). According to Giddens (1991), modernisation produces 'reflexivity', which makes people reflect on their uniqueness, commonness and their positions in the world, which in turn can lead to a sense of isolation and a sense of meaninglessness.

However, the above discourse seems to be based on the Western situation, and individualisation and depression might be developed and perceived differently in different cultures, with different connections between them. Before expanding on this topic, the concept of depression itself requires more elaboration.

### 2.2 What is depression?

According to Thase (2009), depressive disorder is the most common mood disorder and the fourth-largest contributor to the burden of mental illness globally. It is usually accompanied by other disorders such as anxiety disorders, eating disorders, personality disorders and general medical disorders (Hollon, Thase & Markowitz, 2002). There are two main types of depressive disorders, namely major depressive disorder (MDD) and dysthymic disorder (DD). Apart from the two main categories, there are other subtypes of depressive disorders, which are bipolar, psychotic depression, postpartum depression, seasonal affective disorder, atypical depression, double depression and secondary depression (Greenblatt, 2011). In DSM-5 (the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders), two more subtypes of depression are added, which are disruptive mood dysregulation disorder (DMDD) and premenstrual dysphoric disorder (PMDD).

To be diagnosed with major depression, a person needs to have at least four of the following symptoms in a two-week period. These are: change in appetite, with either weight loss or gain (more than 5 percent in the past month), sleep disturbance, low energy, poor concentration, feelings of guilt or low self-worth, recurring thoughts about death, as well as disturbance in behavioural, vocational, social and other important areas of functioning (WHO, 2012). In addition, at least the following two symptoms must be present: persistently depressed mood and loss of interest or pleasure in most activities.

Dysthymic disorder (DD) refers to suffering from depression with less serious symptoms persisting for more than two years. People with DD have better functioning and are less affected by the symptoms than people with MDD. A person who is diagnosed with DD has to have at least two of the following symptoms: poor appetite or overeating, insomnia or hypersomnia, low energy, fatigue, low self-esteem, poor concentration, difficulty making decisions, feelings of hopelessness, social withdrawal, guilt, decreased activity/productivity, and excess anger.

Bipolar disorder means the constant swing of emotions between extremely depressed and extremely high mood. Apart from this major symptom, at least three out of the five symptoms should also be present: excessive self-confidence, few sleeping hours, non-stop talking, flight of ideas, and excessive indulgence in risky social activity (sexual and adventurous activities, spending money and careless investment, etc).

Psychotic depression means that the symptoms of depression are accompanied by some psychotic symptoms such as hallucinations and delusions. People with psychotic depression are basically aware of their symptoms, and consequently they tend not to search for medical support due to their feelings of shame (Greenblatt, 2011). Postpartum depression occurs when a new mother suffers from depressive disorder during the first month after giving birth. New mothers with postpartum depression may feel anxious, a sense of guilt, readily angry, and have negative feelings toward their baby for a year or more.

Seasonal affective disorder (SAD) refers to people who develop depression in autumn and winter. People with SAD have typical depressive symptoms and usually also feel somnolent, inactive and addicted to eating sweet and starchy food (National Institute of Mental Health, 2015). SAD usually happens in high latitude countries. Atypical depression is also a common disorder. People with atypical depression usually have at least one symptom out of the

following five: feeling somnolent, addiction to eating, gaining too much weight and difficulty refusing (Greenblatt, 2011). Double depression refers to the concurrent major depression and dysthymia. Secondary depression refers to depression which is generated from the use of medicine.

Disruptive mood dysregulation disorder (DMDD) refers to "severe and recurrent temper outbursts that are grossly out of proportion in intensity or duration to the situation. These occur, on average, three or more times each week for one year or more" (American Psychiatric Association, 2013). The onset of symptoms has to be before age 10, and it has to be diagnosed for the first time before the age of 6 or after the age of 18 (ibid.). Premenstrual dysphoric disorder (PMDD) symptoms include "feelings of hopelessness, persistent sadness or depression, extreme anger and anxiety, decreased interest in usual activities, sleeping much more or less than usual, very low self-esteem and extreme tension and irritability" (National Health Service, 2014).

#### 2.3 Individualisation and depression

In view of the development of modernisation and the increase of people with depression, researchers are eager to know the possible connection between the two. For example, Durkheim (1966) analysed the rate of suicide across countries and concluded that modernisation causes individualisation which results in isolation, and isolation entails insufficient social support and consequently an increase in the rate of suicide. He then concluded that this was the reason why groups with higher social support have lower suicide rates, for example Jewish society. In this situation, depression and suicide have a strong association (De Leo & San Too, 2014), and Durkheim's research is an important information source regarding the connection between modernisation, individualisation and depression, and can be seen as a seminal work in the field.

The connection between individualisation and depression can be indicated in women. Under the influence of individualism, being individualistic is expected by modern society and is concerned for both men and women (Gammell & Stoppard, 1999). However, women seem to place more emphasis on relatedness than men, and therefore women's relatedness can be violated in modern society (Kirsh & Kuiper, 2002). This might be a reason for depression being more prevalent in the population of women than of men. This concept of individualisation causing depression is applied to biological research in depression; the researchers attempt to explain their discovery of the connection between biological factors and depression in association with individualisation. Caspi et al. (2003) suggested that there is a 'depression gene', which has been named 5-HTTLPR. They suggested that the more frequent the allele, the less prevalent the instances of depression. Apart from 5-HTTLPR, other genes such as MAOA-UVNTR and OPRMI A118G have also been identified as related to depression (Luyten, 2013).

Researchers then found that cultural factors can be the mediator between gene and depression (Way & Lieberman, 2010), although there is an argument that socio-cultural factors are more relevant in mild to moderate depression than manic depression, whereas genetic factors are more relevant in manic depression than mild and moderate depression (Chen, Jiang & Lin, 2000). Chiao and Blizinsky (2010) further claimed that the depression gene is more common in people in 'collectivistic cultures' than those in 'individualistic cultures'.

Triandis and his colleagues (1986) proposed the duality of collectivism-individualism as a cultural dichotomy. Four features have been identified to distinguish collectivism and individualism from one another (Triandis, 1995). The first one is "the meaning of self" (Triandis, 1996, p.409). In individualistic cultures, the concept of 'self' is autonomous and independent from groups, while in collectivistic cultures, self is interdependent with other members in groups. Secondly, individualists set goals which may or may not be compatible with group goals, while collectivists set goals which are compatible with group goals, and give up the self-goals for group goals. Thirdly, with regard to behaviour, this reflects attitudes for individualists and norms for collectivists. Lastly, individualists engage in "exchange relationships", while collectivists focus on the needs of the group members and engage in "communal relationships" (ibid., pp.409-410). Chiao and Blizinsky (2010) claimed that 5-HTTLTR is more easily activated in individualists because of their characteristics of isolation and individuation. This point of view is generally accepted by medical scientists. When it was found that the rate of suicide dramatically increased during the last decade in some Asian countries which are perceived to have collectivistic cultures (such as South Korea), the greater individualism linked to modernisation and reduced social support were assumed to be the main reason (Luyten, 2013).

Although the above research increases our understanding of the influence of individualisation on the generation of depression, the discussions are based on the philosophy of universality. Based on this philosophy, depression is perceived as a fixed concept, and consequently the room for various interpretations of depression in different cultures is limited. However, as Kleinman and Good mentioned, "depressive illness is a profoundly socio-cultural disorder, which relates to society, and suggests how society affects individuality" (1985, p.429). Therefore, the definition and the ways of perceiving depression can be different in different cultures. In addition, generalising the result that individualisation is positively correlated to depression might need to be further examined. The meaning of individualisation, and the attitudes toward individualisation and how people react to it, can vary with respect to the interaction between individualisation and local cultures.

Not taking the above two aspects into consideration might lead to a position that perceives individualisation as a universal force which changes cultures globally in the same way. Hence, although modernisation and the expanding population of people with depression seem to be global phenomena, with which individualisation appears to be connected, this connection needs to be further explored in the context of different cultures. Personal construct psychology provides a perspective to further explore the two aspects, and will be discussed in the next section.

## 2.4 Depression in Personal Construct Psychology

## 2.4.1 Psychological disorder in Personal Construct Psychology

Personal construct psychology (PCP) does not categorise mental illness in the same way as the DSM. Depression is not perceived as a fixed concept in PCP, and this position would therefore be consistent with exploring differences in the meaning of depression in different cultures. PCP was proposed by Kelly in 1955; this approach does not support putting clients into categories, because once the clients are labelled as having certain mental diseases, they are viewed as different from other people who do not have mental illness and thereby become 'abnormal'. In addition, once a client is labelled as having a certain mental illness, generating alternative explanations of the problems surrounding the illness becomes difficult (Burr & Butt, 1992). Hence, instead of classifying the patients into the categories of the various mental disorders, they are viewed in terms of diagnostic dimensions which present the 'strategies' people use to cope with an uncertain world (Walker, 2004). Kelly called it 'transitive diagnosis' (Fransella, 1995, p.66).

In order to cope with the uncertain world, the individual develops a hierarchical psychological construct system, which provides a basis for predicting the world (Kelly, 1970). Kelly proposes that optimally the person completes an 'experience cycle' in order to explain the events in any given situation and to anticipate the future. It includes five sequential phases, which are the 'anticipation phase', the 'investment phase', the 'encounter phase', the 'confirmation and disconfirmation phase' and the 'constructive revision phase' (Oades & Viney, 2012, p.130).

In the cycle, people anticipate events, fully involve themselves in this anticipation, encounter events, confirming or disconfirming the original anticipation, and subsequently modify the construct system based on their reflective assessment. An optimally functioning individual is able to adopt strategies to complete the five phases, and he/she is able to make valid predictions or to revise these if they are invalidated. On the other hand, if the individual clings to particular constructions despite repeated invalidation, this will result in lack of completion of the experience cycle and be manifested in psychological disorder.

It can be seen that people with and without psychological disorders all adopt strategies to complete the experience cycle in order to avoid invalidation and make better sense of the world. The difference is that rather than adopting the various strategies in a balanced way, people with psychological disorders tend to adhere to a particular strategy or strategies in order to deal with an uncertain and constantly changing world, so that they are less able to make valid anticipations. Therefore, Winter (2003, p.201) proposed that 'imbalance' might be a better word than 'disorder', as the former illustrates the unequal way of adopting strategies, while the latter represents a distinctive label which implies that the individual is essentially different from other people without a disorder.

For example, a pair of contrasting strategies is 'loose' and 'tight' constructs. Loose constructs lead to varying predictions, whereas tight constructs are associated with cognitive simplicity (Miller, 1968), cognitive consistency (Bannister, 1962), lack of permeability of superordinate constructs, and rigidly interrelated constructs (Winter, 1992). Everyone needs both types of construing to adapt to the world. Loosening constructs is theorised to open up possibilities and tightening constructs is required for making predictions and decisions.

However, if people are 'locked in' (Fransella, Bell & Bannister, 2003, p.113) to either loose or tight construing, psychopathology might be generated. Loose constructs have been associated with schizophrenia (Bannister, 1962; Bannister, 1963; Winter, 1992). People with schizophrenia may fail to tighten their constructs and therefore frame vague predictions which prevent them from being vulnerable to invalidation. On the contrary, tight constructs have been seen as one of the main characteristics of people with depression (Winter, 1992).

To conclude, depression is not perceived as a fixed concept with universality in PCP. Rather than identifying 'what depression is' and categorising people, personal construct psychologists tend to collect the information about what characteristics these people might collectively have. In addition, they indicate that people with depression adopt the same types of strategies as 'normal' people, but the difference is that the former tend to stick to certain strategies. From this perspective, depression is not a fixed concept but a statement which is full of dynamic, illustrating how people constantly attempt to make their best sense of the world. In the next section, the characteristics of construct systems for people with depression are discussed.

#### 2.4.2 The characteristics of depression

Kelly addressed certain rigid characteristics of constructs of people with depression, and Winter (2003) describes these rigid characteristics in a more systematic way. One of the rigid characteristics is tight constructs. Someone with tight constructs might be less able to make alternative interpretations and consequently present repeated (Kelly, 1955), rigid and stereotyped behaviours (Bannister, 1962). Highly polarised construing is also considered as a type of rigidity which relates to depression (Neuringer, 1961; Neimeyer, 1984; Winter, 1992). Polarised construing refers to the tendency to polarise the construing of self and others with consequent lack of flexibility. However, Button (1990) does not support the proposition and suggests that there is no connection between depression and polarised construing. Moreover, constriction of the construct system may also highly relate to depression (Ross, 1985). An individual with constricted constructs is not able to structure new experiences and tends to revert to existing constructs in order to feel safe and less anxious (Kelly, 1955). Furthermore, research also shows that people with depression tend to perceive themselves as different from others (Neimeyer, 1984) and have negative self-perceptions (Gara et al., 1993). In addition, people with depression have higher intensity scores than people without psychological

disorders (Silverman, 1977). Intensity is highly correlated to consistency (Smith, 2000), and high intensity scores mean that most constructs in a grid are "implying each other and are not used independently" (Fransella, Bell & Bannister, 2003, p.136).

Moreover, personal construct psychology can be used to further study the connection between individualisation and depression, as the characteristics of construct systems of people with depression in different cultures can be studied.

The understanding of individualisation can be seen in the light of personal construct psychology. According to Elias (1991), individualisation is a process of individuals looking for balance between 'I' and 'we'. Through exploring and comparing individual and groups' social and individual constructs, the relation between the individual and society and how people deal with the desire to develop individuality and pursue a sense of belonging can be further explored. In the next section, how individuals relate to society will be discussed from the perspective of PCP.

2.4.3 The individual in relation to society in personal construct psychology

The term 'personal' in personal construct psychology can be understood to imply an approach which researches an individual's construct system. As Kelly (1970, p.12) states, "persons differ from each other in their constructions of events". However, Kelly also touched on the social aspect. He defined culture as "a validational system of events" (1955, p.693), and the validational system is collectively created, held and practised. Since there is a validational system which is created, held and practised, supposedly there might be similarities in the construct system for people in the same culture. The Commonality Corollary refers to "the extent that one person employs a construction of experience which is similar to that employed by another" (Kelly, 1970, p.20).

Apart from the Commonality Corollary, another Corollary also involves more than one person and indicates the psychological process of knowing each other. The Sociality Corollary states that "to the extent that one person construes the construction processes of another, he (she) may play a role in a social process involving the other person" (Kelly, 1970, p.22). 'Role' is defined here as "a course of activity which is played out in the light of one's construction of one or more other persons' construct systems" (Kelly, 1955, p.177). An individual attempts to understand others in terms of his/her own constructs, and interacts with others based on this

understanding. In addition, the way he/she plays out the role is influenced by how he/she construes others. However, it is crucial to note that the process of playing a role in relation to other people does not necessarily happen at a conscious level. Most of the time, people 'intuitively' or non-verbally understand how other people construe the world, and 'test out' their understanding when interacting with others (Fransella, Bell & Bannister, 2003, p.11). The nonverbal aspect of construing will be discussed more in a later section.

Procter (1981) argues that the Commonality Corollary and the Sociality Corollary are limited to dyadic relationships. He extended Kelly's theory by designing two new corollaries in order to explain the constructs of a group of people. These are the Group Corollary and the Family Corollary. The Group Corollary asserts that "to the extent that a person can construe the relationships between members of a group, he (she) may take part in a group process with them" (p.354). The Family Corollary states that "for a group of people to remain together over an extended period of time, each must make a choice, within the limitations of his (her) system, to maintain a common construction of the relationships in the group". Although Procter mainly applies the two corollaries in explaining the dynamic within families, the two corollaries can potentially expand to explain a bigger population group such as cultures, societies and nations. For example, people in the same culture might also develop a hierarchical construct system which is similar to what Procter called the 'family construct system' to maintain a common construction of the relationships. This echoes Kelly's definition of culture, 'a validational system of events' which is generally accepted by people within the same culture.

In addition to the above Corollaries addressing the characteristics of constructs in relation to self and others, two emotions illustrate how an individual's emotions are generated in terms of the construing of self in relation to others. The feeling of guilt happens when being aware of "dislodgement of the self from one's core role structure" (Kelly, 2003, p.246). The development of core role structure is related to the others as it "has been defined as one's deepest understanding of being maintained as a social being" (McCoy, 1977, p.112). People feel guilty when they find that their thoughts or behaviours are not compatible with what they think they 'should' be, in terms of their own view of their core roles constructed through their social development. Shame, by contrast, is defined by McCoy as an "awareness of dislodgement of the self from another's construing of your role" (McCoy, 1977, p.119). In other words, shame occurs when the construer is aware that the self is not as others think it should be. To conclude, it can be seen that PCP provides a picture of how the individual relates to society, and might give a hint of how the individual faces society in the process of individualisation. For example, individualisation might change how people perceive what their 'role' is, and the perception of 'how to play a role which is validated by society' changes. In addition, personal behaviours which are validated or invalidated by society also change. Hence, when discussing the relation between individualisation and depression, focusing on the changes of the perception of core constructs might provide a useful perspective. Core construct refers to superordinate constructs concerning self-identity (Butt, 2004), and the core construct which will be discussed in the next section is individualism) and collectivistic characteristics (psychological characteristics under the influence of collectivism).

# 2.5 Conflict

#### 2.5.1 Psychological conflict and depression

As previously discussed, individualistic characteristics seem to be associated with depression in previous research. Some researchers propose that inner conflict in the process of acculturation might generate depression. In the context of acculturation, intrapsychic conflict might be generated, while different values which respectively belong to different cultures occur at the same time. Acculturation refers to a psychological process; people are in a process of adjusting different cultures (Berry, 1990).

Numerous research studies have indicated a connection between depression and stress which has been aroused in the process of acculturation (e.g., Abu-Bader, Tirmazi & Ross-Sheriff, 2011; Crockett et al., 2007; Revollo et al., 2011; Shin & Features Submission, 1994). Nevertheless, the connection between psychological conflict and depression has been less explored. However, Berry (1998) proposes that psychological conflict might happen in the process of acculturation, which might lead to depression. He divides psychological conflict into three levels, from mild to significant conflict in terms of personal experiences, and suggests that only significant conflict could lead to serious psychological disorders when the process of acculturation is overwhelming for the individual, and the situation is beyond the individual's capacity to cope with it.

# 2.5.2 Psychological conflict and depression in personal construct psychology

There are relatively more discussions on the relationship between psychological conflict and depression in personal construct psychology (PCP), and the methods of measuring such conflict (Feixas, Saúl & Ávila-espada, 2009). Conflict in terms of PCP refers to conflicting and inconsistent ways of construing (Bell, 2004). Conflict can be a feature of psychological problems (Sporle, Winter & Rhodes, 2011), such as depression. Based on a technique of assessing psychological conflict developed by Lauterbach (1975), which in turn is based on Heider's cognitive balance theory (Heider, 1946), Slade and Sheehan (1977, 1979) identify conflict as 'imbalanced triads'. Three constructs which are either correlated with each other negatively, or two correlated positively and the third construct negatively, can be defined as an 'imbalance'. Slade and Sheehan (1979) adopted an example of an imbalanced triad illustrated by Lauterbach (1975), which is 'a) I like parties; b) I associate parties with depression; c) I do not like being depressed' (p.519). Sheehan (1981, 1985) found that individuals with depression have a lower percentage of conflict than non-depressed people. The constructs of people with depression are less differentiated because they have eliminated the conflict. For example, they might define people as either 'good' or 'bad' without considering the individual's complicated personality and conflict issues.

However, the method of measuring conflict has been questioned as the strength of the correlation has not been taken into account (Winter, 1983). A correlation over 0 is defined as positive, whereas a correlation which is lower than 0 is a negative correlation. Yet is that appropriate when the correlation 0.001 is defined as positive and -0.001 as negative, even though there is only a tiny difference between the two figures? Therefore, based on the concept of triad inequality, Bell (2004) developed a different approach to measure conflict, and conflict is interchangeable with inconsistency from his perspective. In contrast to Slade and Sheehan, he involved one element and two pairs of constructs to examine the conflict/ inconsistency in the construct system. Conflict is identified when "an element is at the same time similar or close to two constructs which are themselves different or distant, or an element is similar or close to one construct's pole and at the same time is different to, or distant from, another's construct pole, where the two construct poles are similar or close" (Connabeer, 2013, p.42). For example, a person might construe people who are rich as happy; however, he/she also construes one of his/her friends as not rich but happy. Consequently, a conflict is evident.

Supposedly, conflict defined by Bell (2004) can be related to psychopathology. However, research has shown contradictory results. For example, Feixas, Saúl and Ávila-espada (2009) adopted Bell's measurement of conflict and found that there was no difference in the level of conflict between clinical and non-clinical samples. Connabeer (2013) found that the overall conflict did not correlate to the level of trauma which has been experienced by train drivers witnessing railway suicide. This research result echoes previous research findings (Warner, 2011), indicating a non-correlation between overall conflict and the level of trauma.

Conflict, as defined by Bell, seems to be insufficient to identify mental health problems. Therefore, Feixas and Saúl (2004) proposed another definition of conflict, called 'implicative dilemma', which has been refined later (Feixas, Saúl & Ávila-espada, 2009). Implicative dilemma refers to when the preferred pole of one construct is associated with the non-preferred pole of another (Feixas & Saúl, 2004). For example, one person may construe 'sociable' as desirable, but also construes 'sociable' as correlated to 'showing off', or being arrogant. Consequently, an implicative dilemma is revealed.

There is research evidence that participants with depression hold more implicative dilemmas than non-depressed participants (Feixas et al., 2013; Montesano et al., 2014). Feixas and his colleagues (2014b) then further explore the relation between depressive symptoms and dilemmas. Their results support the previous research result in which dilemmas are shown more frequently among participants with depression. In addition, people with dilemma(s) show a higher level of symptom severity. Moreover, the research found that as well as more dilemmas and symptom severity among individuals with depression, there were also more suicide attempts in the depression group. However, although there is related research on the connection between depression and conflict, the conflict between collectivistic and individualistic characteristics has been less addressed. Hence, it is valuable to look further at whether or not the conflict regarding collectivistic and individualistic characteristics is related to depression. Apart from conflict, the connection between rigidity and depression will also be discussed in the next section.

# 2.6 Rigidity

Rigidity, or a lack of capacity to be flexible, may be related to lack of resilience. Some researchers suggest that people who are not resilient enough to deal with conflict and stress might develop mental health problems (Henderson & Milstein, 2003; Masten & Reed, 2002;

Pan, 2008). According to Pan (2008), there is no universal definition for resilience, which can generally be defined by two approaches. The first approach is to perceive resilience as a personal characteristic. For example, Grotberg (2003) defines resilience as "the human capacity to deal with, overcome, learn, be strengthened by or even be transformed by the inevitable adversities of life" (p.1). In other words, resilience means that the individual is not only flexible enough to deal with difficult situations in life, but also is able to be 'transformed' in the process of dealing with them. The other approach is to define resilience as a process of adaptation when people experience difficult situations (Luthar, Cicchetti & Becker, 2000). The adaptation process involves the interaction between social, personal and cultural environments, rather than happening solely in the intra-psychic world (Fonagy et al., 1994).

A low level of resilience in the process of acculturation can be an indicator of depression (Dowrick et al., 2008; Edward, 2005; Gray, Luna & Seegobin, 2012) as an individual might be less able to adjust to the different values generated from acculturation, so that acculturative stress increases to a level which results in depression. The concept of resilience can refer to loose and tight constructs in the field of personal construct psychology, which can include the two definitions of resilience under the two approaches mentioned above. This is because that loose and tight constructs can refer not only to the characteristics of one's construct system but also to psychological strategies which constantly interact with the outer world. Loosening and tightening of constructs are dynamic psychological processes. As Kelly (2003) pointed out, the generation of creativity starts from loosening the constructs so that different possibilities can be perceived, followed by tightening the constructs to make decisions and convert all sorts of ideas and imagination into reality.

In addition, as mentioned before, predominantly loose or tight constructs can be identified as characteristics of psychopathology. When people lose the balance between loose and tight constructs and lock into construing in a loosening way, the individual perceives the world as extremely unpredictable and therefore making decisions is almost impossible. On the contrary, people with tight constructs have exact beliefs about the world which are difficult to change, even though the constructs are invalid.

However, the same as with conflict, even though a correlation between tightness and depression may be found, a more specific examination of whether this is particularly apparent in tight construing relating to constructivist/individualistic characteristics may be valuable.

Culture is a crucial factor that should be taken into consideration, and in the next section Taiwan will be considered with respect to the relation between depression and individualisation, based on the three aspects mentioned above: individuation, conflict and rigidity.

- 2.7 Individualisation and depression under the influence of modernisation from a psychological perspective Taiwan as an example
- 2.7.1 Depression in Taiwan

Taiwan is an island which is officially known as the Republic of China (ROC), a state in East Asia. The number of Taiwanese people with depression who seek treatment is increasing (Shang, Liao & Li, 2003), especially after Taiwan's establishment of democracy in 1987 (Rin, 2007, p.28). Martial law was abolished in 1987 and subsequently Taiwan experienced rapid social change due to the influence of modernisation and democratisation. Evidence shows that the population of people with depression who seek psychiatric help has increased markedly since 1992, and the rate of people with depression in the psychiatric outpatient population increased gradually from 14.5% in 1995 to 27.3% in 2000 (Shang, Liao & Li, 2003). According to Chang (2012), the population of people with depression who seek psychiatric help increased 10.3 times from 1996 to 2004 (Chang, 2012). The number of people with depression seeking medical help was 500,000 in 2002 (Lee, 2002) and increased to two million in 2014 (Can Love Association, 2014). Furthermore, suicide has become the ninth cause of death in Taiwan since 1997 (Health Promotion Administration, Ministry of Health and Welfare, 2006). Other striking evidence shows that around every 2.5 hours, a person commits suicide in Taiwan and among people who commit suicide, 87% suffer from depression (Can Love Association, 2014).

In line with the global trend (Sprock and Yoder, 1997), the number of women with depression in Taiwan is greater than that of men (Luo, Lee & Zhan, 2003). According to the report of the Health Promotion Administration, Ministry of Health and Welfare in 2011, the prevalence of depression in the population of women is 12.1%, and in the population of men is 7.3% in Taiwan (Chen, 2014). Moreover, there are twice as many suicide attempts by women than by men in Taiwan, with over 19,192 reported cases of attempted suicide in women in 2011 (ibid.). However, Hu (1990) claimed that the number of women with depression is only higher than men in the population of middle-aged married people in Taiwan. There is also research

indicating that women aged from 30 to 50 years are more likely to become depressed (Chen, Jiang & Lin, 2000).

It has been argued that the increase in the number of people with depression seeking medical help is due to the development of the medical system, causing more people with depression to be reported (Gotlib & Hammen, 2009). However, it is believed that a great number of people with depression still remain unreported, which might be shown from the high rates of suicide. Researchers are interested in the possible connections between depression and modernisation in Taiwan, which will be discussed below.

#### 2.7.2 Individualistic characteristics and depression in Taiwanese women

The related research on the connection between individualistic characteristics and depression in Taiwan show contradictory results. Early researches indicated that the development of personal modernity such as individualistic characteristics helps to decrease mental health problems (Qu, 1971; Lee, 1973; Yang & Qu, 1974; Yang, 1985 cited in Yeh, 1989; Yeh, 1989). Yeh (1989) even concluded that people have to intentionally develop personal modernity and catch up with modernisation in order to maintain a good mental health condition. Moreover, in relatively more recent research, Rin (2007) also supports this, and argues that the development of individualistic characteristics can help individuals to confront the pressures from traditional values and thereby have better mental health in modern society.

However, the above research studies are contradicted by other research. Ko (1975) compared the level of depression and anxiety between adolescents in Taipei, the capital city, and Changhua, a rural county. He noticed that the levels of depression and anxiety seemed to be higher in the Taipei adolescents than their counterparts in Changhua. This is consistent with the research conducted by Yeh and his colleagues (Yeh et al., 1986). They found that the prevalence of mild and major depression in urban areas in Taiwan is 2.63 times higher than in rural areas in Taiwan. Since urban areas are commonly more influenced by modernisation than rural ones (Simmel, 1971), the negative influence of modernisation might therefore be an important factor.

Yao (1985) proposed that for those who internalise traditional values, the more they are influenced by modernity, the more conflict they experience. In more recent research, Wu, Wang & Ou (2010) explored the relationships between self-values and the perceived pressure

of getting married in single Taiwanese women aged 30 to 50 years. They found that the higher their level of individualistic characteristics, the greater the pressure they might perceive.

The reasons for the contradictory results are still unclear. Yeh (1989) attempted to explain the contradictory research results in terms of Darwin's theory: modernisation is an irreversible tide and the more that people are able to adjust to it and survive, the mentally healthier they are. However, this theory is problematic as it is controversial that modernisation is more 'advanced' and that people have to keep up with modernisation to survive.

# 2.7.3 Conflict between collectivistic characteristics and individualistic characteristics in Taiwanese women

Burr (2002) indicated that inner conflict between different cultures might be a cause of depression for women from South Asian communities. Although Taiwan is in East Asia, this research indicated the possibility that the connection between depression and conflict in women in Taiwan and different cultures might be collectivism and individualism.

Taiwan is deeply influenced by the values of Confucius, which are seen as those of a collective culture (Triandis et al., 1986; Yang & Lu, 2008; Lu, 2007). Taiwan might be even 'more collectivistic' than mainland China as research shows that college students in Taiwan have stronger collectivistic characteristics than college students in mainland China (Lu et al., 2008). This suggests that people in Taiwan might esteem collectivistic values more highly than their counterparts in mainland China, across the Taiwan Strait.

However, Taiwan is also a place that has been significantly influenced by Western culture and modernity. After World War II, Western values started to have a huge impact on Taiwan, and the values quickly spread. Consequently, the process of globalisation-based acculturation might also take place as people in Taiwan adjust to the difference in values between Confucianism and modernity. Early research by Huang and Yang (1972) into the relation between social-directed and individuality-directed acculturation (Centers & Horowitz, 1963), and the degree of being influenced by modernisation in Taiwan, shows that the degree of being influenced by modernisation has a negative correlation with the social-directed and has a positive correlation with the individuality-directed. This research points out the trend of the increase of people who are individuality-directed in Taiwan. In other words, modernisation generates individualism, and prominent qualities of individualism – thinking independently and emphasising the individual self – have gradually become characteristics of Taiwanese people.

In early research studies, some researchers proposed that collectivistic values could be replaced by individualistic values through the process of modernisation (Hofstede, 1980; Triandis & Brislin, 1984). However, this thinking, which was coloured by cultural discrimination (modern values are 'superior' to traditional values), has been challenged and it is now believed that collectivistic values are not replaced by individualistic values but altered, and people have to experience a process of acculturation to adjust to different values.

The research suggests that people in Taiwan are adjusting and internalising collectivistic and individualistic values under the influence of modernisation (Rin, 2007; Sinha & Tripathi, 1994; Yang, 1998). Lu (2003) empirically supported the existence of a bi-cultural self, consisting of personal orientation and social orientation. The former is similar to individualistic values, while the latter is similar to collectivistic values. Yang and his colleagues (2010) further suggested a model to represent the process of forming this bi-cultural self.

However, although these psychologists noticed the formation of a bi-cultural self which combines traditional Chinese values and modern values, the potential impact on mental health in the process of formation has been less discussed. Nevertheless, mental health can be potentially affected by the development of modernisation. Lu and Kuo (2002) and Rin (2007) paid attention to the influence of modernisation on mental health, suggesting that inner conflict might be generated in the process of formation. There are research studies which particularly point out the influence of the inner conflict between collectivistic and individualistic characteristics on depression, and most of these studies target the female population.

For example, Yao (1985) attempted to empirically discover the relationship between the cognitive conflict between traditional and modern values and depression in Taiwanese women, and she found that on the basis of the internalised traditional values of women, the greater the influence of modernity on women, the greater the conflict they experience. In other words, the influence of modernity increases the cognitive conflict between traditional and modern values. Similarly, Luo, Lee and Zhan (2003) and Chen (1997) indicated that the conflict between tradition and modernity might contribute to depression in Taiwanese women. In addition, Wu, Wang & Ou (2010) explored the relationships between self-values and the perceived pressure

to get married in single Taiwanese women from age 30 to 50. They found that the higher their level of personal orientation, the higher the pressure they perceived.

The female population has been more researched in Taiwan in terms of their adaptation to modernisation and the possibility that Taiwanese women experience a greater pressure from the tension between individualistic and collectivistic characteristics. In traditional Chinese culture, society expects women not only to 'silence themselves' (Jack, 1991) and devote themselves to their families selflessly, but also to play the role of connecting family members. There is a principle which women are told to obey from when they are young: 'obey fathers at home, obey husbands after getting married, and obey sons after husbands die' (Luo, Lee & Zhan, 2003). In other words, women in traditional Chinese culture might be expected to develop stronger collectivistic characteristics than men. Through the influence of Western culture and modernity in Taiwan, women are encouraged to develop their individualistic characteristics. Consequently, women might experience greater pressure between the two characteristics, which might relate to depression. Nevertheless, this assumption needs to be examined. Apart from conflict being possibly related to depression, rigidity is also possibly related to depression.

2.7.4 Rigidity regarding collectivistic characteristics and individualistic characteristics in Taiwanese women

Wright and Masten (2005) suggested that an adaptive resolution of the possible contradictions between individualistic and collectivistic characteristics can be a difficult task for individuals in Chinese culture. However, the related research regarding Taiwanese women is rare, and needs further exploration, and possible connections between rigidity and depression should be further explored.

# 2.8 Depression in movement expression

2.8.1 The development of the dualism between body and mind for women in modernisation

The above literature discusses psychological characteristics in relation to depression in Taiwan. Nevertheless, the body also takes part in the process as body and mind are a union and they cannot be separated from each other. However, for the convenience of discussion, the psychological aspect was chosen to be addressed first before the aspect of the body is examined.

The dualism between body and mind can be seen as a product of modernisation. In premodern times in the Western world, the body was considered as having consciousness (Powell, 1900). However, through the process of modernisation, 'rational research methods' in the Western world developed, in which body and mind are encouraged to be explored separately (Barker, 2003). Descartes' famous sentence, "I think therefore I am" is an illustration of this separation. Consequently, this notion is generally accepted by the public, and Western medical systems split body and mind into two distinct sections following the Cartesian notion of dualism between body and mind (Payne, 2009c), and as a result this theory seems to be widely accepted.

# 2.8.2 Union between body and mind

However, body and mind can be viewed as a holistic union in which the body and the psyche represent each other (Jung, 1946; Levy, 1992; Lin & Payne, 2014; Meekums, 2002). The body is not separated from cognitive activities as the brain plays an important role in intentionality, which involves the process of perceiving and meaning-making (Koch, Caldwell & Fuchs, 2013; Mills, 2005). The union between body and mind can be further discussed in two aspects; one is preverbal constructs, and the other is the characteristics of movement for people with depression.

#### 2.8.2.1 Preverbal constructs

From the perspective of personal construct psychology, the process of construing is not solely a mind activity which is unrelated to the body, for all the constructs are processed symbolically and the symbols are not necessarily verbal (Guthrie, 1991). As Kelly (1963) noted, "a person's behaviour may be based upon many interlocking equivalence-difference patterns which are never communicated in symbolic speech" (p.51). Individuals are not necessarily aware of the motivations behind behaviours although the individual must behave in terms of his/her construct system. Constructs which cannot be verbally expressed can be referenced by body and movement (Lin & Payne, 2014). Due to the nature of the union between body and mind, Kelly proposed that the construct 'body-mind' and the sentence 'the body and mind interact' "makes no sense" to the personal construct psychologist (1955, p.920).

Based on the discussion above, it can be seen that the process of construing, and constructs, can be nonverbal. To describe the nonverbal nature of some constructs, Kelly used

the term 'preverbal constructs' (Kelly, 1955). A preverbal construct means "one which continues to be used even though it has no consistent word symbol. It may or may not have been devised before the person had command of speech" (Kelly, 1955, p.6). In other words, preverbal constructs can be defined as the nonverbal constructs which are formed before the use of language. The term can also broadly refer to the nonverbal constructs that are created after language has been developed. Neimeyer (1981) called preverbal constructs 'tacit constructs' in an effort to more broadly illustrate nonverbal constructs.

#### 2.8.2.2 Restricted movement for women with depression

Since body and mind are indivisible, supposedly depression might also be represented in a body aspect. Stanton-Jones (1992) suggested that body and movement represent the processes of activities in the mind, and reflect "personality, culture, psychopathology, intra/interpersonal and culture patterns" (p.61). Therefore, psychological conflict and rigidity, which are mentioned above, and discussed in relation to depression, might also be represented in body and movement. As Condon (1968) claimed, movement represents inner conflict and the pattern of interpersonal relationships. Davis (1981) further pointed out that 'healthy movement' refers to more integrated and dynamic movement, which is rich in variation, whereas restricted movement with less variation reflects psychiatric disorder. Accordingly, people with depression might have more rigid movement and be less flexible than people without depression.

Waxer (1974) found that clients with depression have less facial expression, tend to avoid eye contact and look downward in psychotherapy sessions. The research from Kazdin and his colleagues (1985) and Schneider et al. (1990) is consistent with Waxer's results, which indicate that some non-verbal behaviours are significantly correlated to depression, such as 'diminished motor activity', restricted facial expression and reduced social interaction. Troisi and Moles (1999) also suggested that people with depression have restricted non-verbal expression and constricted visual mobility.

Nevertheless, some researchers doubt these research results. Youngren and Lewinsohn (1980) claimed that the research samples were too small to claim a movement difference between people with and without depression. They expanded the number of the participants and their observation focused only on facial expression, hands and arms. They further claimed that non-verbal behaviour between people with depression and people without depression

showed no differences. However, due to the difficulty of coding all the movement made by the large number of participants (75 people with depression and 69 people without depression), they sampled only 10 seconds in a one-hour long therapy session, and did not consider that movement might change throughout the session or that posture and transition may be involved.

The above research mainly focused on facial expressions and upper body movement because the participants were observed when they were in verbal psychotherapy sessions. Body-related psychotherapists seem to be more able to observe the clients' whole body movement than verbal psychotherapists, and to analyse movement in systematic ways. For example, Stanton-Jones (1992) proposed that, in Laban's terms (Laban, 1947), people with depression tend to have a 'floating' quality (which consists of flexible, sustained and light effort qualities), restrictedly using the space and kinesphere, and have limited movement complexity, fewer postures and gestures, and neutral weight. In addition, Koch, Morlinghaus and Fuchs (2007) proposed that people with depression walk more slowly: the pace is slower with "increased standing phases and gait cycle duration" (p.342). They also reported a lack of vertical movement (Koch, Morlinghaus & Fuchs, 2007; Serlin, 1996). Davis (1981) interpreted the movement of people with depression, in terms of the Kestenberg Movement Profile (KMP), as diffuse, flaccid and less coordinated.

### 2.9. Psychologically and physically based treatments of depression

#### 2.9.1 The influence of the dualism between body and mind

From the above discussion, it can be seen that body and mind are deeply connected to each other, and the union between body and mind might be able to be shown in relation to the restricted movement of people with depression. Nevertheless, when it comes to the treatment of depression, the concept of the dualism between body and mind is influential. Firstly, the mainstream treatments of depression focus on either psychological or physical symptoms. Secondly, the treatments based on the dualism of body and mind might not be the best for people whose cultural belief is based on the union between body and mind, as in Chinese culture. Both can cause limited effectiveness of the treatment for depression.

#### 2.9.2 Medication

The most common physically based treatment for depression is medication. Turner and his colleagues (2008) reviewed 74 FDA (Food and Drug Administration)-registered studies,

and 69% among them are published. 94% of the published research reports positive results with the use of antidepressants. Simon (2002) reviewed the efficacy and effectiveness of antidepressant treatment in primary care, and concluded that "the efficacy and effectiveness of antidepressant pharmacotherapy for major depressive episodes is established beyond any reasonable doubt" (p.214). This seems to suggest that medication is undoubtedly very effective for depression.

However, Greenblatt (2013) suggested that some researchers may intentionally not report the negative results of medication, in order to promote the sale of antidepressants. Pigott et al. (2010) reviewed four meta-analyses of the effectiveness of antidepressants, and found that their efficacy was only marginal, and even lower than that of placebos. In addition, they also found that these researchers failed to report the negative results of the research. Nierenberg and his colleagues (2008) also reviewed the efficacy and effectiveness of antidepressants for depression, and found that some people with depression taking antidepressants did not achieve remission, and had poor long-term outcomes, conclusions also pointed out by other researchers (Fava, Ruini & Belaise, 2007; Nelson et al., 2005).

Side effects have also been constantly reported. For example, sleeping pills are usually used for treating people with depression who have sleeping difficulties. Yet recent research suggests that the use of sleeping pills may increase the risk of heart disease, especially for clients with heart failure (Setoguchi, 2014). The other side effects which might occur are "nausea, headaches, anxiety, sweating, dizziness, agitation, weight gain, dry mouth and sexual difficulties" (Beyondblue, 2014) depending on what medication is taken. In addition, the danger of overdose is also a concern (Genest, 1989).

# 2.9.3 Cognitive-Behavioural Therapy

Cognitive-Behavioural Therapy (CBT) is one of the psychotherapies of depression which has been most frequently examined for its effectiveness, and it has been tested in many studies (Proudfoot et al., 2004; March et al., 2004). There is research indicating that CBT is more effective on depression than placebo (Elkin et al., 1989), and is a more effective treatment than antidepressants for people with mild to moderate depression (DeRubeis et al., 1999). However, there are also researchers who have obtained different results. Thase and Friedman (1999) indicated that CBT is not as effective as medication. Parker and Fletcher (2007) reviewed the literature indicating the effectiveness of CBT, and found that the formal evaluation of examining CBT's effectiveness is problematic, concluding that CBT's effectiveness might be over-estimated.

#### 2.9.4 The treatment of medically unexplained symptoms (MUS)

The above research shows that although there is research indicating the effectiveness of medication and CBT, the overall evidence is questionable. This might be related to attempting to treat depression combining psychological and physical symptoms with either a purely psychological or a purely physical approach. MUS illustrate the complicated nature of depression combining body and mind symptoms, and therefore show the limitation of the physically or psychologically based treatments. MUS are physical symptoms but psychologically related (Brown, 2004). MUS cannot be medically identified, and are usually accompanied by depression (Payne, 2009b; Kleinman, 1977; Wayne & Edward, 1998). Some similar terms describe medically unidentified physical symptoms such as psychosomatic, somatisation and somatoform disorders (Zhang, 2011). In DSM-5, MUS has been renamed as Somatic Symptom Disorder. In order to be diagnosed as sufferers of MUS, people have to experience the symptoms for more than six months and be seriously affected in everyday life, accompanied by disturbing thoughts, feelings and behaviours (Payne & Stott, 2010). Medically unexplained symptoms are the most common complaints in primary care (Kroenke, 2007). People with MUS usually keep constantly seeking medical help (Kroenke, Spitzer & Williams, 2002), and the expense for MUS is consequently high (Payne, 2009c). In addition, MUS have also been considered as socio-culturally related symptoms (Kleinman, 1986).

The causes of MUS remain unclear. From a psychoanalytic perspective, dissociation and conversion mechanisms are factors generating MUS (Breuer & Freud, 1957; Gupta & Gupta, 2006; Ludwig, 1972) while behavioural psychologists suggest that MUS might be learnt behaviour from childhood (Zhang, Hu & Ye, 2006). A dissociation mechanism refers to the dissociation from trauma-related memories and experiences which arouse strong negative feelings and are difficult for individuals to psychologically process (Koch, Caldwell & Fuchs, 2013). Trauma-related experiences have then been repressed and processed outside consciousness, and consequently are 'converted' into MUS (Brown, 2004). That is to say, "MUS is a defence mechanism in which bodily symptoms represent psychological inner conflict. The individual is able to express psychological distress through MUS without consciously being aware of it" (Lin & Payne, 2014, p.157).

Since MUS represents a complicated interaction between body and mind, adopting either psychological or physical intervention might not be effective. For example, Sumathipala and his colleagues (2008) found that CBT only has short-term effectiveness on MUS. Payne (2009c) echoed Sumathipala's research and proposed that CBT cannot provide an effective treatment for this population in the long term. Morley and his colleagues (1999) found that CBT had inconsistent effectiveness on MUS, which can increase the rate of secondary intervention. In addition, Thomson and Page (2007) found no difference between CBT, placebo and waiting lists for reducing hypochondria which often affects people with MUS at post-treatment.

Similar results are shown on medication. People with MUS who seek non-psychiatric help unsurprisingly usually experience secondary care intervention and increasing dosage (Payne, 2009c). For patients who go to psychiatrists, the medication also has limited effectiveness. Hong and Lee (2008) indicated that although medication is effective in decreasing MUS in the first month of treatment, this improvement stops while the depressive psychological symptoms continue to improve in the following treatment. Furthermore, the remaining body symptoms can stimulate the psychological symptoms with ease. Consequently, adopting only onedimensional treatment emphasising either the body or mind aspect, might not be enough (Henningsen & Löwe, 2006).

Apart from the difficulty of treating MUS, an intervention based on the separation between body and mind might not be effective in cultures which view these as less separate. Chinese culture is an example. It is a culture which considers less separation of mind and body than is the view in Western societies. This is revealed in two aspects: Chinese medicine and the common prevalence of MUS in Chinese culture.

#### 2.10 The union between body and mind in Chinese culture

#### 2.10.1 Depression in Chinese medicine

People immersed in Chinese culture, such as Taiwanese people, seem to be very aware of the union between body and mind. Such awareness is shown in Chinese medicine, which is still popular in Taiwanese society. In Chinese medicine, 'yu' (depressed feeling) comes from the imbalance of 'yin' and 'yang' and the block of 'chi' ('Qi') in the body. 'Chi' ('Qi') is a life- force, a fundamental element forming every living thing in the universe (Frantzis, 2008).

The treatment of 'yu' is various, such as eating properly, acupuncture, medication, adapting 'xigone' (a martial art which aims to adjust body, breath and mind) as well as being taught and lectured about the meaning of life, and generating opposite strong emotions (such as happiness or anger) to counter depressed feelings (Xu, 1996).

It can be seen that following the concept of the union between body and mind, depression is seen as the result of an imbalance in both psychological and physical aspects. This might be one of the main reasons for MUS being more common in Chinese culture than in Western culture (Katon, Kleinman & Rosen, 1982; Kleinman, 1977; Kleinman & Kleinman, 1985; Kleinman, 1986; Parker, Cheah & Roy, 2001; Tseng, 1973).

#### 2.10.2 MUS in Chinese culture – Taiwan as an example

In Taiwan, Tseng (1975) reported that 70 per cent of patients in the National Taiwan University Hospital complained of somatic symptoms before being diagnosed with mental illness. Kleinman (1977) also found a similar result in the same clinical setting, in which he discovered that 88 per cent of patients in Taiwan initially complained about their somatic symptoms, in comparison to only 4 per cent of their counterparts in the Massachusetts General Hospital in the USA. In relatively new research, 72.9% people who sought psychiatric help have MUS (Zong, 1996), and there were more women than men with MUS (Zhang, Hu & Ye, 2006). Tsai, P., Tsai, G. and Shi (2014) indicate that MUS is more prevalent in women than in men in Chinese culture, and there is twice the number of women with MUS than men, which is the same as the ratio in depression in Chinese culture. Nevertheless, the difference of the ratio of MUS in China and Taiwan is unknown.

Apart from the influence of the union between body and mind in Chinese medicine, there are also other explanations of why MUS is more common in Chinese culture. For example, Cheung (1985) proposed that the cause of MUS in Chinese culture is that people do not consider sadness or depressive feelings as symptoms because they believe people with depression are simply 'moody', and only bodily symptoms should be treated. In addition, due to the deep influence of Confucianism which taught people to be emotionally controlled, emotional complaints are subject to moral stigma (Lin & Lin, 1980; Wang, 1983). Moreover, Chinese people are taught to repress negative feelings, and it is socially unacceptable to express negative feelings outside the family (Kleinman, 1980).

Furthermore, there is another explanation which is connected to the bodily perspective in Chinese culture. As mentioned before, depressive feelings are tightly connected to physicality in Chinese medicine, which results in a sensitivity to the bodily condition. It might be easier for people in Chinese culture to be aware of the blocked 'chi' in the body than to be aware of depressive feelings.

The awareness of body reactions can also be seen from language usage in Chinese culture. There is systematic language describing emotions 'externally' rather than 'internally' in Mandarin (Kleinman, 1980). For instance, Kleinman discovered that interviewees in Taiwan seem to have less vocabulary describing emotions, apart from some general descriptions such as 'nervous' and 'depressed'. The phenomenon also occurs with Chinese interviewees who speak fluent English in America. They tend to describe their emotions with 'external' language such as "....fire burning the nerves of the (my) chest, just as a real fire burns wood or an electrical appliance" (ibid., p.142).

In addition, due to the union between body and mind, words can refer both to body and mind. For example, '心'(shin) means heart and mood; '氣'(chi) refers to a part of the body, even though no actual organ has been named as 'chi'; it can actually be felt, with an awareness of its existence. However, chi is also a part of life, and refers to "breath, air, energy, life force, or even spirit and fluid, depending on the context" (Tung, 1994, p.485).

Due to the sophisticated interaction between MUS and culture as well as body and mind (Tung, 1994), it can be assumed that an effective treatment for depression might appropriately combine with both the psychological and physical aspects, especially for people with depression in Chinese culture.

# 2.11 Conclusion

In this chapter, the literature regarding the connection between modernisation and depression has been reviewed with respect to the two characteristics of modernisation: individualisation and the dualism between body and mind. Firstly, the connection between individualisation and depression was explored from three aspects: the connection between individualisation and depression, the connection between the conflict between individualistic and collectivistic characteristics and depression, and the connection between psychological rigidity and depression. It was found that although many Western researchers suggest a positive

connection between individualisation and depression, it is still worth further exploring this connection in different cultures. When universally defining individualisation and depression and their connection, the role of culture might be overlooked.

Moreover, it appears that research regarding the connection between inner conflict and depression is rare. Although there seems to be relatively more research examining this potential connection in personal construct psychology, the empirical studies regarding the conflict between collectivistic characteristics and individualistic characteristics and depression seem to be rare. Furthermore, there is a similar situation in studies of rigidity; although there are studies exploring the connection between rigidity and depression in personal construct psychology, this connection can be further examined in different cultures. Research relating to the connection between depression and the rigidity regarding the two value systems in PCP is non-existent.

Furthermore, there is a debate concerning the connection between individualistic characteristics and depression in Taiwan in the last century; however, there is little recent research on this matter. Although there is research concerning the potential impact of the psychological conflict between individualistic characteristics and collectivistic characteristics on mental health in Taiwan, empirical studies are few. There is even less research relating to the connection between rigidity and depression in Taiwan. Nevertheless, it is interesting to note that the related research has been more focused on women than men. This might be because the number of women with depression and medically unexplained symptoms exceeds that of men in Taiwan. In addition, Taiwanese women seem to experience great struggles in the process of adaptation to the two different value systems of individualistic and collectivistic characteristics.

Secondly, the connection between depression and modernisation was discussed from the perspective of the dualism between body and mind. The view that body and mind form a union was explained from the perspective of personal construct psychology and movement analysis. The former proposes that construct systems can be construed both verbally and nonverbally, and therefore the duality between body and mind does not exist. As for movement analysis, researchers suggest that people with depression seem to have relatively more restricted movement than people without depression, and therefore body and mind are connected rather than separated. Nevertheless, the dualism between body and mind is developed in

modernisation, and the Western medical system is based on it. The treatments for depression such as medication and cognitive-behavioural therapy are only focused on either the psychological or the physical aspect, and therefore their effectiveness in relation to depression might be restricted. In addition, the treatments that are based on the dualistic philosophy might not be the most appropriate treatments in the Chinese culture, which emphasises the union between body and mind. The union between body and mind in Chinese culture can be seen from two aspects: Chinese medicine and the prevalence of medically unexplained symptoms. Accordingly, an alternative treatment which combines both aspects might be more suitable for people with depression, especially for people in Chinese culture.

In the next chapter, the three research questions in response to the Literature Review are generated; personal construct psychology as a basis for research methodology and repertory grid technique as a method are also elaborated. As for the therapeutic implications, The BodyMind approach<sup>TM</sup> (TBMA) was adopted as a treatment for depression in this study, and this will be elaborated in Chapter Five.

# **Chapter Three: Research Methodology and Research Methods**

#### 3.0 Introduction

This chapter presents the three research questions based on the Literature Review in the previous chapter, followed by a discussion of the adopted methodology and methods which were selected for addressing the research questions. Although only three of seven research questions that relate to the connection between individualism and depression are presented in this chapter, the research design and research methods discussed in this chapter will be based on the three research questions and the methodology will cover all seven research questions, including the connection between individualism and depression, using TBMA as a therapeutic intervention.

#### 3.1 Research questions

From the Literature Review, several issues relating to the connection between individualisation and depression have been generated. Firstly, although it is largely accepted that individualism is associated with depression in the Western world, it is still debatable whether or not individualism relates to depression in the Taiwanese context. Secondly, although there are research studies discussing the possible connections between conflict, rigidity and depression in personal construct psychology, these connections in regard to collectivistic and individualistic characteristics have been less addressed. In addition, there are relatively few related research studies in Taiwan.

Seven research questions were generated:

- How do collectivistic and individualistic characteristics relate to depression in Taiwanese women?
- How does conflict between collectivistic and individualistic characteristics relate to depression in Taiwanese women?
- How does psychological rigidity relate to depression in Taiwanese women?
- How does the BodyMind Approach<sup>TM</sup> reduce depression and MUS in Taiwanese women?

- Is rigid movement related to tight psychological construing in Taiwanese women?
- Are there movement differences between women with depression and without depression?
- Are there changes in movement over the course of therapy?

The following methodology can be applied to the overall seven research questions.

# 3.2 Methodology

Personal construct psychology, which is a constructivist approach (Chiari & Nuzzo, 2003), was adopted as the theoretical methodological basis of this research. Constructivism in psychology generally theorises about "how human beings create systems for meaningfully understanding their worlds and experiences" (Raskin, 2002, p.1). In contrast to positivism, constructivists do not believe that 'reality' exists divorced from social and psychological contexts, and that it can be found by excluding personal or social 'noise'. Again differently from positivism, the philosophy of constructivism does not epistemologically and ontologically assume that the researcher can potentially discover 'generalisable, context and value free truths based on similarities between people' (Viney & Nagy, 2012, p.55).

Vasco (1994) describes positivism with a metaphor; for positivists, the world is like a machine, and the researchers can objectively stand in front of the machine and understand the world through analysing its elements and the relationships between these elements. For the constructivists, 'the world is a living organism, constantly changing and only able to be understood contextually' (Viney & Nagy, 2012, p.55). In other words, constructivists assume that unchanging reality does not exist and that what reality 'means' differs in terms of the contexts of different societies, cultures and individualities.

Consequently, constructivism provides two main philosophical underpinnings in this research. Firstly, people are 'passive' in the sense that they are influenced and constrained by social constructions and discourses. Therefore the cause of depression and the presentations of being depressed are different in different cultures and societies. Secondly, people can also be active, because people can actively alter their construct system, and the way of doing so can differ in different social and cultural contexts. Accordingly, the two dimensions compose the two main parts of the research. The first part is the exploration of the psychological

characteristics of women with depression in Taiwan, which is deeply influenced by Chinese culture, and which is a different ontological space from the Western world. The means of exploration is based on personal construct psychology. The second part explores the influence of the intervention on the construct system of Taiwanese women. The means of intervening is the BodyMind approach.

Personal construct theory is one of the major approaches in constructivism; personal construct theorists assume that people can always construe things in different ways and they interpret reality through their constructs in order to better predict the outer world. In other words, 'there is no single, dominant reality, but that realities and meanings are culturally and socially determined' (Viney & Nagy, 2012, p.55). There are no immutable personal or social realities which can be discovered. What personal construct theorists are interested in finding out is how and why people create personal and social realities and give these realities personal meanings. Under the influence of this ontological position, personal construct theorists believe that the researcher cannot be detached from the research and the research informants; both are engaged in a process in which a continual interaction between them occurs in order to make sense of the world (Kelly, 1955). Holding this epistemological position makes the personal construct theorist aware of the interdependence between researcher and participants, and the interdependence is an integral part of the research methodology (Viney & Nagy, 2012).

Based on the ontological and epistemological positions above, it can be understood why depression may be perceived differently in different cultures, and that the impact of individualisation in Chinese culture might not be the same as in Western cultures. With regard to the research questions, the research attempts not to discover 'truths' by answering the questions but rather, attempts to find out what the connection between individualisation and depression might be in Taiwan, through not only gaining a general picture of the connection, but also attempting to understand how people perceive the connection.

The above is the main reason for choosing PCP as the methodology in the research. There are four more reasons for choosing PCP. Firstly, PCP provides a basis for researching both similarities among people and differences between individuals. According to Hardison and Neimeyer (2012), personal construct psychology is "essentially an idiographic approach, and its main strength comes from its ability to depict the content and structure of individual internal representations and ultimately to draw inferences about the general human process of meaning

construction" (p.5). Consistent with the Commonality and Individuality Corollaries, PCP is able to "identify and explore personal narratives and constructions of the individual's experience, and evaluate his or her unique construct systems and hierarchies" (ibid., p.5), as well as to gain a general picture of the similarities people might have in the process of construing. The theory is not only about personal construction of the world, but also extends to the society; because the concept of society is 'constructed' by individuals, and individuals are actively involved in this process of representing society (Fransella & Neimeyer, 2003).

Therefore, personal construct psychology does not just consider that construct systems are passively formed by society, as social constructionism proposes (Sokal & Bricmont, 1999). Personal construct psychology also recognises that people have the ability to actively construe and re-construe themselves and their perception of the world. The recognition of the role of personal activity in personal construct psychology is deeply connected to the therapeutic implications of TBMA, which will be further discussed in relation to the next point.

Consequently, PCP provides an appropriate ground for this research to explore both the general picture of the connection between individualisation and depression, and the individual's perception of the connection. In terms of the three research questions, the research will not only examine whether personal orientation, conflict and rigidity are correlated to depression, but also how the participants construe depression, as well as conflict, rigidity and the participants' individual narratives.

Secondly, the concept of the duality between body and mind, which has been considered a mainstream philosophical assumption for decades in the Western world (Bannister, 2003), is not supported in personal construct psychology. Most mainstream psychological approaches tend to separate body and mind; they mainly focus on psychological aspects, and divide psychological process into different parts to explore, such as cognition, emotions, learning, and behaviours (Kelly, 1955). However, PCP is an integrated approach, and perceives people as a whole rather than as an organism which is a combination of different parts. Hence, as mentioned in the Literature Review, the process of construing involves both verbal and nonverbal aspects, since constructs are symbolically processed and do not have to be in a verbal form (Guthrie, 1991). Personal construct psychologists do not like to separate body and mind when attempting to understand people's construing processes. The philosophy of no separation between body and mind provides a rich basis for this research. As mentioned in the previous chapter, depression is difficult to categorise as either psychological or physical because its causes and symptoms are combined with both psychological and physical factors, and medically unexplained symptoms are indicative of the complexity. In addition, Taiwan is hugely influenced by Chinese culture, which greatly supports the concept of the inseparability between body and mind. Therefore, it would be difficult to discuss depression based on theories which mainly focus on either the psychological or the physical aspect.

Thirdly, personal construct psychology provides a ground for both qualitative and quantitative methods in this research. As mentioned above, both the commonalities of the participants and the differences between individuals will be explored in this research, and PCP provides well developed quantitative research methods to explore it. The most commonly used quantitative method in PCP should be the repertory grid technique (RGT) (Fransella, Bell & Bannister, 2003). However, RGT cannot be seen as a 'pure' quantitative method. Although RGT involves a great volume of calculating, the raw data obtained with the repertory grid technique is both textual and numerical, and the methods of qualitatively and quantitatively analysing the textual data are also developed in PCP.

Qualitative methods in PCP are also well developed. For example, qualitative methods which are developed in personal construct psychology such as laddering (Hinkle, 1965), ABC model (Tschudi, 1977), self-characterisation (Kelly, 1991) and Experience Cycle Methodology (Oades & Viney, 2000). Apart from these qualitative methods, PCP psychologists also agree that qualitative observation can be conducted alongside quantitative measures, since 'meanings cannot be disconnected from their context' (Viney & Nagy, 2012, p.55).

'Context' can refer to the participants' life histories and background, and also to the process of the research interviews. It means that the interviewer is also a part of the context, and therefore the reflexivity from the interviewer is also essential. Reflexivity has been less addressed in traditional psychology, but is a feature of personal construct psychology (Bannister, 2012). Interviewers and interviewees are interdependent, and therefore the interviewer is encouraged to reflect on him/herself as a role of a researcher in the whole process of the research.

Consequently, in this research, qualitative observation methods will be used alongside the

use of repertory grid technique and questionnaires. This will not only allow quantitative grid measures of conflict and rigidity to be related to other variables, such as depression; but also questionnaire results and categorisations of construct content to be compared with those obtained in other cultures; and changes in grid and questionnaire scores during therapy to be monitored. This mixed research method will also allow more idiographic and qualitative exploration of participants' construing and re-construing. In addition, the participants' narrative and the researcher's reflection will also be presented alongside the quantitative results, in order to present a relatively clear picture of the connection between individualisation and depression. In other words, by adopting both quantitative and qualitative methods, an individual's personal stories will not sink in the 'sea of figures'; both the figures and the individual's stories can be deconstructed through the utilisation of these methods.

In the next section, the research methods and the ways of analysing data adopted in this research will be introduced in more detail.

#### 3.3 Research Methods

3.3.1 The scale of 'individuality-orientation self-view and social-orientation self-view'

The scale of 'individuality-orientation self-view and social-orientation self-view' (see Appendices 1 & 2) was designed by Lu, Chang and Wu (2008). Social orientation implies collectivistic characteristics while personal orientation implies individualistic characteristics (Lu, 2008). Social orientation refers to social connection, self-cultivation, social sensitivity and self-adaptation in different circumstances, whereas personal orientation refers to independence, acting on one's own, competition and consistency.

This scale is a shorter version of the original scale (Lu, 2007) which was shortened from 85 items to 40 items. There are two separate subscales and the individuals' scores on social and personal orientations will be respectively obtained. 20 items are for social orientation, and the other half of the items are for personal orientation. In consideration of the time requirements, a shorter version was utilised. Its validity and reliability were attested by Lu, Chang & Wu (2008).

#### 3.3.2 Taiwanese Depression Scale

The Taiwanese Depression Scale (TDS) is a self-report scale, designed by Yu, Liu and Li (2008) (see Appendices 1 & 2). A four-point Likert-type scale, 0, 1, 2, 3, was adopted. Its reliability and validity have been verified as satisfactory (ibid.).

The designation of the scale is based on the holistic approach proposed by the American Holistic Medical Association (AHMA). A holistic approach means taking into consideration four dimensions: cognitive, emotional, physical and interpersonal dimensions, when evaluating a patient with depression. This scale has no subscales. It consists of 22 items in total in which four factors are included; first, the cognitive dimension with 6 items; second, the emotional dimension with 6 items; third, the physical dimension with 6 items; and fourthly, the interpersonal dimension with 4 items. High scores indicate a strong tendency of being depressed.

#### 3.3.3 The Screening for Somatoform Symptoms-7 (SOMS-7)

Rief and Hiller (2003) designed the Screening for Somatoform Symptoms-7 (SOMS-7) (see Appendix 3) based on all the somatic symptoms mentioned in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) and the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10). The reason for choosing SOMS-7 rather than other instruments such as the somatisation scale of the symptom checklist SCL-90-R8 and the hypochondriasis scale of the MMPI is because the latter two instruments exclude the majority of the somatic symptoms which are listed in the International Classification of Diseases and Related Health Problems 10th Revision (ICD-10) and DSM-IV (Rief & Hiller, 2003). The scale consists of 53 items, and the range of rating is from 0 (= not at all) to 4 (= very severe). When using the scale, the participant has to be asked to consider each of these items of which no clear causes can be found by physicians.

#### 3.3.4 Repertory grid interview

The repertory grid technique (RGT), based on personal construct theory, was adopted as a method in the research. According to Kelly, the Fundamental Postulate in personal construct theory refers to "a person's processes" which "are psychologically channelised by the ways in which he or she anticipates events" (Kelly, 1955, p.32). 'The ways' are the constructs, and the events are the elements (ibid.). RGT aims to elicit people's constructs in relation to specific topics, allowing the investigator to discover how people perceive a certain topic (Jankowicz, 2003). The method of conducting a repertory grid interview and eliciting constructs has been developed by many personal construct psychologists and therefore varies. In this research, constructs are elicited from triads of elements, and a "sequential form" of eliciting procedure is adopted (Fransella, Bell & Bannister, 2003, p.27). A sample repertory grid sheet is presented in Appendix 4.

#### 3.4 Design

#### 3.4.1 Overview

There are two phases of the study. In the first phase, in order to answer research questions 1 and 2, the Taiwanese Depression Scale and the scale of 'individuality-orientation self-view and social-orientation self-view' were employed. Both people with and without depression were required for this phase.

In order to answer research question 3 and further explore research question 2, the second phase of the study is a repertory grid interview, along with two other self-report scales, the Taiwanese Depression Scale and the Screening for Somatoform Symptoms-7 (SOMS-7).

#### 3.4.2 Recruitment

The participants were a group of Taiwanese women with/without depression over 18 years old, from Taipei.

The reason for choosing women as participants is related to the subject of this study. Firstly, there are twice the number of women with depression than men, which is in line with the global trend. Secondly, the prevalence of medically unexplained symptoms in women is higher than that in men in Taiwan. Thirdly, since this study is related to the development of collectivistic and individualistic characteristics under modernisation, women seem to experience more tension between the two characteristics based on the discussion in the Literature Review (see Chapter 2).

For the recruitment of women without depression, the method of snowball sampling (Goodman, 1961) was adopted. Recruitment was via advertisement on Facebook. On Facebook, the message was advertised on the researcher's own page and on several groups the researcher was part of. In addition, the researcher's friends also tagged the message on their

own pages. When anyone showed an interest in participating in the study, the researcher then emailed the questionnaires, introduction to the research and the consent letter to them, and notified them that they could email the researcher if they had any questions. The researcher also asked people who completed the questionnaires to introduce the project to their friends.

For the recruitment of women with depression, a psychiatrist referred his patients to the researcher. He owns a private clinic in Taipei, and most of his patients are Taipei residents. The inclusion criteria were given to the psychiatrist in advance so that he knew whom to refer to the study. Three inclusion criteria were firstly, mild to moderate depression, secondly, at least one medically unexplained symptom and thirdly, no other symptoms such as psychotic symptoms or mania, other than depression.

### 3.4.3 First phase: survey

For the participants without depression, the survey was completed via email. After gaining informed consent from the participants, the participants received an email which included the questionnaires, a short introduction to the research (see Appendix 5) and an informed consent letter (see Appendix 6). The participants emailed it back to the researcher after completion. The researcher also co-operated with a high school teacher. The teacher invited the researcher to share with his students their experience of studying in the UK, and the researcher obtained his permission to conduct the survey in his class after the sharing. The procedure of doing the survey with these students was the same as with people with depression who had face-to-face interviews with the researcher. The only difference was that it was a one-to-all interview; the researcher explained this research to all the students at the same time, before they individually completed the questionnaires.

For the participants with depression, the psychiatrist referred the clients to the researcher after gaining the permission of the participants. The survey was conducted face-to-face and one-to-one with the researcher in the clinic. This is because the participants might be more motivated to complete the survey in the clinic directly after they had showed their interest in the research rather than completing the survey online at home. These participants would receive the same documents as the participants without depression.

At the beginning of the survey, the participants were asked to provide some demographic information and answer an open-ended question, "Have you experienced any conflict between

different parts of yourself when making decisions? If the answer is yes, could you give an example?" (see Appendix 1). The participants were then asked to complete the scale of 'individuality-orientation self-view and social-orientation self-view' (Lu, 2007) (see Appendix 2), and the Taiwanese Depression Scale (Yu, Liu and Li, 2008) (see Appendix 3).

# 3.4.4 Second phase: repertory grid interview

Nine months after the survey, all the participants who completed the survey received an email asking them about their willingness to participate in an interview and the intervention group. 12 participants with depression replied with a positive answer, and participants without depression were selected to match the mean age of the participants with depression.

At the beginning, the participants were asked to complete the Taiwanese Depression Scale and the Screening for Somatoform Symptoms-7 (SOMS-7) (see Appendix 4). The participants were then asked about their anticipation of the group before conducting a repertory grid interview (see Appendix 5, a sample repertory grid sheet). Since the study was to examine rigidity and conflict relating to personal and social orientation, the elements relating to the two types of orientation were chosen as below. Actual self and ideal self are related to personal orientation and the remainder of the elements are related to social orientation.

- Actual self
- Me as a mother (If I were a mother)
- Me as a wife (If I were a wife)
- Me as a daughter
- Me as a woman
- Ideal self (How I would like to be)
- How other people would like me to be
- Father
- Mother
- A normal person

Jankowicz (2003) suggested that seven to ten constructs would be appropriate; in the research, ten constructs were elicited. All the elements were written on flashcards and were presented in groups of three to each participant in the same order. Elements numbered 1 to 3 were the first group to be presented, and the participant was asked to answer the question:

"Could you please find an important way in which two of them are alike and thereby different from the third?" This was to identify the emergent pole of the construct. The participant was then asked to think of the opposite of the emergent pole of the construct, so that the implicit pole was elicited. The element which had been chosen to be the third one, which was different from the other two elements, was removed and element 4 was substituted. This procedure was repeated until ten constructs were obtained.

Once the ten constructs were obtained, the participants were then asked to rate each element on a scale of one to seven for each construct. The closer the rating to one, the closer the element to the emergent pole of the construct; the closer the rating to seven, the closer the element to the implicit pole of the construct.

# 3.5 Ethical considerations

Ethical approval for the research was obtained from the Psychology Ethics Committee, University of Hertfordshire, and the protocol number is PSY/06/12/YCL (see Appendix 6); the protocol number of the extension of the ethical approval is PSY/06/12/YCL (see Appendix 7). Before participating in the research, the participants in this study had fully consented in relation to an informed consent letter (see Appendix 8) and a short introduction to the research (see Appendix 9) in which key information about the research was provided. The participants were also informed of the strict confidentiality of the research, and informed that they could ask any questions relating to the research, and drop out at any stage during the process of the research. In addition, they were informed that the data would be kept for five years (until 2019) and then destroyed.

For confidentiality, every participant was coded so that their names were not present on the data. The researcher could remove a participant's data if requested. The data was placed in a locked drawer, and the key kept with the researcher. All the identifying information was removed when writing up.

#### 3.6 Methods for data analysis

For data analysis, mixed quantitative and qualitative methods were adopted, including specific methods of repertory grid analysis. A cross-sectional correlational design was also employed.

#### 3.6.1 Cross-sectional correlational design

A cross-sectional correlational design was adopted to examine the correlations between personal orientation, social orientation, conflict, rigidity, the level of MUS and depression. In addition, demographic data such as education, age, occupation, area of residence, marital status and the number of children, were collected in order to examine any possible correlations between the data and depression.

#### 3.6.2 Repertory grid

Repertory grid analysis contains both qualitative and quantitative methods. The overview is shown below:

#### 3.6.2.1 IDIOGRID

IDIOGRID analysis software was utilised to conduct single grid Slater analyses (Slater, 1977). Two aspects of this analysis were focused upon.

### 3.6.2.1.1 Tightness

In this study, rigidity is defined as tight construing, which can be measured by IDOGRID. A principal component analysis can measure the percentage of variance within the construct system accounted for by the first component. The higher the percentage of variance accounted for by the first principal component, the more tightly organised and one-dimensional the individual's construing (Winter, 1992).

#### 3.6.2.1.2 Distances between elements

IDIOGRID was also used to measure the distances between elements for each participant. "This ranges from 0-2, and a distance of 1 is what would be expected by chance, whereas a distance of 0 indicates that the two elements are construed exactly the same" (Connabeer, 2013).

# 3.6.2.2 GRIDSTAT

GRIDSTAT was utilised to calculate the overall conflict in the construct system. Conflict is defined as inconsistency between one element and two constructs; that is when "an element is at the same time similar or close to two constructs which are themselves different or distant" or "an element is similar or close to one construct's pole and at the same time is different to or distant from another construct's pole, where the two construct poles are similar or close" (Bell, 2004, p.54).

#### 3.6.2.3 Content of construing analysis

For a more qualitative approach, content analysis proposed by Feixas, Geldschläger and Neimeyer (2002) was adopted. They categorised the content of construing into six groups, which are: moral constructs, emotional constructs, relational constructs, personal constructs, intellectual/operational constructs, and values/interests constructs. By analysing the content of the constructs, the participants' constructs can not only be further explored but also be compared to data collected in the Western world.

#### 3.6.2.4 Process analysis

As mentioned in the section of methodology, reflexivity is essential to personal construct psychologists, and the perception of the participants should be understood in this context. The interviewer needs to reflect upon the relationship with the participants in the whole research process. Consequently, apart from reflecting on taking the role of an interviewer, the interviewer can also consider the participants' verbal and non-verbal responses in the research process. In addition, the participants' personal history should also be considered. Jankowicz (2004) suggests what to observe around four aspects: the title, the constructs, the elements and the ratings (pp.78-79). Taking title as an example, Jankowicz (ibid.) suggests that the researcher can observe the participants' responses when the topic is introduced, how the interview begins, and any implied contract between interviewer and interviewee. Generally speaking, the interviewer can pay careful attention to the participants' reactions in the interview and notice whether there are any significant factors in relation to their life history and background which might relate to the research topic.

# 3.6.2.5 Eyeball analysis

After completing a grid, an eyeball analysis can be conducted before any statistical analysis. Eyeball analysis aims to provide the interviewer with a simple description of the grid and a general understanding of the participant's perception of the research topic. Jankowicz (ibid.) suggests six steps for conducting an eyeball analysis: "(1) What is the interviewee thinking about? (2) How has the interviewee represented the topic? (3) How does s/he think?

Constructs! (4) What does s/he think? Element ratings! (5) Look at the supplied elements and constructs and ratings. (6) Draw conclusions" (p.81). The analysis does not mean that the conclusions the interviewer drew at this stage are final. The conclusions should be further looked at together with statistical results. In addition, the interviewer should be aware of his/her subjectivity. Although it is not a therapy session, (embodied) countertransference can also be noticed and reflected if there is any.

### 3.7 Conclusion

In this chapter, the first three research questions have been presented, based on the Literature Review. Methodology was then described, which was based on personal construct psychology (PCP). The four reasons for adopting this methodology were then discussed. Firstly, it is derived from constructivism, its ontological and epistemological positions being suitable for exploring the relation between depression and individualisation in Taiwan. Secondly, PCP provides a philosophical basis to explore both the similarities and differences between individuality and culture. Thirdly, there is no separation between body and mind in personal construct theory, and the union between body and mind is the fundamental assumption in this study. Fourthly, PCP provides a combination of quantitative and qualitative methods, and encourages reflexivity. The chapter then discusses the methods, research design and other considerations in relation to the research.

By adopting PCP as methodology and methods, the research questions can be explored from the perspective of constructivism. The body aspect will also be taken into consideration, the uniqueness of individual participants and the commonalities of the participants could be understood, and the participants' perception of these questions can be presented and be analysed both qualitatively and quantitatively.

In the next chapter, the collected data will be presented, followed by data analysis and a discussion of the results of the analysis.

# **Chapter Four: Findings and discussion**

# 4.0 Introduction

This chapter aims to explore the three research questions by analysing the data of the survey and the repertory grid interview, and describing the results of eyeball and process analysis, followed by a discussion of the results. In addition, this chapter also aims to investigate the psychological characteristics of Taiwanese people with depression, which can also respond to the first three research questions. The results are expected to provide therapeutic implications, which will be focused on in the following chapter.

# 4.1 Demographic Information

147 copies of the questionnaire were collected; 39 copies are from women referred by the psychiatrist, and 108 copies are from women not referred by the psychiatrist. The summary of demographic information is illustrated in Table 4.1.

	Women with depression (Group 1) N=39	Women without depression (Non Group 2) N=108
Age		
18-19	2 5.13%	38 35.18%
20-29	9 23.08%	5 4.63%
30-39	9 23.08%	40 37.04%
40-49	15 38.45%	24 22.22%
50-59	2 5.13%	1 0.93%
60-69	2 5.13%	0 0.00%
Marital status		
Single	22 56.41%	75 69.44%
Married	11 28.21%	32 29.63%

Table 4.1 Summary of demographic information (N=147)

Divorced	6 15.38%	1 0.93%
Children		
none	25 64.10%	85 78.70%
1 child	7 17.95%	11 10.19%
2 children	6 15.38%	12 11.11%
3 children	1 2.56%	0 0.00%
Education		
high school	9 23.07%	41 37.96%
bachelor	26 66.67%	39 36.11%
master	4 10.26%	27 25.00%
PhD	0 0.00%	1 0.93%
Occupation		
housewife	6 15.38%	5 4.63%
Engineering, manufacturing	2 5.13%	6 5.56%
Government official	4 10.26%	16 14.81%
Service	5 12.82%	12 11.11%
Arts	0 0.00%	7 6.48%
Law & business	5 12.82%	6 5.56%
Student	5 12.82%	40 37.04%
Education	3 7.69%	4 3.70%
None	5 12.82%	3 2.78%
Others	4 10.26%	9 8.33%

By adopting a chi-square test, it was found that the two groups differed significantly in terms of the demographic characteristics of age, education, occupation and marriage (see Table 4.2). These differences can be seen from Table 4.1. For example, while 35.18% of women

without depression were aged between 18 and 19, only 5.13% of women with depression were aged between 18 and 19. 23.08% of women with depression were aged between 20 and 29, while only 4.63% of women without depression were aged between 20 and 29. As for education, most women with depression, at 66.67%, held a bachelor degree, while most women without depression, at 37.96%, had only completed high school. Moreover, while the highest percentage occupation in the group of people without depression, 37.04%, was student, the highest percentage of the participants with depression, at 15.38%, was housewife. In addition, although most participants were single, constituting 56.41% of women with depression and 69.44% of women without depression were divorced. The Pearson correlations between the variables were examined and are presented in Table 4.3. It can be seen from Table 4.3 that depression is only correlated with personal orientation (r=-.204, p<.05).

Age	Marital status	Children	Children Education		
x <sup>2</sup> =32.902	x <sup>2</sup> =13.337	$x^2 = 5.423$	$x^2 = 11.231$	x <sup>2</sup> =25.627	
p<.001***	p=.001***	p=.143	p=.011**	p=.042*	
			* . ^ * * .	01 444 2 001	

NOTE: a. Statistical significance: \*p < .05; \*\*p < .01; \*\*\*p < .001. b. Chi-square test, two-tailed.

Table 4.3 Correlations between variables (N = 147)

Variables	D	А	С	Е	SO	РО
Depression (D)	1	.479	090	.087	.073	204**
Age (A)	004	1	.543***	.551***	194*	.054
Children(C)	09	.543***	1	.057	006	1
Education (E)	.087	.551***	.057	1	169*	.038
Social orientation (SO)	.073	194*	006	169*	1	.160
Personal orientation (PO)	204*	.054	1	.038	.160	1

Note: Statistical significance: \*p < .05; \*\*p < .01; \*\*\*p < .001, two-tailed.

In addition, hierarchical multiple regression was then adopted to further investigate the ability of social and personal orientations to predict levels of depression after controlling for age, marital status, children, education and occupation. It can be seen from Table 4.4 that personal orientation and social orientation were statistically significant ( $R^2$ =.076, p =.021) to explain an additional 5.3% variance in depression beyond age, marriage, children, occupation and education ( $R^2$ =.023, p=.644). Therefore, although there are demographic differences between people with and without depression in age, marital status, education and occupation, these variables are less able to explain depression than personal and social orientations. However, the r square value, .076, did not reach statistical significance (F=1.640, p=.129) (see Table 4.5), and therefore personal and social orientation cannot be explained as a dominant variable predicting depression, which is a more effective predictor than the other variables.

				Std arror	Change statistics				
Model	R	R <sup>2</sup>	Adjusted R square	Std. error of the estimate	R <sup>2</sup> change	F change	df1	df2	Sig. F change
1	.153 <sup>a</sup>	.023	001	13.019	.023	.674	5	141	.644
2	.276 <sup>b</sup>	.076	.030	12.751	.053	3.984	2	139	.021

Table 4.4 Model summary of hierarchical multiple regression

NOTE: a. Predictors: (constant), education, children, occupation, marriage. b. Predictors: (constant), education, children, occupation, marriage, personal orientation, social orientation.

Table 4.5 Anova table of hierarchical multiple regression

	Model	Sum of Squares	Df.	Mean Square	F.	Sig.
1	Regression	570.927	5	114.185	.674	.644 <sup>a</sup>
	Residuality	23896.923	141	169.482		
	Total	24467.850	146			
2	Regression	1866.431	7	266.633	1.640	.129 <sup>b</sup>
	Residuality	22601.420	139	162.600		
	Total	24467.850	146			

NOTE: a. Dependent Variable (Constant): age, children, education, occupation, marriage. b. Predictors: (Constant), age, children, education, occupation, marriage,

personal orientation, social orientation.

c. Predictor: depression.

The connection between depression and these variables (age, marital status, occupation and education) has been studied in other research. For example, Frerichs, Aneshensel and Clark (1981) indicated that people aged from 18 to 24 are at the highest risk of getting depression in Los Angeles, while other research conducted in Taiwan indicates that the highest rate of depression is within the 25 to 44 age group (He, 2004). Wu and Kuo (2007) interviewed two Taiwanese couples, and concluded that married women can be at high risk of getting depression when the couples distributed their responsibilities in terms of traditional social roles (such as wife status being lower than husband status). In addition, unemployment is seen as a major risk factor for getting depression (Lewis & Sloggett, 1998), due to the strong connection between poverty and depression (Patel, 2001). Furthermore, education is also associated with depression; people with medium and low education have a higher risk of getting depression (Lindström, 2009).

Nevertheless, since personal and social orientations are more able to explain depression in this study, the other variables will be less considered and the main focus will be on personal and social orientations.

# 4.2 Results from survey

#### 4.2.1 Quantitative results

#### 4.2.1.1 Depression

Not surprisingly, by adopting the t-test, the level of depression among people referred by the psychiatrist (mean=33.54, SD=13.282) is statistically significantly higher than the group of people not referred by the psychiatrist (mean=21.34, SD=11.233) (p<.001, d.f.=145, one-tailed). However, the mean score of women with depression is lower than the cut-off score, 37, determined by the inventors of the Taiwanese Depression Scale (Yu, Liu & Li, 2008). This might be because these participants have mild to moderate depression and all are taking medicine on a regular basis, so that their psychological depressive symptoms have been controlled.

## 4.2.1.2 Personal orientation and social orientation

The mean of social orientation (m=87.88, SD=10.668) is higher than the mean of personal orientation (m=77.78, SD=11.275), which is consistent with the finding of Lu's research

(2008) that Taiwan is still a more socially-oriented culture under the influence of modernisation. As for personal and social orientations, personal orientation is nearly statistically significantly correlated to social orientation (r=.16, p=.053, two-tailed) (see Table 4.6). In other words, there seems to be a tendency for the participants to score highly on one orientation if they score highly on the other.

A moderate negative correlation between personal orientation and depression was found (r=.204, p=.013, two-tailed), which was not found between social orientation and depression (r=.073, p=.379, two-tailed). Interestingly, this result is inconsistent with the Western research which supports the conclusion that individualistic characteristics are highly related to depression, but it is consistent with Rin's (2007) assumption that the development of individualistic characteristics might decrease depression. Rin assumed that individualistic characteristics may help people confront the pressure from collectivistic traditional values, and therefore may reduce depression.

This result partly responds to research question one: 'How do collectivistic and individualistic characteristics relate to depression in Taiwan?' Personal orientation and depression show a negative correlation. This research question will be further explored when discussing the qualitative results later.

	Personal Orientation	Social Orientation
Personal orientation (m=77.78, SD=11.275)		
Social orientation (m=87.88, SD=10.668)	r=.16, p=.053	
Depression (m=24.58, SD=10.668)	r=204, p=.013*	r=.073, p=.379

Table 4.6 Correlations between personal/social orientation and depression

NOTE: a. Statistical significance: \*p < .05. b. Pearson correlation test, two-tailed.

# 4.2.1.3 Conflict between personal and social orientations

Two ways have been adopted to analyse the correlation between conflict and depression. First, the participants were divided into two groups in terms of the conflict between social orientation and personal orientation. One is the high conflict group (n=32), and the other is the low conflict group (n=115). High conflict is identified when the social-oriented self and personal-oriented self are above the mean (M of the former, 4.43; M of the latter, 4.03; p<.001), which derives from the work of Lu (n=839) who created the scale of social- and personal-oriented self (Lu, 2008, p.350). Moreover, low conflict is identified when both the social-oriented self and personal-oriented self are not higher than the mean. It is either the social- or personal-oriented self which is above the mean, and the other is below the mean, which is also identified as low conflict. The mean depression score for both the low and high conflict groups are shown in Table 4.7.

	The low conflict group (N=108)	The high conflict group (N=31)
Mean	23.67	25
Standard deviation	12.475	13.777

Table 4.7 Mean and SD of depression scores in the high and low conflict groups

Although the mean depression score of the high conflict group is higher than that of the low conflict group, no statistically significant difference was shown by the t-test (t=.512, p=.610, d.f.=137, two-tailed). Therefore it can be assumed from this analysis that conflict has no significant influence on the level of depression.

The result can also be examined in another way. The participants have been divided into two groups in terms of whether or not they were psychiatric referrals. Group 1 (n=39) consists of women who are referred by the psychiatrist, while Group 2 (n=108) consists of women with depression not referred by the psychiatrist. By using a chi-square test, it is found that there was no statistically significant association between conflict and psychiatric status ( $x^2$ =.467; p=.494, two-tailed) (see Table 4.8).

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.467 <sup>a</sup>	1	.494		
Continuity Correction <sup>b</sup>	.209	1	.647		
Likelihood Ratio	.456	1	.499		
Fisher's Exact Test				.503	.318
N of Valid Cases	147				

Table 4.8 The result of chi-square test

NOTE: a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.49.

b. Computed only for a 2x2 table.

It can be seen that by using t-test and chi-square, conflict and depression are not associated. However, before coming to any potential conclusion on the second research question, 'How does conflict between collectivistic and individualistic characteristics relate to depression in Taiwan?', this association will be further explored by discussing both qualitative and quantitative results of the survey and repertory grid interview.

4.2.2 Qualitative results

With regard to the analysis of the qualitative question, 'Have you ever experienced inner conflict? If so, could you give one example at least?' in Group 2 (women without depression), four women answered 'no', and one woman did not answer the question. 103 women out of 108 admitted that they had experienced inner conflict, and amongst these 103, 52 mentioned the conflict between social and personal orientations. Based on the four respective categories (see Chapter 2, p.59) in both social and personal orientations, the participants' conflict was classified. For example, three women mentioned a conflict between expressing their own opinions and keeping quiet in order to maintain harmony in groups. This conflict was classified as 'to act on one's own' in personal orientation, whereas 'keeping quiet in order to maintain harmony in the group' can be classified as 'self-adaptation in different circumstances'.

It is interesting to note that in Group 2, 52.6% of teenage participants left this question blank. (Unfortunately, the researcher had no chance to ask their reasons for leaving it blank, as almost all the teenagers were students in High School, and there was no opportunity to go back to the campus.) The percentage is much higher than in the women over twenty, which is 98.5%. However, 50% of teens who claimed that they had experienced inner conflict mentioned a conflict between social and personal orientations, and the conflicts they mentioned were all connected to the parental relationship. Teenagers may experience the psychosocial conflict of 'self-identity versus self-confusion', as proposed by Erikson (1968), and teenagers might experience the conflict between self and social groups in the process of constructing the self, more than adults do.

In Group 1 (women with depression), 35 women out of 39 agree that they have experienced inner conflict, and 20 out of these 35 women clearly mentioned the conflict between personal and social orientations. For example, one mentioned that she is struggling with "whether I should speak personal opinions to my husband and children because I am afraid of being shouted at by them". Another example is that "I desperately wanted to commit suicide, but at the same time I considered my parents need to be taken care of". It shows that the percentages of having experienced inner conflict and the conflict between personal and social orientations are similar between two groups. In other words, the participants with depression did not experience more conflict than participants without depression.

With regard to the remainder of the 15 answers which are not obviously connected to the conflict between social and personal orientations, in some of them it is not possible to identify whether they are related to the conflict because the participants did not clearly describe the content of the conflict, for example, "Should I get a divorce?", and "Should I stay home with my children or find a job?". There is no clue whether the issues they were struggling with were related to the conflict between social and personal orientations.

Furthermore, it is worth noting that women in Group 2 use more words to describe their inner conflict than women in Group 1, so that it is easier for the researcher to identify whether their inner conflicts can be categorised as a conflict between social and personal orientations. However, the judgement of the participants using more words is by the researcher's subjective observation and is not being counted, therefore this assertion is not examined. Moreover, there are statistically significantly more descriptions of the ways of self-regulating inner conflict in

Group 2 than in Group 1 ( $x^2=5.776$ , p=.016, two-tailed). In Group 1, only five out of 35 participants mentioned their ways of self-regulating, while 37 out of 103 participants in Group 2 mentioned it. Whether the participants mentioned ways of self-regulation was coded by the researcher. Self-regulation has been defined as a purposive process in which self-corrective adjustments are generated within the individual (Carver & Scheier, 2011). For example, a participant mentioned that the inner conflict she was once faced with was whether or not she was gay. She asked for her friend's suggestions, and then realised that maybe she needed to further explore traumatic experiences relating to her relationship with her father, before deciding whether she was a gay or not. She mentioned how she faced this conflict, and how she regulated her thoughts. Therefore, she was coded as mentioning ways of self-regulation.

However, it also has to be noted that due to there being only one coder, the reliability of this result was not checked; in addition, the intentionality of the researcher might also influence the result. However, this result is still valuable as a starting point for further research.

#### 4.3 From survey to repertory grid interviews

Before conducting the survey, the researcher predicted that psychological conflict might be correlated to depression, as conflict regarding acculturation seems to relate to depression, according to Berry (1998). Surprisingly, the result suggests that no correlation has been found between conflict and depression. This result was followed by two ideas for further research. Firstly, the result might change if the way of measuring conflict is different. The measurement of conflict in the survey is based on Lu's (2008) data, and this measurement only provides our understanding of the participants' scores on both orientations; their psychological conflict in relation to these two orientations based on the psychological construct system is unknown. Consequently, the repertory grid technique can be conducted to examine this correlation in a different way.

Secondly, if there is no correlation between depression and conflict, as the result in the survey noted, what variable might be related to depression? As mentioned above, more people without depression addressed their ways of regulating inner conflict than people with depression. Self-regulating the conflict between personal and social orientations can be a presentation of low tightness in personal construct psychology; therefore tightness might be a potential variable connecting to depression.

# 4.4 Results obtained in the interview

# 4.4.1 The participants who undertook the repertory grid interview

In the next section, not only quantitative data will be presented; qualitative data based on process analysis and eyeball analysis will also be presented alongside the statistical data. 12 participants with depression and 12 participants without depression who completed the survey were willing to be interviewed after the survey. Both groups' mean age was 34.

#### 4.4.2 SOMS-7 and depression

#### 4.4.2.1 Quantitative data

Consistently with the literature, somatic symptoms are highly correlated with depression (r=.658, p<.001, two-tailed). In addition, not surprisingly, the mean of somatic symptoms for participants with depression (m=61.27, SD=23.64) is statistically significantly higher than in their counterparts without depression (m=42.58, SD=17.85) (t=-2.152, p<.025, d.f.= 22, one-tailed). However, it is worth noting that both figures are higher than the figures provided by the inventors of SOMS-7 (Rief & Hiller, 2003). In their research, the mean scores on the SOMS-7 for 34 patients in Prien, Germany increased from m=36.6 to m=39.3 while they were waiting for therapy. It shows that women without depression in this research have even higher scores on the SOMS-7 than the patients searching for treatment in Prien. This result is quite interesting. Firstly, the result not only shows consistency with the majority of the studies indicating that the population of people with depression with MUS in Chinese culture is higher than that in the Western world. It might also indicate that women in Chinese culture tend to express their psychological, social and cultural-related problems in the form of somatisation (Kleinman, 1980).

#### 4.4.2.2 WayShow's overweight as a MUS

According to Wang and Yu (2001), Taiwanese women seem to confirm the existence of self through bodily suffering, which is deeply connected to social context, emotions, family and identity. Therefore, regardless of whether or not they have depression, Taiwanese women might tend to show more somatic symptoms as it is a way of looking for a self-position in society, and they may or may not be aware of it. WayShow's case might be an example of this. WayShow was a 33-year-old woman in Group 2. She was very friendly and willing to share;

she was energetic, and the way she spoke was very organised. WayShow was overweight, and she told me that she started to gain weight when she came back to Taiwan one year ago. She had gone to Australia for work three years ago, and she said she was very happy and satisfied with her life there. However, her parents kept telling her to come back to Taiwan during the two years when she was staying in Australia. They were even somewhat 'threatening' her by telling her that she would regret it for the rest of her life if they died while she was away. Wayshow felt extremely guilty for not being filial enough in staying at her parents' side as they wished. She thought she could not be so selfish as to only pursue her own self-actualisation without taking care of her parents. Eventually, she left the job in Australia and returned to Taiwan.

Nevertheless, she told me that she was still thinking about going abroad all the time during this year in Taiwan. She asked her parents: "I am in Taiwan. Now you are satisfied. But how about me? How about my own career and life? I do really want to go abroad again... I do miss the life there." WayShow's mother replied to her: "In the next life, you can do what you like. If you do really want one thing, just keep thinking of it, and you can get it in your next life." WayShow was frustrated by her mother's answer.

She told me that she started gaining much weight during this year. She admitted that she ate much more than before, but she did not have an eating disorder, and it had never happened to her before that she could not stop eating. She was frustrated by her overweight. Although she wanted to lose weight, she had no motivation for doing so. Excluding any physiological reasons, her overweight might be a somatic response to her vulnerability and anger at staying with her parents in Taiwan. WayShow's depression scores were not higher than the cutoff, and her overweight might be a way to show her anger or take 'revenge' on her parents (because her parents greatly worried about her body condition) by self-punishment. It also might be a representation of her sadness and anger toward herself, or a reaction of giving up on herself.

The above assumptions were not confirmed in this study. However, it provides an example to explain the possible reason why women without depression had higher somatisation in this study than women without depression in the Western world. In addition, further research into the connection between self-identity and somatisation in Taiwanese women will also be illuminated.

# 4.4.3 Tightness

#### 4.4.3.1 Qualitative data

When interviewing women with depression, the researcher noted an interesting phenomenon which might be related to tight construing. The method of eliciting constructs is that after separating one element from two elements, the participants were asked to think of the opposite pole. However, it seemed to me that every participant with depression was more or less confused in thinking of an implicit pole. Rather than thinking of the opposite pole, they tended to think of the construct which was based on the two elements. Consequently, I had to repeat the direction and make sure that they followed it after they provided an implicit pole.

Taking ShuTing as an example, she was 37 years old and was single. She had been seeing a psychiatrist and taking medicine for depression for five years. Some of her constructs are recorded below: "ruthless/strict" vs. "prison/helpless", "being compelled to live" vs. "furious", "have no choice" vs. "linger on in a steadily worsening condition", and "expect to be loved by father" vs. "being isolated". Before asking her what her contrast construct pole was, I reminded her of the rule again. However, I found this strange as the above constructs seemed not to contrast with each other. Of course it is also possible that these pairs of construct poles contrast with each other from her point of view.

However, what if some of ShuTing's elicited construct poles were not opposite poles? This situation was more common among participants with depression than those without depression. Is it possible that the level of tightness for women with depression is relatively high, with the result that they were less able to adjust their construct system and follow the rules?

After the first session, ShuTing showed her anger towards the researcher. She complained that the researcher had wrongly told her the route to walk from the Underground station to where the sessions took place. The researcher had told her to turn left out of the station and to walk along FuHua Street to its end. However, it is actually FuHua 'Road' rather than 'Street', and it took her a long time searching for FuHua Street. She then shouted at the researcher, and said that she "almost died because of your (the researcher's) mistake". This probably reflected her very high tight level of construing. She seemed unable to bear with uncertainty; the

situation of not finding the street she expected might make her feel uncertain, and the feeling of uncertainty might make her feel she "almost died".

# 4.4.3.2 Quantitative data

The observation above is partly confirmed by the quantitative data. The level of tightness (the percentage of variance accounted for by the first component from the principal component analysis of the grid) in Group 1 (women with depression) (mean=57.332, SD=11.869) is statistically significantly higher than in Group 2 (women without depression) (mean=48.361, SD=10.494) (t=-1.924, p=.026, d.f.= 22, one-tailed). However, the correlation between tightness and depression is not statistically significant (r=-.097, p=.660, two-tailed) (see Table 4.9). This might be due to the small sample sizes, resulting in insufficient statistical power. As mentioned above, although there is a statistically significant difference of depression between the two groups, the means of depression in the two groups are all lower than the cut-off determined by the inventor of the Taiwanese Depression Scale. This might be because all the participants with depression were taking medicine and their depressive psychological symptoms had been controlled. Moreover, it might also relate to the validity of this depression scale. Although its reliability and validity had been verified as satisfactory by the inventor of the scale (Yu, Liu and Li, 2008), it has not yet been widely examined. Consequently, this might also partly result in the statistically insignificant correlation between depression and tightness. Furthermore, it might be also because the correlation between tightness and depression is weak; if so, it would be very interesting to show the cultural specificity of Taiwan as the result is inconsistent with some research in the Western world which found a positive correlation between the two variables (Bannister, 1962; Winter, 1994). However, it needs to be further examined.

	Р.О.	S.O.	D	S	Т	С
Personal orientation (P.O.)						
Social orientation (S.O.)	r=.16 p=.053					
Depression (D)	r=204 p=.013	r=.045 p=.836				

Table 4.9 Correlations between variables (two-tailed) (Dep, N=12; No dep, N=12)

Somatisation (S)	r=199 p=.364	r=037 p=.868	r=.658 p<.001***			
Tightness (T)	r=246 p=.259	r=042 p=.850	r=097 p=.660	r=.216 p=.322		
Conflict	r=.052 p=.809	r=.326 p=.121	r=.028 p=.899	r=.174 p=.426	r=097 p=.660	
Actual and ideal self	r=167	r=218	r=.441	r=.185	r=046	r=235
	p=.436	p=.307	p=.031*	p=.398	p=.833	p=.269
Actual self and roles <sub>b</sub>	r=080	r=256	r=.403	r=.151	r=108	r=186
	p=.712	p=.227	p=.051	p=.491	p=.623	p=.383
Actual self and me as woman	r=093	r=262	r=.299	r=.038	r=097	r=180
	p=.665	p=.217	p=.155	p=.865	p=.659	p=.401
Actual self and others <sub>c</sub>	r=067	r=114	r=.330	r=.083	r=.050	r=189
	p=.755	p=.597	p=.127	p=.706	p=.822	p=.376
Actual self and mother	r=059	r=217	r=.362	r=.157	r=079	r=118
	p=.788	p=.320	p=.090	p=.485	p=.728	p=.593
Actual self and father	r=123	r=248	r=.369	r=.221	r=110	r=033
	p=.577	p=.254	p=.083	p=.323	p=.627	p=.882
Actual self and a normal person	r=.120	r=.165	r=143	r=316	r=618	r=008
	p=.576	p=.441	p=.505	p=.141	p=.002**	p=.969
Ideal self and others	r=105	r=240	r=.361	r=.167	r=.137	r=158
	p=.627	p=.259	p=.083	p=.447	p=.532	p=.460
Ideal self and roles	r=167	r=240	r=.419	r=.188	r=.062	r=210
	p=.435	p=.258	p=.041*	p=.391	p=.780	p=.324
Others and roles	r=111	r=176	r=.325	r=.154	r=.004	r=145
	p=.606	p=.412	p=.122	p=.482	p=.986	p=.499

NOTE: a. Statistical significance: \*p < .05; \*\*p < .01; \*\*\*p  $\leq$  .001.

b. 'Roles' refers to the three elements: me as a mother/daughter/wife.

c. 'Others' refers to the element 'how other people see me'.

d. Figures in red are statistically significant those in green are nearly statistically significant

This result can respond to the research question three; there is no correlation between tightness and depression based on the result in this study. In addition, it was found that there is

a negative correlation between tightness and the distance between the elements 'actual self' and 'a normal person' (r=-.618, p=.002, two-tailed). In other words, the less people perceive their actual self as close to a normal person, the more the level of tightness. This result might be connected to cultural influence. A case that can explain this assumption will be presented later.

Apart from the two associations above, tightness was not found to be associated with other variables such as somatic symptoms (r=.216, p=.322, two-tailed), conflict (r=-.097, p=.660, two-tailed), social orientation (r=-.042, p=.850, two-tailed), personal orientation (r=-.246, p=.259, two-tailed) and distances between elements (see Table 4.9).

4.4.4 Distance between elements in association with depression

# 4.4.4.1 Qualitative data

A participant with depression, YiRue, is highly educated, and currently a housewife with two children. She told the researcher that before her husband had been identified as having deficit hyperactivity disorder (ADHD), she already felt her husband might be a ADHD sufferer and she found many difficulties in getting along with her husband. When she told her friends about her difficulties, her friends advised her to count her blessings, and told her that her husband was already good enough. According to YiRue, her friends thought her husband was good enough because he held a PhD in Physics and was doing his post-doctorate at Taiwan University, the best university in Taiwan. In addition, they saw her husband helping YiRue by taking her bag. From now on, every time when she gathered with her husband and friends, as long as her husband displayed some attentive behaviour, her friends would tell her how sweet her husband was. Even though she was uncomfortable about her friends' behaviour, she did not reveal these feelings to her friends. On the one hand, she felt she had been misunderstood as a woman who could not appreciate her life and that her friends were wrong. On the other hand, she thought that perhaps her friends were right and she had to stop blaming her husband. She did not know how to deal with the situation. She tried to be a 'good' wife as her friends and she herself expected. When she described herself during this time, she said: "I was lost. I wanted to be myself, but I did not know what myself looked like." After a couple of months, she felt she was under huge pressure and suffered from depression.

Playing social roles seem to be a hard burden to YiRue. She felt pressure from being a wife and lost herself. Nevertheless, YiRue was not the only one struggling in playing social roles in this study, especially in the group with depression.

#### 4.4.4.2 Quantitative data

Depression was found to be positively correlated with the distance between 'actual self' and 'ideal self' (r=.441, p=.031, two-tailed). This result is consistent with the literature; people with depression tend to have low self-esteem, which is indicated by perceiving the actual self as different from the ideal self (Winter, 1994). Outside the field of personal construct psychology such as in self-discrepancy theory (Higgins, 1987), the distance between actual self and ideal self is also considered as highly connected to depression (Hewitt & Flett, 1991; Orth, Berking & Burkhardt, 2006; Tangney, Burggraf & Wagner, 1995). However, apart from this, depression was also found to be nearly statistically significantly positively correlated with the distance between actual self and 'me as a mother', 'me as a daughter', and 'me as a wife' (r=.403, p=.051, two-tailed). Moreover, depression was also positively correlated to the mean distance between ideal self as 'me as a mother', 'me as a daughter', and 'me as a wife' (r=.419, p=.041, two-tailed) (see Table 4.9).

It can be seen that apart from the correlation between depression and the distance between actual self and ideal self, distances of the self from other elements which are related to the social roles that the individual takes are also associated with depression. The farther the distance between self and social roles is, the higher the level of depression. This shows that the elements connected to social relations might be an indicator of depression in Taiwan.

Chinese culture is a collectivistic culture, in which personal boundaries are blurry, and self can be expanded to include family, friends and even strangers (Fei, 1948). Therefore, social relations seem to be complicated in Chinese culture, as social relation does not simply mean the relations between self and others. 'Self' does not simply refer to individuality, and 'others' does not completely refer to those people who are physically outside of a human being. Consequently, research on self-identity in this collectivistic culture might need to be more considered.

This result echoes YiRue's struggling. Her friends could easily express their opinions about other people's private business, and YiRue did not tell her friends that their suggestions

made her feel uncomfortable, in order to maintain social harmony. Friends became part of herself, and they could powerfully influence YiRue's decisions and her sense of self. YiRue's depression might be highly correlated to the fact that she tried to be a wife, meeting social standards which however were different from her actual self.

## 4.4.5 Conflict

Conflict in Group 1 (mean=37.841, SD=3.232) is statistically significantly higher than Group 2 (mean=38.467, SD=7.062) (t=-.279, p=.392, d.f.= 22, one-tailed). In addition, echoing the result in the survey, overall conflict in construing does not relate to depression (r=.028, p=.899, two-tailed). Furthermore, no significantly positive correlation was found between conflict and social orientation (r=.326, p=.121, two-tailed). This result is inconsistent with Yao's proposition (1985) that people who internalise traditional values (high social orientation) might be more likely to sense inner conflict in the development of modernisation. Yao's research she further proposed that this inner conflict may generate depression; but in this study, the conflict was not correlated to depression.

#### 4.4.6 Somatisation

There was no relationship between the scores of SOMS-7 and grid variables; however, the scores of SOMS-7 were found associated with depression (r=.658, p<.001, two-tailed) among the various variables (see Table 4.9). The association between MUS and depression is not surprising, since MUS is widely recognised as highly likely to be accompanied with depression, as mentioned in the Literature Review. Apart from the association with depression, the scores of SOMS-7 did not associate with other variables.

# 4.4.7 Social and personal orientations

Apart from the statistically significant association between personal orientation and depression (r=-.204, p=.013, two-tailed), personal/social orientations were not found to be correlated to the other variables, such as the distances between elements (see Table 4.9).

# 4.5 Qualitative data from the repertory grid interview: the content of construing

The result of the analysis of the content of construing in this study, and the data obtained from Feixas' research which proposed a method for qualitatively analysing the data, is listed in Table 4.10.

Type of constructs	Group 1 (women with depression)		(women	up 2 without ssion)	Feixas (2003)		
Relational	N=37	30.8%	N=46	38.3%	N=206	24.4%	
Personal	N=30	25%	N=22	18.3%	N=198	23.4%	
Moral	N=17	14.17%	N=20	16.7%	N=127	15%	
Emotional	N=13	10.83%	N=7	5.8%	N=182	21.5%	
Values	N=18	15%	N=24	20%	N=51	6%	
Intellectual	N=5	4.17%	N=1	0.83%	N=36	4.3%	
Total	N=120	100%	N=120	100%	N=800	100%	

Table 4.10 The numbers of each type of construct and the percentages (de: N=12, No-de, N=12)

It can be seen from the table that the percentage of emotional constructs in Group 1 (10.83%) is much higher than that in Group 2 (5.8%), but this difference does not reach statistical significance ( $x^2$ =1.659, p=.198, two-tailed). Therefore, there is not sufficient evidence concurring with Feixas' research (2003) in which people with depression have more emotional constructs than people without depression. Nevertheless, interestingly, when comparing the combined percentage in the study with the percentage in Feixas' research (2003), both the percentages of emotional constructs in Groups 1 and 2 are much lower than the result obtained by Feixas (21.5%), and reach statistical significance ( $x^2$ =11.586, p=.003, two-tailed). This might relate to a specifically Chinese cultural and linguistic factor; there are restricted vocabularies directly referring to emotions in Chinese culture. In addition, people in Chinese culture tend not to express emotions to strangers, and tend to show their emotions only in front of the people they trust (Kleinman, 1985). Therefore, the participants might have been less willing to use emotional terms in front of the researcher, who was a stranger to them.

It is also worthy of note that the percentages of relational and value constructs in both Groups 1 and 2 are higher than Feixas' result. However, no statistically significant difference was found in relational constructs ( $x^2$ =4.512, p=.105, two-tailed), although it was found in value constructs ( $x^2$ =8.761, p=.013, two-tailed). The statistically insignificant result shows that

people in individualistic cultures are not necessarily less concerned about social relations than Chinese people.

Higher percentages of value constructs might illustrate the characteristic of selfcultivation in Chinese culture, which is deeply influenced by Confucianism. One important theme of Confucianism is the idea that people should keep trying throughout their whole lives to achieve the confines of 'ren' (The Confucian Analects). 'Ren' represents very high social moral standards, and is almost impossible to achieve (Tu, 1985). Confucius offered several different meanings of 'ren' in The Confucian Analects. Generally, 'ren' means benevolence, virtue, compassion; an attitude or a personality that a gentleman should have. In order to achieve 'ren', The Confucian Analects taught people to "try very hard to cultivate self and follow the regulations of li" (克己復禮, ke ji fu li). The ultimate aim of achieving 'ren' is to be harmonious in a society.

Consequently, people in Chinese culture might tend to monitor themselves more than people in the Western world (Lin, 1985), and the higher percentage of value constructs than in Feixas' study might present the internalisation of the regulations of 'li' and the values of 'ren'. Moreover, this internalisation might also relate to the participants' high social orientation, since the teachings of Confucius are closely related to social harmony.

Nevertheless, it should be noted that since the definitions of 'ren' and 'li' are quite comprehensive and that there have been social and cultural changes over time, the interpretations of 'li' and 'ren' can be expected to have undergone significant changes, so that the value constructs construed by the participants might not be the same as the original Confucian teachings. For example, although Confucius proposed that being 'ren' means being extraordinary, which means being harmonious in society, being extraordinary gradually came to mean being 'successful' in society (Dirlik, 1995), which particularly refers to being rich and having power. It became more obvious when this 'altered Confucianism' combined with capitalism in modern times; the definition of being successful is quite narrow, and when you call someone 'successful' he or she must be very rich or powerful. This can be seen from the articles proposing that China has becomes a money-driven society in modern times (Dirlik, 1995; Fan, 2007).

An issue which has to be addressed is that only one researcher analysed the data. Therefore there was no check on reliability, and the result of the analysis should be further examined by future replication studies. Nevertheless, it still illustrates an interesting comparison between the original data from Feixas and this study, which provides a basis for future research.

The above discussion might be able to explain the cultural influence of the correlation between tightness and the distance between actual self and 'a normal person'. This can be discussed in the case of YuHui, who is a participant in Group 1. The result shows that her actual self is quite distant from 'a normal person'. Hence, it seems to be understandable when she said how special she was in her working place. She was a massager, and she said her colleagues did not understand "the way of body" so they could not provide "genuine" treatment to customers. But she could. She had worked hard to absorb Chinese and Western medical knowledge, and she said she was "different from my colleagues", and she would not feel secure if her friends were massaged by her colleagues.

Nevertheless, interestingly, she also mentioned that she had officially changed her given name on her ID card because her original given name was "too special". She said she "does not want to be different from others". Her original name was given by her father, and her father expected her to be "extraordinary", which is to be successful – to have good academic performance, a good job with good pay such as being a lawyer, doctor or accountant. YuHui said that she did not like her father's expectations, and it was impossible for her to meet such expectations. Eventually, she changed her name to a 'normal' name, which made her feel more comfortable.

It might be that although she did not like her father's expectations, she actually accepted his values. She was probably deeply influenced by her father's value system. Her father and YuHui might also be influenced by the 'altered Confucianism' in which only those having money and power are considered successful. Consequently, her value constructs are quite rigid, which might be reflected in her high level of tightness and her strong opinions of what is right or wrong. It is possible that the reason she did not like her father's expectations is not that she did not like her father's value system, but that she was not sure whether she could meet her father's expectations. This might also be able to explain why YuHui's level of conflict was low at the pre-group assessment. She did not have conflict between two value systems; rather, she was struggling with whether she could be successful.

YuHui's case seems to give an example to illustrate the quantitative results, such as that women with depression have more value constructs, are more rigid, and their actual self is more distant from their self as a normal person. However, this is only the researcher's assumption, which needs to be further researched.

#### 4.6 Discussion

4.6.1. Research question one: 'How do collectivistic and individualistic characteristics relate to depression in Taiwanese women?'

Firstly, the research results suggest that Taiwan still has a strong tendency towards collectivistic culture under the influence of modernisation, which can be identified from the result that social orientation among all participants is higher than personal orientation (m=87.88>m=77.78). This result is consistent with most literature (Lu, 2003; Wen, 2005) and with Lu's research (Lu et al., 2008): Taiwanese people of both genders appear to have a strong social orientation, even stronger than people in China. High social orientation echoes the characteristics of Chinese culture and becomes a demand for women to have blurry personal boundaries and an expanded concept of self, as mentioned above. Consequently, social pressures can occur and this might explain the correlation between depression and the elements relating to social relations in the results, and the importance of social relations with regard to the construction of self-identity in a collective society. Therefore, the elements connected to social relations might be a factor of depression in modern Taiwan.

Secondly, the result shows that personal orientation is negatively correlated to depression in Taiwanese women. This is in contrast to what the mainstream literature in the Western world suggests; this literature claims that personal orientation is positively connected to depression (Moscardino et al, 2010). Nevertheless, this result is consistent with Rin's assumption (2007) that individualistic characteristics help reduce depression in both genders. Personal orientation might help women to adjust social pressure, confront social expectations and blurry boundaries in a social-oriented culture such as Taiwan, resulting in depression being reduced. However, this result generates one tricky question. If individualistic characteristics can help reduce depression, why do the numbers of Taiwanese people with depression increase dramatically in the process of modernisation, which encourages the development of individualistic characteristics? This contradiction needs to be further researched.

Thirdly, in this research, a correlation between depression and somatisation was found (r=.658, p<.001, two-tailed); this result is not surprising as it is consistent with many previous

research studies which have indicated a strong connection between these two variables. In addition, it is found that the scores of SOMS-7 in women without depression in this study were even higher than people without depression in Germany (m=61.27> m=42.58). This can be discussed from two aspects. Firstly, the prevalence of somatisation might connect to social-oriented culture in women in Taiwan, and the stigma of psychological symptoms in Chinese culture. People in Chinese culture tend to have more MUS than people in the Western world, because people in Chinese culture tend more to express their psychological, social and culturally-related problems in the form of somatisation (Kleinman, 1980). Due to this stigma in a social-oriented Chinese culture, expressing depressive symptoms in the form of somatisation might be a better option than in psychological symptoms, because physical symptoms are perceived as more acceptable to Chinese society (Wang & Yu, 2001). This result might explain why emotional constructs are statistically significantly less used by both women with and without depression than those in Feixas's research in Spain in 2003. When emotions cannot be expressed, somatisation might be more common in people who tend not to construe their experiences in terms of emotions (Winter, 1992).

Secondly, this result might also echo the previous researches which found that women with depression seem to have more somatisation than men (Haugland & Wold, 2001; Wool & Barsky, 1994). The participants in the study conducted in Germany were of mixed genders whereas the participants in this study were all female. Taiwanese women in particular seem to show self-identity issues through somatisation (Wang & Yu, 2001). Somatisation is full of culturally-related meanings as it manifests self-perception in relation to society and the world, and presents the inner struggle to establish a stable and personally acceptable self-identity in relation to society (ibid.). Hence, although there is a correlation between depression and somatisation, somatisation is not only shown particularly in women with depression, but also in women without depression. Nevertheless, a question is generated: why do women in Taiwan seem to tend to show their self-identity through somatisation more than men? Is it connected to social expectations toward women in a collectivistic culture? This needs to be further researched.

4.6.2 Research question two: 'How does conflict between collectivistic and individualistic characteristics relate to depression in Taiwanese women?'

In YuHui's case, it can be seen that while her depression scores are relatively high, her level of conflict between social orientation and personal orientation is low. Her case echoes Sheehan's research (1981, 1985), in which depression is negatively connected to conflict. Nevertheless, the quantitative result suggests that conflict is not associated with depression in either the survey or the repertory grid interview in this study. Even though a woman experiences a high degree of conflict between social and personal orientations, she will not necessarily suffer from depression.

Consequently, this study suggests that conflict between collectivistic and individualistic characteristics is not related to depression in Taiwanese women. This issue can be explored by involving another research result in the study, the statistically insignificant correlation between tight construing and depression, which corresponds to research question three, 'How does psychological rigidity relate to depression in Taiwanese women?'

4.6.3 Research question three: 'How does psychological rigidity relate to depression in Taiwanese women?'

There is not sufficient evidence supporting the correlation between rigidity and depression in this study, although level of tightness in Group 1 is statistically significantly higher than that in Group 2. Moreover, the percentage of participants mentioning the self-regulation of inner conflict in Group 2 is more statistically significant than that in Group 1 ( $x^2$ =5.776, p=.016). If having ways to regulate inner conflict refers to being more flexible, the level of tightness might be low. From this perspective, women without depression might have lower rigidity than women with depression.

Nevertheless, even though there is insufficient evidence to indicate a correlation between tight construing and depression in this study, it is still possible that tight construing plays a crucial role; women with a higher level of tightness might be more flexible in dealing with inner conflict, and so less likely to get depression. However, this assumption is not only about Taiwanese women, because the connection between tightness and depression is also found in other researches in the Western world. Hence, a following question would be: are there any particular characteristics in terms of this assumption in Taiwanese women?

The result suggests that value constructs are commonly used by participants in both Group 1 and Group 2, and this result might relate to the concepts of Confucianism. In YuHui's case, her high level of tightness might relate to rigid Confucian values: a restricted definition of being successful, and the need to keep cultivating oneself in order to be successful. However, when the definition of being successful is narrow (i.e., only becoming rich and having good academic performance are considered successful, and other qualities are not), people could easily feel frustrated if they had neither money nor power. It might be worse still when people are highly social-oriented in a collectivistic culture; they may feel shame, guilt or self-hatred when facing other people's questions and their own doubts. Consequently, when tightness combines with Confucian values in a social-oriented society, people might easily become depressed.

Taking YiRue as another example, YiRue's level of tightness is high (the percentage of variance aoounted for by the first principle component of the grid is 65.68, which is much higher than the mean of 57.06 in Group 1). In the social- oriented society of Taiwan, when her friends told her 'what a good wife should be' might not make YiRue feel depressed and pressured if her personal orientation were high enough to confront her friends' opinions when they crossed YiRue's personal boundary, as the result of this study suggests that personal orientation is negatively correlated to depression. Yet YiRue accepted her friends' value system, which is related to the central value of Confucianism: a wife should 'try very hard to cultivate self and follow the regulations of li' in order to achieve 'ren', which is having no arguments with her husband and maintaining harmony in the family. In addition, YiRue's high level of tightness gave her no choice but to accept the the crossing of her boundary. Her lack of self-regulation might closely relate to the generation of her depressive symptoms.

However, when discussing the results of the research, the limitations of this study should be noted. For quantitative results; firstly, the sample is quite small. In the second phase of the repertory grid interview, there are only 12 women with depression and 12 women without depression in this study. Secondly, these 12 participants with depression were all taking medication; therefore their psychological depressive symptoms were controlled by medication. Thirdly, all the participants were women, and therefore the results might be specific to females. For qualitative results, most of them are based on the researcher's observation and interpretation, and therefore further research is needed. The therapeutic implications of the results of this study will now be considered.

### 4.7 Therapeutic implications

These results have implications, both at intra-psychic and interpersonal levels. For the intra-psychic aspect, the participants might usefully be facilitated to increase their personal orientation. In previous research in Taiwan, some researchers suggest that the development of individualistic characteristics can help to decrease depression (Yeh, 1989). However, although this study seems to echo their research, increasing individualistic characteristics cannot be the only aim of the therapy with regard to culturally-related depression, based on the results of this study. In a society which has a stronger social orientation, targeting only an increase in personal orientation might increase the conflict between the two orientations. Hence, when facilitating the participants' increase of personal orientation, they also need to be facilitated to find a balance between social and personal orientations.

In addition, the distance between the elements of self and ideal self is positively correlated to depression, and therefore shortening the distance between the actual self and the ideal self might also help to decrease depression.

For the inter-psychic aspect, as the results of this study illustrate, depression is positively correlated to the distance between the ideal self and social self, and between the self and social roles such as 'me as a mother/daughter/wife'. As mentioned above, the construction of self-identity in relation to social roles might be crucial in a collectivistic society, and therefore interventions emphasising only the intra-psychic aspect might not be suitable. Therefore, apart from focusing on the increase in personal orientation and the construction of self-identity, the intervention also needs to be able to enable people to reflect on their social relationships, and the difficulties/problems/struggles of playing social roles. In the next chapter, the therapeutic implications based on the discussions in this chapter will be elaborated.

# Chapter Five: Investigation of therapy: design

# 5.0 Introduction

In this chapter, the treatments of depression combining body and mind aspects will be reviewed, and the reasons for adopting The BodyMind Approach<sup>TM</sup> as an intervention will be elaborated, followed by the articulation of two research questions, the third phase of the study, and the methods adopted in this research.

# 5.1 The treatments of depression combining the aspects of body and mind

As mentioned in the Literature Review, the mainstream treatments of depression are mainly based on the assumed dualism between body and mind. However, due to the limited effectiveness of these treatments on depression and accompanying medically unexplained symptoms, more and more researchers recommend integrated treatments (Steele, Leeuw & Carpenter, 2009). For example, cognitive-behavioural therapy (CBT) combines systematic muscle relaxation training (Edwards et al., 2010) and mindfulness techniques (Ma & Teasdale, 2004). However, treatment combining CBT and physical aspects still focuses on the cognitive aspect, aiming to 'correct' the abnormality and misinterpretation of cognitions and body sensations (Brown, 2004). From this perspective, the body is still fundamentally separated from the mind, and the body is merely a passive carrier and is less able to actively influence the psyche.

However, the body is perceived as actively involved in the process of cognitive activity in dance movement psychotherapy. Dance movement psychotherapy (DMP) is an alternative intervention which combines body and mind aspects. DMP is also known as dance therapy, movement psychotherapy and dance movement psychotherapy. According to the Association for Dance Movement Therapy UK, "Dance Movement Psychotherapy recognises body movement as an implicit and expressive instrument of communication and expression. DMP is a relational process in which client/s and therapist engage creatively using body movement and dance to assist the integration of emotional, cognitive, physical, social and spiritual aspects of self. The philosophical orientation of DMP is based on the intrinsic belief in the interrelationship between the psyche, soma and spirit as evidenced in the potential held in the creative processes" (Association for Dance Movement Psychotherapy UK, 2014, para. 2). Based on the concept of the union between body and mind, there is some evidence that DMP may be effective in the treatment of depression. For example, DMP is able to elevate mood due to the exercise element in dance therapy (NICE, 2010). In addition, the uniqueness of DMP such as "embodiment, creativity, movement-based imagination, the use of symbolic movement and the use of movement as a metaphor" (Meekums, Karkou & Nelson, 2012, p.3), can lead to changes in cognition and feelings (Meekums, 2002). DMP has also been adopted to treat MUS by reconnecting body and mind, which is suggested as the start of the recovery of MUS (Lin & Payne, 2014; Thulin, 1997).

Although the effectiveness of DMP in the treatment of depression and MUS still needs more systematic research (Mala, Karkou & Meekums, 2012), DMP is considered as an intervention in this study due to the integration between body and mind aspects. In this study, The BodyMind Approach<sup>TM</sup> (TBMA), which derives from Dance Movement Psychotherapy, is adopted.

# 5.2 The BodyMind Approach<sup>TM</sup>

The BodyMind Approach <sup>TM</sup>(TBMA) (Payne, 2009a) is an integrated approach combining verbal, nonverbal and cognitive approaches. It was proposed by Payne (Payne, 2009a; Payne, 2009b; Payne, 2009c; Payne & Stott, 2010; Payne, 2015, Payne & Brooks, 2016) and particularly aims at treating medically unexplained symptoms in the form of a therapeutic group. Apart from moving, which has been mainly utilised, drawing and writing are also the media adopted in TBMA groups (Payne, 2009a).

At the end of the previous chapter, it was summarised that interventions should meet three criteria, which are: addressing both intra-psychic and inter-psychic aspects, meeting the concept of the union between body and mind in Chinese culture, and targeting somatisation. How TBMA responds to these three criteria will be discussed in the following section.

# 5.2.1 Addressing both intra-psychic and inter-psychic aspects

TBMA puts much emphasis on the exploration of both intra-psychic and inter-psychic aspects. Participants in a TBMA group are encouraged to communicate with the other participants, and receive feedback in the group. Similarly to talking psychotherapies, the participants' patterns of dealing with social relationships might become apparent in the group,

and the participants may become aware of their patterns, acquiring positive experiences in the group, and therefore making changes in the patterns which they are not satisfied with.

However, differently from talking psychotherapies, TBMA adopts a technique called 'Authentic Movement' (AM) (Adler, 2002) to explore inter-psychic and intra-psychic relationships at the same time. Authentic Movement focuses on the issue of self-other relationships, and expresses the communication between inner selves in an embodied way (ibid.). Authentic movement facilitates the participants to move spontaneously in order to make connections between the conscious, unconscious and collective unconscious (Adorisio, 2007). In addition, Authentic Movement can increase awareness of "the body self, the interpersonal self and the intra-psychic self" (Wyman-McGinty, 2007, p.155).

The two components of AM are the mover and the witness, and in TBMA the witness is usually the facilitator. More than one mover is possible. The witness usually sits beside the mover, and witnesses the mover moving. After a period of time which has been agreed upon beforehand, the witness asks the mover to stop moving gradually, in a gentle way. The mover then shares his/her moving experience, followed by the witness responding to what the mover says.

The 'mover' is also an 'inner witness'. In the process of spontaneously moving, usually with eyes closed, the mover develops an 'inner witness' witnessing him/herself moving (Adler, 2002). Consequently, he/she witnesses him/herself moving while being aware that he/she has been witnessed by the outer witness, and he/she might be able to explore personal and social orientations in the moving process. In addition, when sharing the personal moving experiences with the witness, the mover is able to verbally communicate with the witness and might experience the transitions between social and personal orientations in reality and bring the experiences out of the group context.

Hence, by doing authentic movement, the participants are able to explore both intrapsychic and inter-psychic relationships at the same time. The advantage of practising AM is that personal orientation might be increased through the development of an inner witness and the raising of self-awareness. However, the increased personal orientation does not mean ego inflation; rather, the exploration of self-identity goes together with the exploration of social relationships, and a continuing process of adjustment between self and others will occur in AM.

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This way of exploring self and interpersonal relationships might be more suitable for people in Chinese culture. In this society of high social orientation, the facilitator has to consider the pressure the participants might perceive when encouraging the increase of personal orientation. In authentic movement, the participants have the opportunity to explore themselves in the presence of another person or people also coming from Chinese culture. In addition, due to the non-judgmental witness of the facilitator, the participants can develop a more compassionate way to perceive themselves. Consequently, the level of self-acceptance might be increased and the participants might develop more flexible perspectives toward themselves and others.

# 5.2.2 Meeting the concept of the union between body and mind

The BodyMind Approach<sup>TM</sup> is derived from dance movement psychotherapy, which is based on the assumption that body and mind are in constant interaction (Schoop & Mitchell, 1974). Furthermore, as mentioned in the Literature Review, people with depression seem to have more restricted movement than people without depression. Therefore, through expanding the repertoire of participants' movement, the level of depression might be reduced. Some evidence for this is provided by a study by Koch, Morlinghaus and Fuchs (2007) that indicated that the movement of people with depression is characterised by a lack of vertical movement, and that through facilitating participants with depression to jump (a type of vertical movement) in the sessions, the level of depression was significantly decreased.

This assumption might be related to the association between psychological rigidity and depression in this study. Since the level of rigidity in people with depression is higher than in people without depression in both this study and the literature in personal construct psychology, and people with depression have more rigid movement than people without depression, is it possible that rigid movement represents psychological rigidity? This study attempts to respond to this question.

# 5.2.3 Somatisation

TBMA is designed to treat people with medically unexplained symptoms, and its effectiveness was initially examined in Payne's pilot study, although further research is needed. According to Payne (2009a), TBMA could effectively decrease MUS and the number of times the participant seeks an appointment with a General Practitioner (GP). Such effectiveness was

observed at the end of the group and it was maintained in the follow-up interview three months after the group (Payne, 2009c, 2015).

The mechanism of TBMA in treating MUS is based on the concepts of 'dissociation and conversion' (Lin & Payne, 2014). Although the causes of MUS are still not clear, MUS is suggested to relate to early childhood trauma (Brown, 2004), and 'dissociation' and 'conversion' are two of many of the possible factors underlying MUS (Breuer & Freud, 1957; Gupta & Gupta, 2006; Janet, 1907; Ludwig, 1972). Dissociation is similar to 'suspension' in personal construct psychology; traumatic experiences are too painful for individuals to consciously construe and are therefore dissociated from consciousness and become suspended (Brown, 2004). If the traumatic experiences happen before the use of language, they might become the basis of preverbal constructs which are not easy to access verbally. Consequently, the suspended experiences and preverbal constructs which are at a low level of awareness can be 'converted' into medically unexplained symptoms. The concept of 'levels of awareness' refers to a spectrum of awareness; the higher the level is, the more the individual is consciously aware of. It is difficult accessing the low level of awareness verbally, and therefore TBMA focuses on sensory experience of the symptoms in the body to treat MUS. As Chodorow stated (1991, p.4), "movement from personal unconscious can serve as an embodied link to an individual's past". Through the kinaesthetic experience in movement, the participants have the opportunity to access the lower level of awareness which relates to the traumatic experiences causing physical symptoms.

In order to break the mechanism of dissociation and conversion, TBMA facilitates the group participants to connect their bodily symptoms with cognition, meaning-making, and encourages them to give their physical symptoms meaning. In other words, through the process of giving physical symptoms meaning, the participants can stop dissociating from the traumatic experiences relating to the physical symptoms, and the mechanism of conversion can also stop. In addition, suspended experiences can be construed, and related preverbal constructs can be explored.

# 5.3 Considerations arising from the discussion

There are some considerations arising from the above discussion. Firstly, although in Payne's pilot study TBMA was found effective in the decrease of depression and MUS, TBMA has not been practised in Taiwan yet. Therefore, further exploration is useful in terms of its

effectiveness in Taiwan. Secondly, although people with depression seem to have more rigid movement, it cannot be concluded that rigid movement relates to tight psychological construing and this needs more evidence. The above two considerations will be focused on in the later study. Consequently, research questions 4, 5, 6 and 7 emerge, which are listed below:

(4) How does the BodyMind Approach<sup>TM</sup> reduce depression and MUS in Taiwanese women?

(5) Is rigid movement related to tight psychological construing in Taiwanese women?

(6) Are there movement differences between women with depression and without depression?

(7) Are there changes in movement over the course of therapy?

# 5.4 Methods

# 5.4.1 Intervention group

The BodyMind Approach<sup>TM</sup> was adopted as the intervention, and designed as a 12-week, two-hourly group, which is a replication of Payne's study (Payne, 2009b). Two intervention groups were designed, with one for 12 women with depression and the other for 12 women without depression. These participants all completed the repertory grid interview in the second phase of the study. The two groups were facilitated by the same facilitator trained and certified in TBMA with Pathways2Wellbeing, who provided the same activities and session structures in both groups.

# 5.4.2 Movement record

The method of collecting movement data from the 12-week intervention group is a timesampling method (Altmann, 1974). The whole process of the group was videotaped, and only the first, 6th and 12th groups were analysed. Although the validity of the time-sampling method has been questioned (Mann et al., 1991), it is still a valuable technique due to its efficiency and the facility to analyse relatively small amounts of data to achieve higher accuracy (Boyd & DeVault, 1966). Each group session lasted for 120 minutes. The first 30 minutes from the beginning of the session and 30 minutes before the end of the session were excluded for movement analysis because these 60 minutes were assumed to probably be verbal sharing time. During the rest of the 60 minutes, the videotape was analysed for one minute in every ten minutes. This minute was randomly chosen by the researcher. Numbers 1 to 10 were respectively written on ten sheets, and folded. The researcher picked one sheet and analysed the minute of this number which had been picked. Consequently, there are six segments for each session and 18 segments for each participant in total.

#### 5.4.3 Follow-up repertory grid interviews

In order to examine the efficacy of the TBMA group, one post-group interview and two follow-up interviews were conducted. The pre-group interview had already been conducted in the second phase of the study, which has been discussed in Chapter Four. Participants were asked to fill in the same repertory grid, the Taiwanese Depression Scale, and the Screening for Somatoform Symptoms-7, one week after the 12-week-group ended, three months later, and six months later.

#### 5.5 Design

# 5.5.1 Third phase: the intervention group

Followed by the first phase of the survey and the second phase of the pre-group repertory grid interview, the third phase was the BodyMind approach treatment group. The group was followed by the pre-group interview within a week. The intervention group was held at a performing arts rehearsal room with a wooden floor, situated in the north of Taipei. Although the place is far from central Taipei (40 minutes from Taipei Central station), it only takes ten minutes' walk from the Underground station, and the neighbourhood is quiet and close to nature. The mirrors on the wall in the rehearsal room were covered by fabric, and the props (crayons, water colour, clay, charcoal pencils, oil pastel, Chinese writing brushes, ink and drawing papers) were prepared in a corner of the room before each session. The facilitator was a trained dance movement psychotherapist (DMP) with three years' experience in facilitating DMP groups and had taken the official training of the BodyMind approach provided by the company Pathways2wellbeing before facilitating the group.

There were two groups; one consisted of 12 women with depression and the other consisted of 12 women without depression. All the participants had completed the survey and the first repertory grid interview. The former group came on Saturday morning and the latter group on a Saturday afternoon so that the two groups did not meet each other. In addition, two cameras were positioned in the corner of the room so that the participants' movements could be analysed from the videotape recordings.

The researcher and the facilitator held a discussion in relation to the group before and after each session, and the group supervisor provided supervision every two weeks. In addition, the researcher had regular meetings with the psychiatrist who provided his professional support during the whole process of the intervention group. All the participants with depression were his patients. The researcher also briefed him on how the group with depression went so that he could monitor the participants' situations.

## 5.5.2 The fourth phase: the follow-up interviews

One week, three months and six months after the 12-week TBMA group, follow-up interviews were conducted. As in previous interviews, the participants could choose for the interview to be at their homes, in the psychiatric clinic or other quiet and private public spaces. The procedure and the elements of the repertory grid all remained the same; the only difference was asking the participants' one question at the beginning of the post-group interview: "What did you find the most and least helpful aspects of the group?"

# 5.6 Ethical considerations

Ethical approval was obtained before the commencement of the group, as mentioned in Chapter Three. Before the group started, a disclaimer notice (see Appendix 10) was issued to the participants, indicating the possibility of getting physically hurt, and suggesting that the participants' movement should depend on their own physical condition and situation, and they had to move at their own risk. In addition, a consent letter was issued which notified that the group (see Appendix 11) would be videotaped. The participants were informed again about confidentiality, and that they did not need to attend the group if they did not want to be videotaped, and they could drop out at any stages of the study. In addition, all the participants were given a sheet of follow-up resources (see Appendix 12) at the end of the group. Furthermore, during the 12-week group the participants with depression all went to see their

psychiatrist on a regular basis so that the psychiatrist could monitor the participants' situation. The names of the participants were replaced by numbers on the coding sheet, so that the raters of the movement did not know the participants' names.

#### 5.7 Methods of data analysis

Data which had been collected pre-group, post-group, and three and six months after the group, was analysed and compared, including the level of depression, SOMS-7, conflict and tightness, and distances between elements.

#### 5.7.1 Intention-to-treat analysis

Intention-to-treat analysis (Hollis & Campbell, 1999) is a method which includes all the data from the participants, regardless of the fact that some of them might drop out of the group due to various reasons. The way of dealing with missing data is carrying the last known outcome forward, and analysing the data to include the drop-outs (Montori & Guyatt, 2001). This method was adopted because the sample of the study is small, and this analysis can increase the numbers. In addition, because it is not unusual for some subjects drop out in the process of an intervention, including the drop-out subjects might be more able to represent the real world.

# 5.7.2 Clinical significance

The reason for checking clinical significance along with statistical significance is to provide a relatively more complete picture of the effectiveness of the intervention group. Two ways of evaluating clinical significance are adopted by the criteria proposed by Jacobson, Follette and Revenstorf (1984). The first is 'meaningful change', which "determines whether the client has moved from the dysfunctional to the functional range. The condition of meaningful change was evaluated by asking whether the level of functioning post-treatment suggested that the subject was statistically more likely to be in the functional than in the dysfunctional population" (Ankuta & Abeles, 1993, p.70).

The second way is 'Reliable Change' (RC) (Jacobson et al., 1984), which was modified by Christensen and Mendoza (1986). RC means "whether or not the amount of change was of sufficient magnitude to be considered statistically reliable. The condition of reliable change was evaluated by asking whether the Reliable Change Index is greater than 1.96" (Ankuta & Abeles, 1993, p.70).

## 5.7.3 Helpful/unhelpful aspects of therapy

The result of the question 'What were the most and least helpful inputs you found in the group?' asked at the beginning of the post-group assessment was used to compare with Yalom's therapeutic factors (2005) which are instillation of hope, universality, imparting information, altruism, corrective recapitulation of the primary family experience, development of socialising techniques, imitative behaviour, cohesiveness, existential factors, catharsis, interpersonal learning and self-understanding.

#### 5.7.4 Repertory grid

The way of analysing the data from repertory grid interview is presented in Chapter Three. In addition, the same as the pre-group repertory grid interview, qualitative methods such as eyeball analysis and process analysis will be adopted. Qualitative data will be presented alongside quantitative data, in order to fully respond to the research questions.

# 5.8 Laban Movement Analysis (LMA)

Laban movement analysis (LMA) (Laban, 1947) was adopted to analyse the movement of the participants in the intervention group, with a view to examining the potential relation between movement and tightness. LMA is a systematic method describing movement, which originates from Laban's work and was then extended by other researchers such as Irmgard Bartenieff (1980). LMA is divided into four categories: body, effort, space and shape. The body category is developed by Irmgard Bartenieff (1980), and mainly describes the characteristics of the whole structure as well as different body parts while moving, such as the patterns of body connectivity and the sequences of the use of body parts. The effort category is a system that describes the texture and the dynamic of movement, which can respond to inner intention. There are four sub-categories in the effort category, which are space, weight, time and flow. Each of the sub-categories has two elements which are opposite to each other. Space includes direct and flexible, weight includes strong and light, time includes sudden and sustained, and flow includes bound and free. The space category mainly describes how movement connects to space, including general space, kinesphere and personal movement space. The shape category mainly describes the changes of body shape while moving. Laban's theory is very complicated, comprehensive and well developed and it is difficult to code the participants' movement in all the categories in LMA. Therefore, the coding system in this study was designed based on the literature discussing the characteristics of movement of people with depression, and rigid movement, which has been defined as restricted body usage (Davis, 1981), less coordinated movement (Davis, 1981), less various combination of effort (Stanton-Jones, 1992), small kinesphere (Stanton-Jones, 1992), less vertical movement (Koch, Morlinghaus & Fuchs, 2007; Serlin, 1996) and less interpersonal movement (Kazdin et al., 1985; Schneider et al., 1990; Waxer, 1974).

Consequently, in the research, sub-categories of body are designed as isolated movement and coordinated movement. The sub-categories of effort follow Laban's design, which are time, weight, space and flow. The category of space is divided into two categories: kinesphere and dimension. Kinesphere is divided into small, medium and large, while dimension is divided into vertical, horizontal and sagittal movements. For shape, 'modes of shape change' is chosen in which shapeflow, direction and carving are categorised. Shapeflow refers to the movement related to the body. Directional movement represents how the body interacts with the environment, with categories such as ark-like and spoke-like. Carving movement also represents the relationship between body and the environment, but it particularly refers to movement which includes three dimensions (for the coding sheet, see Appendix 13).

## 5.9 Coding and cross sectional analysis

Two coders independently coded the movement. Both raters are qualified dance movement psychotherapists. One has the Laban Movement Analyst qualification while living in the south of Taiwan, and the other, living in Germany, was trained to analyse movement by means of LMA for two years at Goldsmiths College, University of London. The coding sheets, video and a sheet notifying the analysed minutes were posted to the coders, and they posted the coding sheet and video back to the researcher after they had completed the analysis.

After watching each segment (one minute) of the video, the coders had to record whether or not they found each of the movement qualities addressed on the coding sheet. For example, if they found both small and big kinesphere movements in the first segment of the first session, they had to write down '0' and '2' (which respectively represent small and big kinesphere) in the column of the 'first minute' under the category of kinesphere in the coding sheet of the first session. The total frequency of each number (2, 1, 0) for the two groups is calculated, and is compared with the level of tightness, examining whether Group 1 (women with depression) has less frequency than Group 2 (women without depression). In addition, the most frequent movement qualities between both groups are compared.

# **Chapter Six: Results from four assessments**

## 6.0 Introduction

This chapter aims to answer research question four, 'Does The BodyMind Approach<sup>TM</sup> reduce depression and MUS in Taiwan? If so, how?', by examining the effectiveness of the TBMA intervention group. The results of the four assessments conducted within one week and three months and six months after the intervention, along with the pre-group assessment which was considered in Chapter Four, will be reported, followed by the discussion of the findings.

# 6.1 The effectiveness of the intervention group

## 6.1.1 The participants

12 women with depression (Group 1) and 12 women without depression (Group 2) participated in the intervention group, and five participants in Group 1 and one participant in Group 2 dropped out during the 12 weeks of the intervention. The one who dropped out in Group 2 dropped out after the fourth session. She said that the group did not meet her expectation. She expected to 'dance', but the facilitator did not ask them to 'dance' but 'move'. One drop-out in Group 1 dropped out before the start of the first session, because she thought she would be too busy studying on the weekdays and attending the group at the weekends. One drop-out in Group 1 had a similar reason; she thought her life was too busy for her to find time to attend therapy sessions on the outskirts of Taipei at weekends, and she dropped out after the fourth session. One drop-out in Group 1 said that her emotions were unstable and she thought "it is not the right time to attend a group"; therefore she dropped out after the second session. Another drop-out had a similar reason. She thought that her emotions were unstable and she felt uncomfortable being in a group, and she decided to drop out after the fourth session. One drop-out in Group 1 also dropped out after the second session. She mentioned that she felt high pressure in studying at a college, and she needed more time to study at weekends. Except for the five drop-outs, the remaining seven participants in Group 1 and eleven participants in Group 2 completed the group, and finished the post-group assessment, three-month and sixmonth follow-up assessments.

# 6.1.2 Statistical results

## 6.1.2.1 Depression

6.1.2.1.1 The changes of depression at the four assessments

Utilising a t-test to examine the difference in the level of depression between Group 1 and Group 2 at the four assessment points, a statistically significant result was found (t=-1.811, p=.042, one-tailed) at the pre-group assessment (see Table 6.1), which was not found at the post-group and two follow-up assessments.

		Pre- Intervention Group 1: N=12 Group 2: N=12	Post- Intervention Group 1: N=7 Group 2: N=11	3 months after follow-up Group 1: N=7 Group 2: N=11	6 months after follow-up Group 1: N=7 Group 2: N=11
Dep	ression				
	Group 1 (women with depression)	m=31.92 SD=11	m=31.43 SD=9.554	m=27.57 SD=15.44	m=28.29 SD=18.48
	Group 2 (women without depression)	m=24.25 SD=9.697	m=24.18 SD=8.6	m=23.45 SD=14.43	m=22.45 SD=13.03
	Sig. diff. bt. groups	t(22)=- 1.811P=.042	t(16)=- 1.671p=.057	t(16)=575p=.2 90	t(16)=788P=.2 21
Somatisation					
	Group 1	m=61.27 SD=23.639	m=52.43 SD=23.035	m=40.86 SD=23.412	m=42.429 SD=24.555
	Group 2	m=45.28 SD=17.85	m=40.27 SD=25.032	m=40.18 SD=23.056	m=30.273 SD=19.438
	Sig. diff. bt.groups	t(22)=-2.152 P=.022	t(16)=-1.035 p=.158	t(16)=06 p=.477	t(16)=-1.169 P=.130
Tigl	ntness				
	Group 1	m=57.332 SD=11.627	m=55.87 SD=10.702	m=51.031 SD=8.054	m=53.704 SD=11.342

Table 6.1 The differences between Groups 1 and 2 at four assessments

	Group 2	m=48.362 SD=10.494	m=49.343 SD=10.947	m=48.388 SD=11.189	m=54.387 SD=8.699
	Sig. diff. bt. groups	t(22)=-1.924 p=.034	t(16)=-1.244 p=.116	t(16)=540 p=.300	t(16)=.145 P=.444
Conf	lict				
	Group 1	m=38.467 SD=7.212	m=34.671 SD=2.141	m=33.714 SD=2.876	m=36.471 SD=9.044
	Group 2	m=37.842 SD=3.232	m=36.655 SD=3.662	m=35.464 SD=4.647	m=39.109 SD=9.702
	Sig. diff. bt. groups	t(22)=279 p=.391.5	t(16)=1.291 p=.108	t(16)=.888 p=.194	t(16)=.577 p=.286

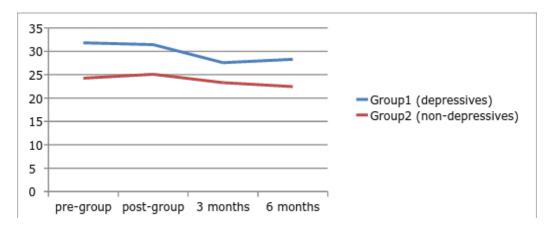
NOTE: a. Significant differences are analysed by t-test, one-tailed.

b. \*Statistical significance: \*p < .05; \*\*p < .01; \*\*\* $p \le .001$ .

c. The figures in red show statistically significant results; the figures in green show nearly statistically significant results.

The trend of the changes of depression in the two groups throughout the four assessments can be seen in Graph 1. Since the difference in levels of depression between the two groups reduced from statistical significance at pre-group to statistical insignificance at post-group and follow-up assessments, it can be assumed that the group intervention might be effective; in addition, the effectiveness appeared to be maintained at two follow-ups. Nevertheless, apart from the explanation of the effectiveness of the intervention, an alternative explanation might be that the most depressed members of Group 1 dropped out and were not included at the posttreatment assessments.

Graph 1 Mean of depression for Group 1 and Group 2



However, it was found that the level of depression in the drop-outs in Group 1 was 28.6, which is even lower than the mean of depression scores of participants who remained in Group 1, at 34.29. In addition, depression score of the only participant who dropped out in Group 2 was 23, which is slightly lower than the mean of Group 1. Hence, the insignificant differences between the two groups at the post-treatment assessments might be due to the effectiveness of the intervention.

In terms of the changes in depression throughout the four assessments with respect to the two groups, non-parametric tests including a Wilcoxon test and a Friedman test were adopted due to the small samples. A Wilcoxon test showed that the intervention group did not elicit a statistically significant change in depression in individuals with either depression or without depression, as indicated by the difference between pre- and post-group, post-group and three-month follow-up scores, as well as three-month and six-month follow-up (see Table 6.2). However, when examining the level of decrease from pre-group to first follow-up in Group 1, an almost statistically significant difference was found (Z=-1.527, p=.06, one-tailed). It can be assumed that the intervention facilitated the decrease in depression, but the decrease did not reach statistical significance.

	Pre- and post- group	Post- and 1 <sup>st</sup> follow-up	Pre- and 1 <sup>st</sup> follow-up	1 <sup>st</sup> and 2 <sup>nd</sup> follow-up
Group 1 (N=7)	z=-1.022, p=.156	z=-1.363, p=.087	z=-1.527, p=.060	z=169, p=.433
Group 2 (N=11)	z=408, p=.342	z=051, p=.480	z=357, p=.361	z=415, p=.339

Table 6.2 The differences of depression in Groups 1 and 2

NOTE: a. Wilcoxon test, one-tailed.

b. The figures in green show nearly statistically significant results.

By adopting a Friedman test, it is found that the changes of depression throughout the four assessments did not reach statistical significance in both Group 1 ( $X^2=2.739$ , p=.434) and Group 2 ( $X^2=1.629$ , p=.654) (see Table 6.3).

Group 1 (N=7)	X <sup>2</sup> (3)=2.739, p=.434
Group 2 (N=11)	X <sup>2</sup> (3)=1.629, p=.654

Table 6.3 The changes of depression throughout four assessments

The results show that there is not sufficient evidence to indicate the effectiveness of the intervention in terms of the decrease of depression. This might be due to the poor validity of the depression scale, as addressed in Chapter Four, or to the group not being sufficiently effective to decrease depression. In addition, all the participants with depression were taking medicine, and the psychological depressive symptoms were controlled, which might result in a limited decrease of depression in Group 1. Moreover, the small sample sizes also might be a factor in the statistically insignificant result due to the lack of enough statistical power.

In order to explore the effectiveness of the intervention in various ways, the changes of the correlations between depression and other variables will now be examined.

#### 6.1.2.1.2 Depression and other variables

Table 6.4 illustrates the changes in the correlations between depression and variables at four assessments. The correlation between depression and somatisation was statistically significant throughout the four assessments, which will be further discussed in the Somatisation section. There was no statistically significant association between tightness of construing and depression at post-intervention assessment and the two follow-ups either by the utilisation of a t-test or a correlation test, which will also be further discussed in the Tightness section. The correlation between depression and the distance between actual self and ideal self-remained significant at post-group (r=.535, p=.022, two-tailed) and three-month follow-up (r=.513, p=.030, two-tailed), but not at six-month follow-up (r=.158, p=.532, two-tailed). This might be because the distance between actual self and ideal self a source of depression. This result might indicate a long-term effectiveness of the intervention, which kept influencing the participants after the intervention. However, it needs to be further examined by comparison with the other results in this study.

NOTE: Friedman test, one-tailed.

	Pre-group assessment	Post-group assessment	1 <sup>st</sup> Follow-up assessment	2 <sup>nd</sup> Follow-up assessment
Somatisation	r=.658, p<.001**	r=.709, p=.001**	r=.737, p<.001**	r=.780, p<.001**
Tightness	r=097, p=.660	r=038, p=.881	r=326, p=.187	r=214, p=.394
Conflict	r=028, p=.899	r=.131, p=.604	r=054, p=.831	r=.386, p=.113
Actual/ideal self	r=.441, p=.031*	r=.535, p=.022*	r=.513, p=.030*	r=.158, p=.532
Actual self/roles <sup>a</sup>	r=.403, p=.051	r=158, p=.531	r=.402, p=.098	r=.188, p=.454
Actual self/me as Woman	r=.299, p=.155	r=.142, p=.573	r=.188, p=.455	r=319, p=.197
Actual self/others <sup>b</sup>	r=.330, p=.127	r=085, p=.738	r=095, p=.708	r=.005, p=.983
Actual self/mother	r=.362, p=.090	r=021, p=.934	r=182, p=.470	r=013, p=.960
Actual self/father	r=.369, p=.083	r=.182, p=.470	r=.189, p=.453	r=247, p=.323
Actual self/normal person	r=143, p=.505	r=.004, p=.987	r=095, p=.709	r=461, p=.054
Ideal self/others	r=.361, p=.083	r=.229, p=.360	r=201, p=.423	r=.208, p=.407
Ideal self/roles	r=.419, p=.041*	r=193, p=.443	r=.127, p=.617	r=.298, p=.230
Others/roles	r=.325, p=.122	r=257, p=.303	r=236, p=.345	r=.119, p=.638

Table 6.4 Correlations between depression and variables

NOTE: a. 'Roles' refers to the mean of the distances between depression and the three elements (me as a mother/daughter/wife).

b. 'Others' refers to the element 'how other people see me'.

c. Pearson correlation test, two-tailed.

d. \*Statistical significance: p < .05; \* p < .001\*\*

e. The figures in red are statistically significant results; the figures in green are nearly statistically significant results.

The other variables relating to social relations which were statistically significantly correlated to depression at the pre-group assessment were not significantly correlated at the

following three assessments. The insignificant correlations at post-group and two follow-up assessments between depression and the element distances relating to social relations might be because of the deficits of the research which have been addressed above, such as insufficient statistical power and the potentially invalid depression scale. Although the validity and reliability of the Taiwanese Depression Scale was examined by the inventor of this scale, it has not yet been widely examined and recognised as a depression scale. Therefore, this might affect the research results in relation to depression. However, it might also reflect the effectiveness of the intervention. For example, the participants might be less concerned with how other people see them after the group, and therefore this might be less of a source of depression.

Hence, this intervention seems to be more effective regarding issues relating to social relations than intra-psychic relationships, because most social relations-related correlations which were statistically significant at the pre-group assessment did not reach statistical significance at the post-assessments, while the correlation between depression and the distance between actual and ideal self, which is a type of intra-psychic relationship, remained significantly correlated at the post-group assessment and three-month follow-up. However, because this correlation became insignificant at the six-month follow-up, it might not be seen as an indication of a long-term effectiveness of the intervention.

### 6.1.2.1.3 YiRue's exploration in the sessions

In Chapter Four, it is mentioned that YiRue was anxious about whether she was able to be a wife appropriately according to social expectations. In the first session, it is worth noting that she seemed not to 'move' but to 'dance'. Her movement was elegant, beautiful, and quite light in Laban's terms. This situation lasted for two sessions. Every time she was asked to close her eyes while doing authentic movement, she opened her eyes several times in the process. It is possible that she seemed to have a fixed thought of how to move in front of the other participants, and therefore moved based on what she had learnt in dance classes rather than expressing her emotions through movement. She seemed not to feel secure, and to care very much about how other people saw her. She was anxious about the social relations, and was not used to expressing herself in front of people. This seems to represent her social relations in real life; she tried to be a wife appropriately, so she could not (or did not want to) be her actual self, or was afraid of being so. Her actual self was distant from her self of being a wife.

However, she showed some differences throughout the sessions. Gradually, she was more able to 'move' rather than 'dance'. Her movement became more spontaneous, and she was even able to close her eyes during the movement time (around 5 to 10 minutes). At the eighth session, she closed her eyes carefully when the movement time started. She did not hurry or start moving immediately. This moment moved the researcher because YiRue seemed to quietly look for herself without caring about the other people's gaze, although she still stayed in the corner, as usual. In addition, she started to talk more and to share her experiences of movement with the group. This was a substantial progression for her because she became more able to express herself and be herself in the group.

At the post-group assessment, she told the researcher that she had stopped seeing the friends who had been telling her how to behave with her husband. She had made some new female friends; like her, their child/partner/parents were ADHD sufferers. YiRue said that they planned to write a book together, sharing their stories of being with their close family members with ADHD. In fact, at the second follow-up assessment, she gave the researcher a draft of this book. After reading her story, the researcher understood more of her struggling process of doubting herself and facing her own anxieties when her friends and parents could comprehend why she did not feel happy in her marriage.

This 12-week therapy session seemed on the one hand to represent this process, and on the other hand to provide a space for her to explore her self in social relations. When she became better able to cope with her anxiety of being seen in the group and to move based on her own feelings and thoughts rather than worrying too much about how other people might see her, her self-acceptance increased and she was more courageous in being herself, even sharing her own experience with others.

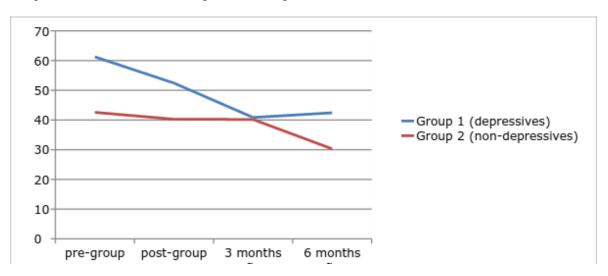
#### 6.1.2.2 Somatic symptoms

#### 6.1.2.2.1 The changes of SOMS-7 at the four assessments

The level of somatisation in Group 1 was statistically significantly higher than that in Group 2 at pre-group assessment (t=2.152, p=.022, one-tailed). However, the difference did not reach statistical significance at post-group (t=-1.035, p=.158) or the two follow-up assessments (first follow-up: t=-.06, p=.477; second follow-up: t=-1.169, p=.130) (see Table 6.1). This indicates that the intervention might effectively reduce the difference in the levels of

somatisation between the two groups. Nevertheless, as with the depression findings, it might also be due to participants with the highest somatisation levels dropping out of Group 1. Results show that the mean of somatisation scores of the people with depression who drop out is 69.22, which is higher than the Group 1 mean of 61.27. Consequently, this possibility cannot be eliminated.

The trend of the changes of the level of somatisation at four assessments in both groups is shown in Graph 2. It can be seen from Graph 2 that the difference between the two groups was reduced from pre-group assessment to first follow-up assessment; although the difference between the groups at the second follow-up assessment increased, it did not reach statistical significance.



Graph 2 Somatisation in Group1 and Group 2 at four assessments

The changes in the levels of somatisation through the four assessments in each group are examined by the Wilcoxon test. In Group 1, the difference between post-group and first follow-up reached statistical significance (Z=-1.859, p=.032, one-tailed) (see Table 6.5), and the difference between pre-and post-group was nearly statistically significant (Z=-1.577, p=.058). In addition, when examining the difference between pre-group and first follow-up in Group 1, a statistically significant result was found (z=-2.197, p=.014). On the contrary, there was no statistically significant difference between assessments in Group 2. This trend is similar to the changes in depression, a relatively significant decrease from post-group to first follow-up assessment. This result might indicate the long-term effectiveness of the intervention, which has been mentioned above. The group seems to have continued making an impact on the participants after the end of the intervention.

Table 6.5 Comparing the differences of somatisation between Groups 1 and 2

	Pre-group and post- group assessment	Post-group and 1 <sup>st</sup> follow-up	1 <sup>st</sup> and 2 <sup>nd</sup> follow-up
Group 1 (N=7) Participants with depression	Z=-1.577, p=.058	Z=-1.859, p=.032	Z=339, p=.368
Group 2 (N=11) Participants without depression	Z=409, p=.342	Z=089, p=.46	Z=-1.511, p=.066

NOTE: a. Wilcoxon test, one-tailed.

b. The figures in red are statistically significant result; the figures in green are nearly statistically significant results.

The Friedman test was used to examine the overall differences of somatisation. It was found that the overall changes of somatisation in Group 1 were statistically significant ( $X^2$ =7.721, p=.026), while there was nearly statistically significant change in Group 2 ( $X^2$ =5.697, p=.054) (see Table 6.6).

Table 6.6 The changes of somatisation throughout four assessments

Group 1 (N=7)	X <sup>2</sup> (3)=7.721, p=.026			
Group 2 (N=11)	X <sup>2</sup> (3)=5.697, p=.054			

NOTE: Friedman test, one-tailed.

From the result of the Friedman test, the intervention can be seen as effectively decreasing the level of somatisation in Group 1 and Group 2, due to the (nearly) statistically significant changes throughout the four assessments. Based on the results of the Wilcoxon and Friedman tests, the intervention seems to be more effective in the decrease of somatisation than of depression. This might be because somatisation is less able to be controlled than psychological symptoms by taking medication. Nevertheless, this might also be because the intervention – The BodyMind Approach<sup>TM</sup> – is somatically-focused. Consequently, the effectiveness of the intervention was more targeted towards the decrease of somatisation than of depression.

## 6.1.2.2.2 SOMS-7 and depression

A statistically significant correlation between somatisation and depression was found at not only the pre-group assessment (r=.658, p<.001, two-tailed), but also the post-group and two follow-ups (post-group: r=.709, p=.001; first follow-up: r=.737, p<.001; second follow-

up: r=.780, p<.001; two-tailed) (see Table 6.4). This result shows that somatisation is highly correlated to depression, and is a very strong indicator of depression, as previous literature has suggested. Moreover, the correlations between the differences of depression and somatisation between the paired assessments were examined (see Table 6.7). Nearly statistically significantly correlation and statistically significant correlation between post-group and first follow-up (r=.456, p=.057, two-tailed), and pre-group and first follow-up (r=.826, p<.001) were found. It indicates that depression and somatisation can be decreased at the same time through TBMA intervention.

In Payne's (accepted for publication) latest research, similar results are indicated as the depression scores for the patients with MUS in Payne's study were decreased at the post-group assessment, and the patients' MUS were also decreased as their symptom distress was decreased and their wellbeing was increased. As mentioned in the Literature Review, Hong and Lee (2008) found that although medication can effectively decrease psychological depressive symptoms, somatisation cannot be decreased along with psychological symptoms, and depressive symptoms and somatisation. However, this needs to be further examined to acquire more evidence.

	Pre- and post-group	Post-group and first follow-up	Pre- and first follow-up	Two follow- ups
Depression and somatisation	r=.027	r=.456	r=.826	r=.324
	p=.916	p=.057	p<.001***	p=.190
Depression and tightness	r=271	r=342	r=.247	r=398
	p=.277	p=.164	p=.322	p=.101
Somatisation and tightness	r=.077	r=.107	r=.324	r=.094
	p=.760	p=.672	p=.190	p=.710
Depression and conflict	r=233	r=199	r=438	r=084
	p=.352	p=.429	p=.069	p=.741
Conflict and somatisation	r=698	r=379	r=475	r=.246
	p=.001**	p=.121	p=.047*	p=.326

Table 6.7 Correlations between the change scores on the variables

NOTE: a.\*Statistical significance: \*p < .05; \*\*p < .01; \*\*\*p<.001. b. Pearson Correlation, two-tailed.

c. Figures in red are statistically significant; figures in green are nearly statistically significant.

#### 6.1.2.2.3 DeYin's story—from frequent urination to normal

DeYin, a participant in Group 1, was sixty years old, the oldest participant in the study. Nevertheless, she did not look like a 60-year-old woman, but about 50. She was beautiful, elegant, and polite. Her volume of speaking was rather low, but it was not difficult to hear her voice. She was very caring. The way she spoke was very tender and genuine. When she listened to other people speaking, she was very attentive. In the survey, her answer to whether she had experienced inner conflict was yes. She explained that she was struggling as to whether she should give her 23-year-old son her suggestions, because she was afraid of his bad temper or of him saying something not nice. Her tendency of keeping social harmony and her fear of arguing also showed in the therapeutic group. At the post-group assessment, DeYin told me that she did not feel comfortable when there was an argument between two participants in the session. She also felt surprised and disappointed when a participant told her that she did not want to pair with her in a session.

According to DeYin's completed questionnaire at the pre-group assessment, she had the problem of frequent urination. She did not go to see a doctor for this, as she thought it was normal for an ageing woman; besides, the result of her annual health examination was normal. Nevertheless, at the post-group assessment, she mentioned that her frequency of urination had become less than before; at the first follow-up assessment, she said that there was no frequent urination at all. Moreover, the trend of her scores of somatisation and depression were similar; both of them are decreased at the same time, from pre-group assessment to three-month follow-up, and increased slightly at six-month follow-up.

Because the researcher did not ask further about the symptoms of MUS and the connection between MUS and depression in this study (which is the deficit of this research design, and will be further considered in the Discussion section), it is unable to examine the connection between the improvement of frequent urination and therapeutic intervention. Nevertheless, it is still worth exploring DeYin's change through the intervention, which might provide some clues about this connection.

At the post-group assessment, DeYin said that she had learnt to take care of her body, and was aware of her emotions through her body after the intervention. She gave an example of this. When she was taking a shower at home one day, she found that she was quite enjoying the feeling of the water spreading on her body. She felt protected and safe. She then shared that

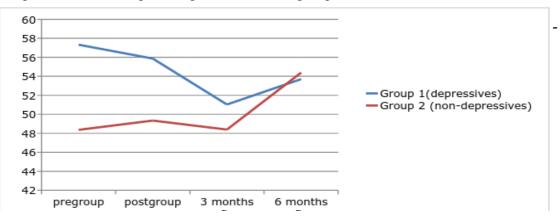
taking a shower was like "nurturing herself", and she "needed that" because she "did not used to do so". DeYin's experience showed that through the intervention, she seemed to become aware that she did not used to take care of herself, although she knew it was important. When she was taking her shower, she experienced that she needed emotional support, and that she could nurture herself. Her self-compassion also showed in her talk. She said that she had recently felt enthusiastic about health preservation through Chinese medicinal cuisine.

Ruling out the possibility of medically explained physical illness, is it possible that frequent urination was a presentation of DeYin's need of taking care of herself? In addition, could frequent urination have presented her nervousness and fear of not being liked, accepted or of breaking social harmony? She seemed to be used to taking care of others and paying attention to other people's needs; but she ignored or overlooked her own needs. She might sacrifice herself at some level in order to maintain social harmony. When she started to take care of herself, her frequency of urination became normal as this symptom had lost its function.

#### 6.1.2.3 Tightness

#### 6.1.2.3.1 The changes of tightness at the four assessments

The difference of tightness between Group 1 and Group 2 was statistically significant at pre-group assessment (t=-1.924, p=.026, one-tailed), but became statistically insignificant at post-group and two-follow-up assessments (see Table 6.1). This is because tightness in Group 1 was slightly decreased while that in Group 2 was slightly increased. The trend of the changes of the level of tightness at four assessments in both groups is shown in Graph 3.



Graph 3 Overall changes of tightness for both groups

Using the Wilcoxon test to examine the differences in tightness between pre-group and post-group, post-group and first follow-up, and between the two follow-up assessments in both groups, there were no statistically significant results for both groups (see Table 6.8). The same result was found by adopting the Friedman test to examine the overall changes throughout the four assessments (see Table 6.9).

	Pre-group and post- group assessment	Post-group and first follow-up	first and second follow-up
Group 1 (N=7) depression	Z=338, p=.368	Z=-676, p=.250	Z=507, p=.306
Group 2 (N=11) No depression	Z=089, p=.465	Z=578, p=.282	Z=-1.511, p=.066

Table 6.8 Comparing the differences in tightness between Groups 1 and 2

NOTE: Wilcoxon test, one-tailed.

Table 6.9 The changes in tightness throughout four assessments

Group 2 (N=11) X <sup>2</sup> (3)=5.697, p=.127	Group 1 (N=7)	X <sup>2</sup> (3)=1.800, p=.308
	Group 2 (N=11)	X <sup>2</sup> (3)=5.697, p=.127

NOTE: Friedman test, one-tailed.

From the results above, it can be seen that although the degree of tightness in Group 1 decreased after the intervention and decreased even further at the three-month follow-up, the difference between assessments did not reach statistical significance. This might result from the ineffectiveness of the intervention in decreasing tightness. It might also result from the small samples; the decrease in tightness might be statistically significant with larger samples. However, it has to be noted that the nature of tightness is not the same as depression and somatisation. As mentioned in the Literature Review, tightness is not a symptom; it is a psychological strategy. Tightness should not be overly decreased because extremely low tightness means extremely high looseness, which is identified as a characteristic of schizophrenic thought disorder (Bannister, 1962; Bannister, 1963; Winter, 1992). Therefore, this might be a factor in the statistically insignificant results. In addition, if there is no correlation between depression and tightness, as was reported in Chapter Four, a statistically significant decrease in tightness might not be expected. In addition, it is interesting to note that the mean of tightness in Group 2 is even higher than that in Group 1 at the six-month follow-up assessment. This result seems to support the assumption of the weak association between

tightness and depression. Consequently, the intervention may not be concluded as being helpful in reducing tightness, even though the difference in tightness between the two groups was statistically decreased after the intervention.

Moreover, as with depression and somatisation, the trend of the changes for tightness at the four assessments in Group 1 was similar; there was a decrease from pre-group to threemonth follow-up, and the decrease between post-group and three-month follow-up is larger than the decrease between pre-group and post-group. It illustrates that the influence of the intervention might not finish at the end of the 12-week intervention; rather, it can extend to three months after the intervention. Although depression, somatisation and tightness rose at the six-month follow-up, they did not become higher than the scores at post-group assessments. In other words, TBMA might have sustained effectiveness after the intervention, as Payne suggested in her pilot study (Payne & Stott, 2010). However, this assumption needs to be further examined as these scores increased at the six-month follow-up assessment, and most of the differences of these scores between assessments in this study were not statistically significant.

#### 6.1.2.3.2 Tightness and depression

There are no statistically significant correlations between tightness and depression throughout the four assessments (see Table 6.4). In addition, the correlations between the differences between the pairs of assessments in terms of depression and tightness are also not statistically significant (see Table 6.7). The results might reflect the weak association between tightness and depression, which is discussed in Chapter Four. This weak association might be related to cultural specificity; while tight construing is suggested as a characteristic of people with depression in some Western research (Winter, 1992), tightness might not be an indicator of depression in Taiwan. However, this needs to be further examined.

## 6.1.2.4 Conflict at the four assessments

#### 6.1.2.4.1 The changes of overall conflict

By using a t-test to examine the differences in conflict between Group 1 and 2, it was found that there were no statistically significant differences throughout the four assessments (see Table 6.1).

Using the Wilcoxon test to examine the differences of conflict between pre- and postgroup, post-group and first follow-up, and between the two follow-up assessments in both groups, it was found that although conflict decreased from the pre-group to three-month followup, and increased at the six-month follow-up in both Groups 1 and 2 (see Graph 4), there was no statistically significant change for either group (see Table 6.10). The same result is found by adopting the Friedman test to examine the overall changes throughout the four assessments (see Table 6.11).



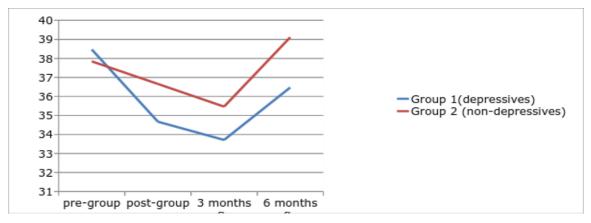


Table 6.10: Comparing the differences of conflict between Groups 1 and 2

	Pre-group and post- group assessment	Post-group and 1 <sup>st</sup> follow-up	1 <sup>st</sup> and 2 <sup>nd</sup> follow- up
Group 1 (N=7) depression	Z=085, p=.467	Z=507, p=.306	Z=338, p=.368
Group 2 (N=11) No depression	Z=-1.201, p=.115	Z=-1.023, p=.153	Z=-1.29, p=.099

NOTE: Wilcoxon test, one-tailed.

The results above are consistent with the result described in Chapter Four, namely no correlation between conflict and depression. Consequently, the intervention seems to have limited influence on conflict.

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Group 1 (N=7)	X <sup>2</sup> (3)=.771, p=.428
Group 2 (N=11)	X <sup>2</sup> (3)=3.055, p=.192

NOTE: Friedman test, one-tailed.

#### 6.1.2.4.2 Conflict and other variables

Consistent with the result at the pre-group assessment, conflict does not relate to depression at the four assessments (see Table 6.4). In addition, the changes of conflict and somatisation from pre- to post-group (r=-.698, p=.001, two-tailed), and from pre-group to three-month follow-up are negatively correlated to each other (r=-.475, p=.047, two-tailed) (see Table 6.7). This result, that the decrease of conflict is correlated to the increase of somatisation and depression at some paired assessments, might illustrate some points. Firstly, the result indicates a relationship between somatisation, depression and lack of conflict. Secondly, this shows that the overall conflict in construing might present in the physical aspect such as the formation of somatisation. Accordingly, this illustrates an inseparable union between psychological and physical aspects. However, the result seems to be inconsistent with the result of the statistically insignificant correlations between conflict and depression as well as between conflict and somatisation. The contradiction might be due to insufficient statistical power in this study; hence, further research is needed.

#### 6.1.2.4.3 WayShow's increased conflict and decreased somatisation

It is mentioned in Chapter Six that WayShow's overweight can be seen as a somatic symptom, and her body suffering might confirm the existence of self. At the three-month postgroup assessment she said that she had made a decision of looking for jobs outside of Taiwan, because she "does not want to regret one day". Of course her mother was very disapproving of her decision, but WayShow seemed to be very assertive of it. Research results show that her somatisation scores decreased throughout, but her level of conflict increased. Why did her somatisation increase while conflict decreased? There are many possibilities. Firstly, overweight might be a way of escaping from inner conflict between personal orientation (working abroad) and social orientation (her parents' expectation). Through being overweight, she might be able to have less experience of the inner conflict. Secondly, people in Chinese culture seem to tend to consciously or unconsciously adopt somatisation as a way of presenting psychological inner conflict (Kleinman & Good, 1985). Therefore somatisation might be a representation of inner conflict, and vice versa. Thirdly, WayShow might have repressed the conflict and therefore it transformed into somatic symptoms. Fourthly, as mentioned in Chapter Six, her overweight might be a passive protest against her parents, because she could not and consciously did not want to disobey her parents. Hence, when she took a decision to go abroad,

her somatic symptom might have 'lost its function', and therefore was decreased. In addition, her conflict rose because she started to confront both her inner conflict between her social and personal orientation and her outer conflict between herself and her parents.

# 6.1.2.5 Intention-to-treat analysis (ITT)

By utilising intention-to-treat analysis, it is found that the differences in depression, somatisation, tightness and conflict between pre- and post-group, post-group and first follow-up and two follow-ups are not statistically significant in either Group 1 or Group 2 (see Tables 6.12 to 6.15).

	Pre-group and post- group assessment	Post-group and first follow-up	first and second follow-up
Group 1 (N=12) Depression	Z=-1.022, p=.307	Z=-1.363, p=.087	Z=169, p=.433
Group 2 (N=12) No depression	Z=408, p=.341	Z=051, p=.480	Z=415, p=.339

Table 6.12: Comparing the differences of depression between Groups 1 and 2 (ITT)

NOTE: Wilcoxon rest, one-tailed.

Table 6.13: Comparing the differences of somatisation between Groups 1 and 2 (ITT	ſ)
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	Pre-group and post- group assessment	Post-group and first follow-up	first and second follow-up
Group 1 (N=12) Depression	Z=-1.577, p=.058	Z=-1.859, p=.032	Z=339, p=.735
Group 2 (N=12) No depression	Z=409, p=.342	Z=711, p=.239	Z=578, p=.282

NOTE: a. Wilcoxon rest, one-tailed.

b. The figures in red are statistically significant results; the figures in green are nearly statistically significant results.

Table 6.14: Comparing the differences of tightness between Groups 1 and 2 (ITT)

	Pre-group and post- group assessment	Post-group and first follow-up	first and second follow-up
Group 1 (N=12) Depression	Z=338, p=.368	Z=676, p=.125	Z=507, p=.306
Group 2 (N=12) No depression	Z=089, p=.465	Z=578, p=.282	Z=-1.511, p=.066

NOTE: Wilcoxon rest, one-tailed.

	Pre-group and post- group assessment	Post-group and first follow-up	first and second follow-up
Group 1 (N=12) Depression	Z=085, p=.467	Z=507, p=.306	Z=338, p=.368
Group 2 (N=12) No depression	Z=-1.201, p=.115	Z=-1.023, p=.153	Z=-1.29, p=.985

Table 6.15: Comparing the differences of conflict between Groups 1 and 2 (ITT)

NOTE: Wilcoxon rest, one-tailed.

The results show that the difference between pre-group and first follow-up in somatisation in Group 1 reaches statistical significance (Z=-1.859, p=.032, one-tailed). In addition, the difference between pre- and post-group in somatisation is nearly statistically significant (Z=-1.577, p=.058, one-tailed) (see Table 6.13). The results are found to be statistically significant in the previous analysis. Moreover, the overall change of somatisation in Group 1 throughout the four assessments is statistically significant (see Table 6.16), which is the only variable where overall change reaches statistical significance. This result is partly consistent with the previous analysis, as Group 1 has a statistically significant overall decrease in somatisation, while Group 2 has a nearly statistically significant overall decrease in somatisation in the previous analysis (see Table 6.6). Since somatisation is the only variable where changes in Group 1 reach statistical significance, the results show that the intervention might be more effective in the decrease of somatisation than of depression, tightness and conflict.

	tole 0.10: The overall changes of four variables infoughout four assessments (111)					
	Depression	Somatisation	Conflict	Tightness		
Group 1	$x^{2}(3)=2.739$	$x^{2}(3)=7.721$	$x^{2}(3)=.771$	$x^{2}(3)=1.800$		
	p=.217	p=.026	p=.428	p=.308		
Group 2	$x^{2}(3)=1.629,$	x <sup>2</sup> (3)=3.385	$x^{2}(3)=2.939$	$x^{2}(3)=3.327$		
	p=.327	p=.168	p=.201	p=.172		

Table 6.16: The overall changes of four variables throughout four assessments (ITT)

NOTE: a. Friedman test, one-tailed.

b. The figures in red are statistically significant results.

The correlations between depression and other variables at the four assessments are also examined. However, differently from the previous analysis, the correlations between depression and the distance between ideal self and the mean of the distances between depression and me as a mother/daughter/wife at pre-group assessment are not statistically significant (r=.386, p=.068, two-tailed) (see Table 6.17). In addition, it is worth noting that the correlations between depression and the distance between actual and ideal self at pre-group

(r=.396, p=.076, two-tailed) and first follow-up assessments (r=.096, p=.664, two-tailed) are not statistically significant, which are inconsistent with previous analysis. These inconsistent results show that whether the distances are an indicator of depression needs to be further examined.

	Pre-group assessment	Post-group assessment	1 <sup>st</sup> Follow-up assessment	2 <sup>nd</sup> Follow-up assessment
Somatisation	r=.658, p<.001***	r=.668, p<.001***	r=.469, p=.024*	r=.671, p<.001***
Tightness	r=.097, p=.660	r=068, p=.756	r=270, p=.214	r=197, p=.368
Conflict	r=.181, p=.408	r=.072, p=.744	r=.024, p=.914	r=.347, p=.104
Actual/ideal self	r=.396, p=.076	r=.492, p=.018*	r=.096, p=.664	r=.215, p=.324
Actual self/ roles <sup>a</sup>	r=.464, p=.026*	r=014, p=.950	r=080, p=.716	r=.259, p=.232
Actual self/me as a woman	r=.315, p=.142	r=029, p=.894	r=181, p=.408	r=216, p=.322
Actual self/ others <sup>b</sup>	r=.352, p=.101	r=276, p=.202	r=.395, p=.062	r=100, p=.652
Actual self/mother	r=.390, p=.072	r=242, p=.278	r=386, p=.076	r=254, p=.254
Actual self/ father	r=.347, p=.114	r=.350, p=.110	r=.207, p=.356	r=188, p=.402
Actual self/ normal person	r=.010, p=.962	r=062, p=.778	r=226, p=.298	r=468, p=.024*
Ideal self/others	r=382, p=.072	r=.191, p=.384	r=266, p=.220	r=.115, p=.600
Ideal self/roles	r=.386, p=.068	r=076, p=.730	r=033, p=.882	r=.215, p=.326
Others/roles	r=.348, p=.102	r=.441, p=.036*	r=.395, p=.062	r=.020, p=.464

Table 6.17: The correlations between depression and variables on the data of ITT

NOTE: a. 'Roles' refers to the mean of the distances between depression and the three elements (me as a mother/daughter/wife).

- b. 'Others' refers to the element 'how other people see me'.
- c. The figures in blue are statistically significant, although insignificant in the previous on-treatment analysis, or vice versa.
- d. The figures in red are statistically significant results, which are also obtained from on-treatment analysis.
- e. Pearson Correlation test, two-tailed.
- f. \*Statistical significance: \*p < .05; \*\*p < .01; \*\*\*p  $\leq$  .001

## 6.2 Clinical significance

#### 6.2.1 Depression

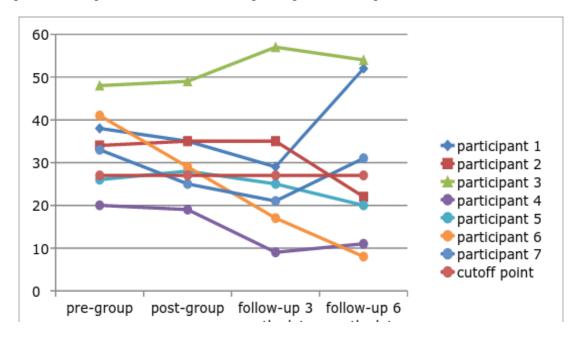
Apart from statistical significance, clinical significance is also examined to discover every participant's situation. The cut-off for depression in this study is 27.707, which is rounded off to 28. This is determined by the formula proposed by Jacobson et al. (1984). The equation below is used to calculate the cut-off for depression in this study. The symbols and their definitions in the equation in terms of the Taiwan Depression Scale (TDS) and the Screening for Somatoform Symptoms-7 (SOMS-7) are presented in Table 6.18.

Symbol	Definition	Value
	Pre-group mean of the depression/somatic symptoms for people without depression	24.25 42.58
	Pre-group mean of the depression/somatic symptoms for people with depression	31.82 61.273
	Pre-group depression score/somatic symptoms of a participant	
	Post-group depression score/somatic symptoms of a participant	
	Standard deviation of depression score/somatic symptoms for people with depression	11.531 23.639
	Standard deviation of depression score/somatic symptoms for people without depression	9.697 17.85
	Test-retest reliability of the Taiwan Depression Scale (TDS) /SOMS-7	0.67 0.71
	Standard error of measurement for TDS/SOMS-7	6.624 12.73
	Standard error of distance between the two test scores	9.368 18.003

Table 6.18: The symbols and their definitions in terms of TDS and SOMS-7

In addition, a participant is considered to meet the condition of reliable change if the Reliable Change (RC) is greater than 1.96 (Ankuta & Abeles, 1993). The formula for calculating RC is illustrated below.

The scores of depression for each participant in Group 1 at four assessments compared with the cutoff are shown in Graph 5.



Graph 5: The depression scores for each participant in Group 1 at four assessments

Of the seven participants with depression who completed the group and assessments, participant four had depression scores under the cut-off across all four assessments, while participants one and three had depression scores over the cut-off across all four assessments. Participant six had a constant decrease of depression from 41 at pre-group to 29 at post-group, and down to 17 and 8 at the two follow-up assessments, which were lower than the cut-off.

Participant two had a depression score above the cut-off at the first three assessments, and down to 22 at the fourth assessment. Participant five had a slight increase of the score from 26 at pre-group to 28 at post-group, and a decrease to lower than the cut-off at the two follow-ups. Furthermore, the depression score of participant seven was down to under the cut-off after the group, but increased to over the cut-off again at the second follow-up.

It can be seen that only participant seven had depression scores which move from over the cut-off point at pre-group to lower than this point at post-group. Three participants (numbers five, six and seven) had depression scores that moved from higher than the cut-off at pre-group to lower than the cut-off point at the first follow-up. At the second follow-up, the levels of depression of four participants (numbers two, four, five and six) were under the cutoff. In other words, apart from participant four, the other three participants moved from the depressive to non-depressive range.

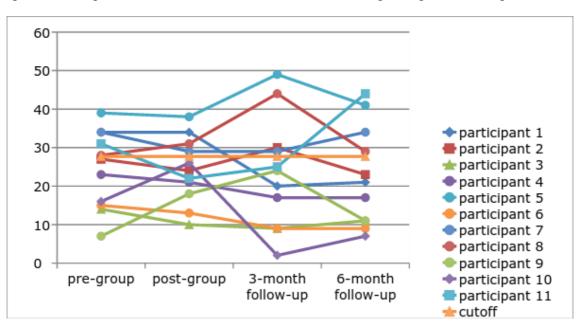
As for the reliable change, the standard error of measurement for the Taiwan Depression Scale is 6.624, and the standard error of distance between the two test scores is 9.368 (Yu, Liu & Li, 2008). Each participant's reliable change is examined (see Table 6.19).

Participant	1	2	3	4	5	6	7
Pre- and post- group	0.32	0.107	0.107	0.107	0.213	1.281	0.854
Pre-group and first follow-up	0.961	0.107	0.961	1.174	0.107	2.562	1.281

Table 6.19: The reliable change of depression in Group 1

Only the reliable change between pre-group and first follow-up for participant six is higher than 1.96. In other words, only this participant had a reliable change in depression from over the cut-off point at pre-group to under the cut-off at first follow-up.

As for Group 2 (people without depression), five participants (numbers three, four, six, nine and ten) out of eleven had depression scores that were under the cut-off across all the four assessments, while the depression scores of three participants (numbers five, seven and eight) were higher than the cut-off across all the four assessments (see Graph 6). There is a decrease from over the cut-off at pre-group to under at the first follow-up for participant one, but the reliable change is not higher than 1.96 (20- 34/9.36783869=1.068). The depression of participant eleven decreased from over the cut-off pre-group to under the cut-off post-group. In addition, the reliable change between pre- and post-group is higher than 1.96 (22- 31/9.36783869=2.02). However, this participant's level of depression increased to over 27 at the second follow-up assessment. Therefore, only participant eleven in Group 2 can be identified as having a reliable change of depression from within the depressive range pre-group to out of the depressive range at three-month follow-up.

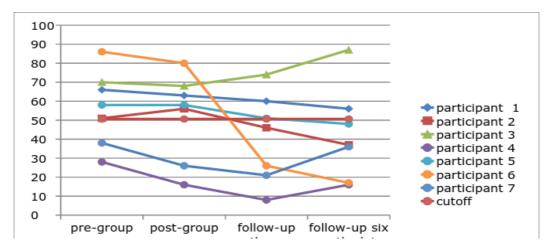


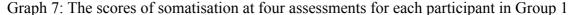
Graph 6: The depression scores at four assessments for each participant in Group 2

Consequently, it can be seen that there is only one participant in each group who has a reliable change from within the depressive range pre-group to out of the depressive range at three-month follow-up.

#### 6.2.2 Somatisation

For somatic symptoms, the cut-off is 50.622, according to the formula mentioned above.In Group 1, the scores of somatisation for participants one and three are higher than the cut-off throughout the four assessments (see Graph 7). Their depression scores are also higher than the cut-off throughout.





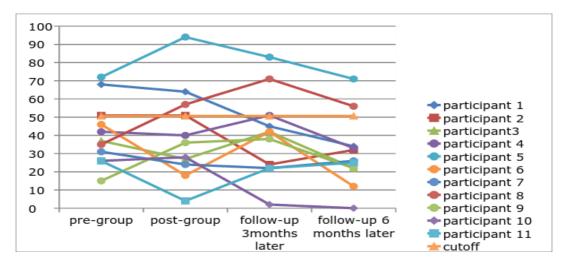
Somatisation scores for participants four and seven are also under the cut-off throughout. No participants' somatisation scores higher than the cut-off at pre-group dropped to under the cut-off post-group. The scores of somatisation for three participants (numbers two, five and six) moved from higher than the cut-off at pre-group to lower than the cut-off at the second follow-up. Reliable change is examined. The standard error of measurement for the Screening for Somatoform Symptoms-7 (SOMS-7) (Rief & Hiller, 2003) is 12.73, and the standard error of distance between the two test scores is 18.003. Reliable change for each participant is listed in Table 6.20.

Participant	1	2	3	4	5	6	7
Pre- and post-group	0.833	0.277	0.111	0.667	0	0.333	0.667
Pre-group and first follow-up	0.333	0.278	0.222	1.111	0.389	3.333	0.944

Table 6.20: The reliable changes of depression for each participant in Group 1

Of all the participants in Group 1, only participant six has a higher than 1.96 reliable change in somatisation. This participant is also the only one having a reliable change of depression which is higher than 1.96 in Group 1. For Group 2, of all the eleven participants who completed the intervention group and four assessments, six participants (numbers three, six, seven, nine, ten and eleven) are under the cut-off all along, while participant five is over the cut-off across all the four assessments (see Graph 8).

Graph 8: The scores of somatisation at four assessments for each participant in Group 2



Somatisation is decreased from over the cut-off pre-group to under the cut-off at first follow-up for participants one and two, while it is increased from under the cut-off at pre-group to over the cut-off at the next three assessments for participant eight. The reliable changes for the three participants are examined (see Table 6.21).

Participant	1	2	8
Pre- and post- group	0.222	0	1.222
Pre-group and first follow-up	1.278	1.45	2

Table 6.21: The reliable changes of somatisation for participants 1, 2 & 8 in Group 2

Although somatisation is decreased from over the cut-off for participants one and two pregroup to under the cut-off at first follow-up, neither make a reliable change. However, for participant eight, the increase of somatisation from pre-group to first follow-up is a reliable change as the score is over 1.96.

To conclude, the analysis illustrates that only participant six in Group 1 shows a clinically significant decrease in both somatisation and depression, as both of the scores are decreased from over the cut-off pre-group to under the cut-off at first follow-up, and the changes are reliable. For Group 2, only the decrease of depression from pre-group to first follow-up for participant eleven reaches reliable change. In addition, it is notable that for participant eight in Group 2, her somatisation scores moved from under the cut-off pre-group to over the cut-off at the next three assessments, and the changes are reliable. Moreover, this participant's depression scores are also over the cut-off across all the assessments. The scores increased from a pre-group score of 28 to a first follow-up score of 44, although the change is not reliable. From the quantitative results, it seems that the intervention made participant eight 'worse'. Therefore, this participant's situation will be both quantitatively and qualitatively further explored by case study in Chapter Eight, along with the further exploration of the participant who had a clinically significantly reliable change on both somatisation and depression.

#### 6.3 Content of construing

The percentages of each category of content of construing at the four assessments for Groups 1 and 2 are listed below (see Table 6.22 and Table 6.23). In chapter Four, it was mentioned that the percentage of emotional constructs at pre-group assessment in both groups

is significantly lower than in the original data collected by Feixas in Spain in 2003 (p=.003). The percentage of emotional constructs at post-group assessment is higher than pre-group in both groups, but the increase does not reach statistical significance in Group 1 ( $\chi^2$  =1.035, p=.31) and Group 2 ( $\chi^2$  =1.212, p=.27). In addition, it is still statistically significantly lower than Feixas' data ( $\chi^2$  =12.136, p=.002). This result perhaps indicates a characteristic of Chinese culture in which people use less emotionally related vocabulary and show fewer emotions than people in Western culture. Furthermore, this phenomenon may partly explain the prevalence of medically unexplained symptoms in Chinese culture. This is discussed in Chapters Two and Four.

Type of construing	Group 1 (people with depression)				
	Pre-group	Post-group	First follow-up	Second follow-up	
Moral	14.17%	24.29%	7.14%	18.57%	
Emotional	10.83%	15.71%	8.57%	5.71%	
Relational	30.8%	30%	22.86%	24.29%	
Personal	25%	15.71%	28.58%	28.57%	
Intellectual/Operational	4.17%	1.43%	7.14%	15.71%	
Values and Interests	15%	12.86%	25.71%	7.14%	

Table 6.22: The percentage of each type of construct in four assessments for Group 1

Type of construing	Group 2 (people without depression)				
	Pre-group	Post-group	First follow-up	Second follow-up	
Moral	16.7%	20%	14%	11.82%	
Emotional	5.8%	10%	6%	5.45%	
Relational	38.3%	27.27%	33%	39.09%	
Personal	18.3%	24.55%	19%	25.45%	
Intellectual/Operational	0.83%	4.55%	6%	6.37%	
Values and Interests	20%	13.64%	22%	11.82%	

Table 6.23: The percentage of each type of construct in four assessments in Group 2

However, the percentage of emotional constructs increases at post-group in both groups; from 10.83% to 15.71% in Group 1, and from 5.8% to 10% in Group 2. The increase of the use of emotional constructs after intervention might illustrate that they felt more secure in using emotional terms because the participants might be more trusting of the researcher, so that they knew that talking about their emotions would not harm the interpersonal harmony (Bond, 1993). Nevertheless, both Groups 1 and 2 use fewer emotional constructs at the two follow-ups. This might be because the participants felt more distant from the researcher since the researcher did not contact the participants between interviews.

Yet the decrease of the percentage of emotional constructs at two follow-ups might relate to the decrease of depression. In Group 1, this percentage at the six-month follow-up (5.71%) is nearly the same as their counterparts in Group 2 at the six-month follow-up (5.45%). According to Feixas (2003), people with depression tend to use more emotional constructs than people without depression. Therefore, nearly the same percentage of emotional constructs between the two groups can be seen as a sign of recovery for Group 1. However, there is not sufficient evidence indicating the connection between the percentage of the use of emotional constructs and depression in this study. The participants with depression do not have statistically significantly more emotional constructs than the participants without depression at the pre-group assessment; therefore, emotional constructs might be less related to depression in this study.

As mentioned in Chapter Four, it should be noted that there is only one coder, who is the researcher, coding the content of construing; hence the reliability of coding has not been checked. Consequently, the results need to be treated with caution.

6.4 Helpful and non-helpful aspects of the group intervention

All participants' answers to 'What were the most helpful and non-helpful aspects of the group' are categorised by Yalom's 11 therapeutic factors (see Table 6.24).

	Group 1	Group 2
instillation of hope	0	0
universality	1	1
imparting information	0	0
altruism	1	0
corrective recapitulation of the primary family experience	0	0
development of socialising techniques	0	0
imitative behaviour	0	0
cohesiveness	3	6
existential factors	0	0
catharsis	1	1
interpersonal learning	3	6
self-understanding	4	6

Table 6.24: The numbers of helpful aspects in each therapeutic factor

All participants mentioned that the group was helpful. Of the 11 therapeutic factors, universality, altruism, catharsis, cohesiveness, interpersonal learning, and self-understanding were mentioned i.e. more than half of the factors. Cohesiveness, self-understanding and interpersonal understanding were mentioned the most as helpful factors by both Group 1 and Group 2. Four out of seven participants in Group 1 and six participants out of eleven in Group 2 mentioned that they benefited from the support of the group members so that they felt safe enough to explore themselves through either moving or verbally sharing.

As for the non-helpful aspects, four participants in each group said there were no nonhelpful aspects. Two out of the other three participants in Group 1 mentioned that they did not like to move spontaneously as it was 'too much freedom' and they 'did not know what to do'. One participant was afraid of being misunderstood or being judged when sharing in the group.

Of the seven participants who mentioned non-helpful aspects in Group 2, two participants mentioned that the structure of the sessions was too fixed and wanted them to be 'more free and unpredictable' so that they could explore themselves even more deeply; three participants mentioned the anxiety of sharing in front of the group members; and one participant complained that the venue was too far from her home. The last participant complained that the facilitator did not provide enough information in relation to the 'actual changes' outside the therapy room.

It is interesting to note that although all the participants found the group helpful, this was not fully reflected in the change data. This might be because the scales were not sensitive enough to detect the changes. It might also be because they felt embarrassed about telling the researcher that they actually did not find the group helpful. People in a culture of high social orientation such as Chinese culture might choose not to tell a truth which could break social harmony. Moreover, it should also be considered that although they found the group helpful, the 12-week intervention might be too short to make a more obvious change. Furthermore, only depression and somatisation scales were used, in addition to the grid, and therefore their changes in other aspects cannot be tested. For example, the participants mentioned that the most helpful aspects were interpersonal learning, cohesiveness and self-understanding; however, no scales relating to these three aspects were used in the study.

Another interesting phenomenon was noticed. While some participants in Group 1 complained about the 'freedom', some participants in Group 2 complained about the lack of freedom. This perhaps indicates that people with depression tend to prefer structured sessions because these can provide predictability and therefore reduce anxiety. On the other hand, the participants without depression were more welcoming of unpredictability and might be more willing to change. This could link to people with high tightness not liking 'surprises' and too many possibilities, while people with low tightness are more fond of having many choices and an unpredictable future. However, in this study, tightness and depression are not found to be correlated with each other; therefore this assumption needs to be further examined.

In addition, the participants in both groups mentioned their anxiety about speaking in front of others because they were afraid of being judged. This can be associated with the correlation between depression and the distance between self and 'how other people see me' discovered at pre-group assessment. Moreover, it is interesting to note that on the one hand, the participants mentioned that the most helpful aspect was the support from the group, but on the other hand they mentioned the non-helpful aspect of talking in front of others due to the anxiety of being judged. As mentioned before, the social boundary in Chinese culture is blurred because the perception of self can be extended to relatives, friends and even nations. Therefore, people in Chinese culture might be more anxious about the construction of self-identity in social groups through the development of individualisation; hence, social relations become a major issue.

However, one issue that should also be taken into consideration is that women might be more socially-related than men, and consequently they might experience stronger anxiety over the issue of social relations (Fuhrer & Stansfeld, 2002). Nevertheless, there are researchers who propose that women being thought of as putting more of an emphasis on social relations than men might be a stereotype and a cultural myth (Ridgeway & Correll, 2004). Consequently, the gender and cultural variables influencing the degree and content of social relations need to be further examined.

6.5 What might make a TBMA group effective in relation to MUS and the distance between social roles and actual self?

According to the results above, it can be seen that TBMA intervention seems to be effective for the decrease of MUS and decreased distance between social roles and actual self. Its effectiveness might be due to various reasons. Firstly, the structure of the sessions provides opportunities to explore the self on one's own, in a dual relationship, and in a group. The structure of each session is similar, starting with verbal sharing to check every participant's situation, followed by warming up in order to encourage the participants to connect their body and mind, and prepare for the next exercise. Authentic Movement (AM) is the next exercise, enabling the participants to explore themselves in a dual relationship. After AM, they can individually choose any kind of art materials provided in the room to make further connection and exploration of their experience in AM, which is followed by verbal sharing in the group at the end of sessions. Hence, in the sessions, each participant is able to explore herself in a group.

orientations, actual self and social roles. When they were witnessed by another person or when they witnessed others, they had to try to cope with the anxiety of seeing and being seen in an intensive dual relationship, and to process issues such as 'what I want to be in front of people?', 'how does my partner see me?', 'what is my actual self and do I want to share my actual self to my partner?', and 'will I get hurt if I show my actual self in front of my partner?' These issues can also arise in their relationships with their parents, partners, children or friends in reality, which are critically related to their thoughts, feelings and emotions toward their actual self and social roles.

Thirdly, because they were encouraged to explore, experience, and verbally and nonverbally express their emotions, feelings and thoughts in the process of the intervention, their somatic symptoms might therefore lose their existent causes. As mentioned before, one reason for MUS being prevalent in Chinese culture is probably that people in Chinese culture are not used to directly expressing their emotions. In Chinese literature, emotions are expressed through referring to the environment. Expressing emotions directly is inappropriate and vulgar (Kleinman & Good, 1985). Hence, when they were encouraged to directly express their emotions, their MUS were decreased.

There is also another possible reason for the decrease of MUS. Psychological depressive symptoms are stigmatised in Chinese culture, and this is probably also a reason for the prevalence of MUS in Chinese culture. However, when depressive symptoms were accepted by group members, they no longer needed to suppress their depressive symptoms as somatisation.

## 6.6 Discussion

This chapter attempts to answer research question four, 'How does The BodyMind Approach reduce depression and MUS in Taiwan?' The answers to this question can be discussed in three aspects. Firstly, in terms of the decrease of depression, TBMA seems to be effective in reducing the level of depression for women in Taiwan, because the difference in depression between the two groups moved from statistical significance pre-group to statistical insignificance post-group and at two follow-ups.

In addition, the correlations between depression and socially related elements moved from statistical significance pre-group to insignificance at the following three assessments. This also

indicates the effectiveness of the intervention as socially related elements might be a lesser source of depression after the intervention.

In addition, the decrease of depression in Group 1 from pre-group to three-month followup is almost statistically significant, which can also be seen as an indication of the effectiveness of the TBMA intervention. Furthermore, the difference in the percentage of emotional constructs between the two groups was reduced throughout the assessments and this percentage in Group 1 moved from 5.03% higher than Group 2 pre-group, to only 0.26% higher than Group 2 at six-month follow-up. Based on Feixas' (2003) proposition that people with depression tend to use more emotional constructs than people without depression, this result might indicate the effectiveness of the intervention. However, the difference between the two groups pre-group did not reach statistical significance, and it therefore requires further investigation.

Nevertheless, there is evidence to show the ineffectiveness of the group in reducing depression. For example, as with the result at pre-group assessment, depression and the distance between actual self and ideal self are still correlated at post-group and three-month assessments. This suggests that the distance between actual self and ideal self might still be an indicator of depression after the intervention. However, this correlation becomes statistically insignificant at the six-month follow-up, and whether it is related to the effectiveness of the intervention needs to be further investigated. Nevertheless, the distance between actual self and ideal self and ideal self and ideal self is only correlated to depression at post-group assessment in intention-to-treat analysis, which raises the question of whether the distance between the two elements is an effective indicator of depression in women in Taiwan.

In addition, there are no statistically significant changes of depression either between the paired assessments or throughout the four assessments. Moreover, these results are consistent with the results conducted by intention-to-treat analysis. Furthermore, although four participants in Group 1 moved from within the depressive range pre-group to out of this range at six-month follow-up, only one participant of these four had a reliable change in depression.

These results might be influenced by some issues which have already been mentioned; for example, the small samples can result in not enough statistical power. In addition, the Taiwanese Depression Scale might be not sensitive enough to monitor the changes in depression. Furthermore, this was the first time the facilitator had facilitated a TBMA group

after receiving a qualification to do this. Therefore, the lack of experience might also affect the efficacy of the group. In addition, a 12-week group might be too short for the participants to have more significant improvement. Moreover, it might also relate to the limitation of the adopted scales.

As shown in the results, interpersonal relationships seem to be very much a focus of the participants. Firstly, distance scores derived from the elements relating to social roles, which represent how the participants identify themselves among social groups, were correlated to depression. Secondly, both the most and the least helpful aspects of the intervention are all related to the perception of other participants. However, the characteristic of emphasising social relations in Chinese culture needs to be further discussed, as there is also Western research indicating that people with depression tend to emphasise social relationships and identify themselves through how they are seen by others (Lewinsohn et al., 1980). Nevertheless, the characteristic of emphasising social relations in Chinese culture along with the changes of the possible characteristics through the intervention are less able to be accessed in this study, as the scales and measurements adopted cannot fully monitor the content and the changes of their attitude towards social relationship in relation to depression. Although these changes can be partly seen from the results of the repertory grid (such as the changes of scores involving the socially related elements at four assessments), these cannot provide a clearer picture in terms of this issue. Consequently, further research is needed, such as the utilisation of questionnaires relating to social relations and refinement of the grid elements.

Secondly, the research question can be answered by the results with respect to somatisation. The TBMA intervention seems to be more effective in reducing somatisation than depression. There was a statistically significant difference in somatisation between Groups 1 and 2 pre-group, but this became statistically insignificant post-group and at the two follow-ups. As with depression, there was a statistically significant difference in depression between the two groups pre-group, but this became statistically insignificant in the three later assessments. However, differently from depression, a nearly statistically significant decrease of somatisation was found from pre- to post-group (z=-1.577, p=.058, one-tailed), and a statistically significant decrease from post-group to three-month follow-up (z=-1.859, p=.032, one-tailed). In addition, the decrease of somatisation throughout the four assessments was statistically significant in Group 1 ( $x^2=7.721$ , p=.026) and nearly statistically significant in Group 2 ( $x^2=7.721$ , p=.052).

By utilising intention-to-treat analysis, the change between post-group and three-month follow-up reaches statistical significance (Z=-1.859, p=.032), and the change between pregroup and post-group is nearly statistically significant (Z=-1.577, p=.058). However, only the overall change of somatisation throughout the four assessments in Group 1 reaches statistical significance ( $x^2$ =7.721, p=.026).

The result that TBMA seems to be more effective on MUS might be because the medication the participants took during the intervention might have less impact on the physical aspect. It might also be because TBMA is a somatic-focused intervention.

As for clinical significance, the scores of SOMS-7 of the five participants in Group 1 moved from higher than the cut-off pre-group to lower than the cut-off at six-month followup. Nevertheless, only one of the five participants had a reliable change. This participant also had a reliable change on the decrease of depression score from pre-group to three-month follow-up.

In addition, it is worth noting that the decrease of somatisation is associated with the decrease of depression from pre-group to three-month follow-up (r=.826, p<.0001, two-tailed), and nearly statistically significantly correlated from post-group to three-month follow-up (r=.456, p=.057, two-tailed). This result shows that TBMA intervention can facilitate the decrease of somatisation and depression at the same time. It is an interesting result as somatisation is usually seen as a symptom which is difficult to be treated along with depression (Hong & Lee, 2008). Consequently, the above results suggest that TBMA can be an alternative treatment for the decrease of somatisation along with depression.

Thirdly, it is interesting to note that the changes of conflict and somatisation from pre- to after-group (r=-.698, p=.001), and from pre-group to three-month follow-up (r=-.475, p=.047, two-tailed) are negatively correlated to each other. This result shows that the generation of conflict might be able to facilitate the decrease of somatic symptoms. It is consistent with Winter (1983), where conflict was correlated with improvement in group psychotherapy. TBMA is also a type of group psychotherapy, and Winter (1992) suggested that conflict in people with a neurotic disorder can be increased through their improvement. This might be because as the psychotherapist encourages the patients to explore their inner world, the patients' construct system becomes more sophisticated and therefore conflict increases.

Fourthly, TBMA intervention can be effective in the decrease of somatic symptoms, and the distance between actual self and social roles is probably because the structure of the sessions and Authentic Movement provided chances for the participants to explore actual self and social roles. In addition, since the participants were encouraged to directly express their emotions and feelings when expressing emotions is not encouraged in Chinese culture, and they were accepted as they were in group without stigmatising their symptoms, somatisation can therefore be decreased.

Based on the above four points, the effectiveness of TBMA on depression and somatisation is concluded. In the next chapter, the last research question, 'Is rigid movement related to tight psychological construing?' will be discussed.

# **Chapter Seven: Movement analysis**

#### 7.0 Introduction

This chapter aims to respond to research questions five, six and seven, 'Is rigid movement related to tight psychological construing in Taiwanese women?', 'Are there movement differences between women with depression and without depression?' and 'Are there changes in movement over the course of therapy?' The association between psychological tightness and four types of rigid movements: variation, coordination, vertical dimension and small kinesphere, as well as other movement qualities, will be examined. The changes of these movement qualities at the three assessments between Groups 1 and 2 will also be analysed, compared and discussed, in order to further examine the correlation between psychological and physical aspects. The results regarding these three research questions will also be illustrated through the discussion of two cases, which will be further discussed in Case Study. Apart from responding to these research questions, this chapter will present a comparison between this research conducted in the Chinese culture and literature from the Western culture, in order to discuss the commonality and dissimilarity between the two cultures in terms of movement qualities. Finally, interpretations of the cultural characteristics of Taiwan under the influence of modernisation will be made, based on the movement observations.

## 7.1 Inter-rater reliability

All participants' movements in three sessions including the first, sixth and twelfth sessions were analysed by two independent raters. The agreement percentage is 57.08%, which is calculated as below. The number of participants in Group 1 is 7, and that in Group 2 is 11.

The number of agreements between the two raters was 1,758, and total number of scores available was 3,080. This agreement percentage, 57.08%, is much lower than the reliable percentage of 70% which is generally accepted (Stemler & Tsai, 2008). This unsatisfactory result might have several causes. Firstly, the video quality was not good enough for the raters to clearly see the movers' movements. Due to the consideration of confidentiality and a group sense of security, no one (including the researcher) but the facilitator and the participants were allowed to stay in the room during the sessions. In other words, no one was able to manage the two cameras. Two cameras were set up at two sides of the room before each session started. Consequently, the movers might be overlapping in the screen or out of the screen so that the

coders found it difficult to appropriately code the movers' movements. Secondly, only one rater is a licensed Laban movement analyst. The other rater is a registered dance movement psychotherapist in the UK and studied Laban movement analysis (LMA) for two years. Therefore, the difference in their training background in terms of LMA might also influence their judgment of the movements. Due to the low inter-rater reliability, only the data rated by the rater who is a licensed Laban movement analyst will be analysed and discussed.

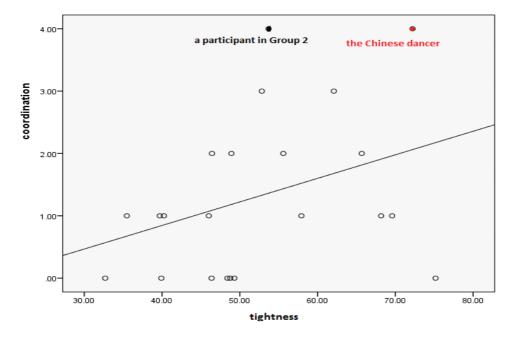
7.2 Research question five, 'Is rigid movement related to tight psychological construing?'

7.2.1 The association between movement variations, coordination, kinesphere, vertical movement and tightness at the first assessment

One participant in Group 1 dropped out before the first session started. Four minutes in the first session had been randomly chosen and were then coded. The reason for the decrease of the coded minutes from the originally planned six minutes to four is that many participants were late for the first session; in addition, introducing group rules and short self-introductions also took time. Eventually, there were only 40 minutes for moving time, and therefore only four minutes were coded.

Movement variation and tightness are not correlated (r=.051, p=.820, two-tailed) at the first assessment (see Table 7.1). In addition, a statistically significant correlation was not found between tightness and coordination (r=.355, p=.105, two-tailed). However, one participant in Group 1 was a traditional Chinese dancer and her movement was trained to be very coordinated. This might have considerably influenced the result since this research was a very small sample with only 11 participants' movements in Group 1 and 12 participants' movements in Group 2 being analysed.

A scatter plot illustrates that although this Chinese dancer participant is an outlier, which means that this participant's data lies outside most of the other participants' data (see Graph 9), another participant in Group 2 is also an outlier, which may influence the correlation between tightness and coordination. However, it can be seen that without the two outliers, tightness and coordination seem still not to be correlated.



Graph 9 Linear relationship between coordination and tightness

When examining the association between small kinesphere and tightness, no association was found between the two variables (r=.301, p=.174, two-tailed). Moreover, vertical movement was almost statistically significantly associated with tightness (r=.405, p=.062, two-tailed), but not associated with sagittal movement (r=-.125, p=.580, two-tailed). This means that the more the use of vertical movement, the higher the tightness of construing.

assessments		
	First assessment	Third assessment
Variations	r=051, p=.820	r=.600, p=.008
Isolation	r=271, p=.222	r=.432, p=.074
Coordination	r=.355, p=.105	r=.154, p=.542
Sudden	r=097, p=.666	r=.556, p=.016
Sustained	r=504, p=.017	r=.317, p=.2.00
Neutral time	r=.207, p=.356	r=.644, p=.004
Light	N/A*	r=.483, p=.042
Strong	r=122, p=.588	r=.356, p=.146
Neutral weight	r=402, p=.064	r=.396, p=.104
Direct	r=124, p=.581	r=.463, p=.054
Flexible	r=.040, p=.859	r=.318, p=.200
Neutral space	r=355, p=.105	r=.053, p=.834
Free	r=.361, p=.099	r=.600, p=.008
Bound	r=194, p=.388	r=.369, p=.132
Neutral flow	r=154, p=.494	r=.344, p=.162
Small kinesphere	r=.301, p=.174	r=.234, p=.35
Large kinesphere	r=082, p=.716	r=.521, p=.026
Far-reaching kinesphere	r=.207, p=.356	r=.486, p=.042
Vertical	r=.405, p=.062	r=.503, p=.034
Horizontal	r=.046, p=.839	r=.455, p=.058
Sagittal	r=125, p=.580	r=.289, p=.244
Shapeflow	r=255, p=.252	r=.322, p=.194
Arc-like	r=.215, p=.336	r=.445, p=.064
Spoke-like	r=060, p=.790	r=.388, p=.112
Carving	r=002, p=.993	r=.213, p=.396

Table 7.1 Tthe association between pre/post-tightness and movement qualities at first and third assessments

NOTE: a. Pearson correlation, two-tailed.

b. Figures in red are statistically significant results and in green are nearly statistically significant results.

- c. N/A for the correlation between light and tightness is because the data was not normally distributed. Among all the 23 participants, 22 participants showed light movement quality in all four coded minutes while only one participant in Group 2 showed this movement quality in two of four coded minutes.
- 7.2.2 The association between movement variation, coordination, kinesphere and vertical movement and tightness at the third assessment

The second assessment was conducted at the sixth session, and the third assessment was conducted at the twelfth session. The association between rigid movement and tightness was only examined at the first and third assessments, because the repertory grid interview had not been conducted during the 12-week intervention and therefore the level of tightness at the second assessment is unknown.

Movement variation and tightness at the third assessment is statistically significantly positively correlated (r=.600, p=.008, two-tailed) (see Table 7.1), which is different from the statistically insignificant result at the first assessment. Moreover, coordinated movement (r=.154, p=.542, two-tailed) and isolated movement (r=.432, p=.074, two-tailed) are not correlated to tightness at the third assessment. As for the correlation between kinesphere and tightness, large and far-reaching kinesphere are found to be correlated with tightness (large: r=.521, p=.026, far-reaching: r=.486, p=.042; two-tailed), which was not found at the first assessment.

Similarly to the result at the first assessment, tightness is correlated with vertical movement (r=.503, p=.034), while it is not correlated with sagittal movement (r=.289, p=.244). There are also other movement qualities which are found to be (nearly) statistically significantly correlated with tightness, such as sudden (r=.556, p=.016), neutral time (r=.644, p=.004), light (r=.483, p=.042), direct (r=.463, p=.054), free (r=.600, p=.008), horizontal (r=.455, p=.058) and arc-like movement qualities (r=.445, p=.064). Among all the correlations, only vertical movement is correlated to tightness at both the first and third assessments, and this correlation at the first assessment is nearly statistically significant (r=.405, p=.062), while that at the third assessment is statistically significant (r=.503, p=.034).

#### 7.2.3 YiJin's movement with vertical dimension

YiJin was a 28-year-old participant in Group 1. She had majored in law in a college but had refused to take an examination to gain a law license after graduation. YiJin studied law because of her father's expectations. She thought she had completed her father's wish and her refusal to take the exam was an act of showing her disobedience. She worked in a law firm. She was also an amateur painter; she usually posted her artworks on Facebook, and she had a number of followers on this social media. She loved the arts and enjoyed painting, and did not like law. But she said she was not brave enough to give up a proper job and be a full-time artist.

YiJin seemed to be very nervous in the sessions. She usually kept her hands behind her back and stayed at a distance from the other participants and her torso was very tense, but she showed her friendliness to the other participants with a smile. YiJin's level of tightness was relatively high, and she tended to make movements in a vertical dimension. For example, each participant was encouraged to make a movement in turn, and the remainder of the participants repeated this movement at the beginning of the first session. Almost all YiJin's movements were in a vertical dimension, such as waving her arms, and both of her hands were on her head, and then she squatted down. From the researcher's perspective, the last of those movements suggested that she was hiding, which might represent that she wanted to hide herself in the group at that moment.

Although it is difficult to examine the connection between YiJin's vertical movement and tightness, her vertical movement might represent her tight construing when being in a group. She might tightly construe the issue of self in a group, and her vertical movement might represent her tendency to be more in her own world with less social interaction. This is because compared to the sagittal dimension, the vertical dimension is more related to the development of sense of self, which is more about 'me' rather than social relations (Amighi, 1999). Due to her tight construing concerning social relations, she might have been less able to feel at ease in the group, and therefore she was more in her own world, and made more vertical movement.

It is interesting to note that if high tightness is associated with high depression, then making vertical movement could encourage the decrease of depression in the personally oriented Western world (Koch, Morlinghaus & Fuchs, 2007). However, for women in socially oriented Chinese culture, encouraging vertical movement might not help to decrease

depression. Instead, making sagittal movement, which encourages social interaction, might help.

## 7.2.4 Conclusion

To conclude, only one out of four movements which has been identified as rigid is associated with tightness, and this is vertical movement. In response to research question five, only one rigid movement is associated with psychological tightness.

In addition, the result of the third assessment is partly contradictory to the result of the first movement assessment. For example, while coordination is positively correlated with tightness at the first assessment, isolation is positively correlated with tightness at the third assessment. Moreover, while sustained is related to tightness at the first assessment, sudden is related to tightness at the third assessment. Furthermore, YiJin's case provides an example of a possible connection between vertical movement and tightness.

These results might be able to be explained from three aspects. Firstly, the sample size is quite small, and therefore the results reflect this. Secondly, it might also relate to the definition of rigid movement. The definition of 'rigid movement' might need to be re-considered. The definition of rigid movement is based on the existed literatures; however, these researches might be limited, and other movement characteristics of people with depression might not have been identified yet. In other words, other movement characteristics of people with depression which have not been identified yet might be more effectively correlated to tightness. In addition, it might also be possible that the way of adopting four categories in LMA, effort, space, shape and body, is not effective enough to present the movement characteristics of people with depression, and therefore the results are contradicted. Moreover, the results might also be contradictory because the definition of rigid movements was inappropriate. For example, the issue of social interaction is especially critical for Taiwanese people; however, the definition of rigid movement did not include the element of inter-relationship. Fourthly, the way of analysing movements might not be the most appropriate. The two coders were asked to code whether each movement quality was apparent in each analysed minute; in other words, the frequency of each movement quality cannot be known. The results of a person who made only one isolated movement and a person who made isolated movements many times in a minute are the same. Consequently, the study design might not be sensitive enough to examine this correlation

7.3 Research question six, 'Are there movement differences between women with depression and without depression'?

#### 7.3.1 Movement variation, coordination, kinesphere and vertical movement

At the first assessment, the difference in movement variation between Groups 1 and 2 is statistically significant (t=2.11, p=.048, two-tailed) (see Table 7.2). This result is consistent with Davis's research (1981), in which she proposed that people without depression show more movement variations than people with depression. In other words, in terms of movement variation, people with depression have more rigid movement than people without depression.

Group 2 did not have statistically significantly more coordinated movement than Group 1 (t=-.439, p=.666, two-tailed) (see Table 7.2). This result is inconsistent with Davis's (1981) observation that people with depression have less coordinated movement than people without depression. In terms of the kinesphere, although Group 1 does not have statistically significantly more movement with a smaller kinesphere than Group 2 (t=.904, p=.376, two-tailed), Group 2 has statistically significantly more large movement than Group 1 (t=-2.539, p=.020, two-tailed). This result illustrates that people without depression tend to have a larger kinesphere than people with depression, which is partly consistent with Stanton-Jones' (1992) assertion that one movement characteristic for people with depression is smaller kinesphere.

There is no statistically significant difference between the two groups in the times of using vertical movement (t=.329, p=.746). The same result is shown in the use of horizontal movement (t=.230, p=.820). The lack of difference in the use of vertical movement between the groups is inconsistent with the literature mentioned in Chapter Five indicating that people with depression tend to have less vertical movement than people without depression (Koch, Morlinghaus & Fuchs, 2007; Serlin, 1996). Interestingly, Group 2 has statistically significantly more sagittal movement than Group 1 (t=-3.843, p<.001). The use of sagittal movement is related to the use of space, and the use of space relates to the issue of self in relation to others (Bartenieff, 1980; Cipolletta, 2006). According to the theory of Kestenberg Movement Profile (KMP), children start to move out from vertical to sagittal movement around the age of two (Amighi, 1999). As mentioned above, while the vertical dimension is more related to the development of self, the sagittal dimension is more related to the development of self. (Meridian and the ability to "go out into the world and yet return to find connections with self" (Amighi, 1999, p.122). Therefore, while in the Western world vertical movement relating

to the sense of self might be more able to identify depression, the sagittal dimension relating to social interaction and the search for self-identity in society might be more able to indicate depression in Taiwan.

This result that women without depression seem to have more connection with the environment than women with depression at the first session, the first time the participants met each other, is on the one hand consistent with the previous literature indicating that people with depression have less interpersonal movement than people without depression (Kazdin et al., 1985; Schneider et al., 1990; Waxer, 1974). On the other hand, this result shows that less interpersonal movement might be a characteristic of women with depression in Taiwan. In addition, this result echoes the result in the previous chapter; elements of the repertory grid relating to social relations are associated with depression at the pre-group assessment. The issue of social relations might be crucial in this socially oriented culture, and women in this culture might experience more struggle in the search for self in society.

Mov	Movement categories		Group 1	Group 2	t-test
Body	Isolation	1	m=3.273,SD=1.191	m=3.250,SD=1.055	t=.049, p=.962
	Whole coordina	ation	m=1.182,SD=1.328	m=1.417,SD=1.240	t=439, p=.666
Effort	Time	Neutral	m=2.364,SD=.809	m=2.167,SD=1.467	t=.393, p=.698
		Sudden	m=2.364,SD=1.362	m=2.25,SD=1.288	t=.206, p=.84
		Sustained	m=1.909,SD=1.136	m=3.083,SD=.996	t=-2.641, p=.016
	Weight	Neutral	m=.364,SD=.674	m=.083,SD=.289	t=1.317, p=.202
		Strong	m=.727,SD=.905	m=2.083,SD=.669	t=-4.113, p<.001
		Light	m=3.818,SD=.603	m=4.00,SD=.000	t=-1.047, p=.306
	Space	Neutral	m=.091,SD=.302	m=.417,SD=.669	t=-1.482, p=.154
		Direct	m=3.364,SD=.674	m=3.667,SD=.651	t=-1.096, p=.286

Table 7.2 The comparison of the movement qualities between Group 1 and 2 at first assessment

					1
		Flexible	m=1.909,SD=1.136	m=2.000,SD=.739	t=230, p=.822
Flow		Neutral	m=.546,SD=.934	m=.250,SD=.622	t=.900, p=.378
		Bound	m=3.000,SD=1.265	m=2.417,SD=1.730	t=.916, p=.37
		Free	m=2.546,SD=1.293	m=3.583,SD=.793	t=-2.343, p=.030
Space	Kine-	Small	m=3.364,SD=1.027	m=2.917,SD=1.311	t=.904, p=.376
	sphere	Large	m=1.818,SD=1.168	m=2.917,SD=.900	t=-2.539, p=.020
		Far- reaching	m=2.091,SD=.831	m=2.583,SD=.793	t=-1.454, p=.61
	Dimen- sion	Vertical	m=2.728,SD=1.104	m=2.583,SD=.996	t=.329, p=.746
		Horizon- tal	m=2.455,SD=1.368	m=2.583,SD=1.311	t=230, p=.820
		Sagittal	m=3.000,SD=.632	m=3.833,SD=.389	t=-3.843, p<.001
Shape	Sha	peflow	m=3.455,SD=.688	m=3.333,SD=.888	t=.364, p=.720
	Direc- tional	Arc-like	m=2.636,SD=1.120	m=2.417,SD=.900	t=.521, p=.608
	tionar	Spoke- like	m=2.091,SD=1.136	m=3.000,SD=1.128	t=-1.924, p=.068
	Carving		m=.182, SD=.405	m=.333,SD=.492	t=802, p=.432
Movem	nent varia	tion	m=53.42,SD=9.773	m=60.504,SD=6.081	t=-2.11, p=.048
			NOTE: - + ++ +		·

NOTE: a. t-test, two-tailed.

b. Figures in red are statistically significant results.

# 7.3.2 Free and strong effort quality

Sustain, strong and free effort qualities in Group 2 are statistically significantly higher than that in Group 1 (sustain: t=-2.641, p=.016, strong: t=-4.113, p<.001, free: t=-2.343, p=.030; two-tailed). According to Cipolletta (2006), free/bound flow can refer to loosening/ tightening in personal construct theory. She did not particularly point out that tightening refers to free or bound flow, and only mentions that the process of tightening-loosening can refer to the move from/to free or bound effort movement, which forms the cycle of creativity.

Light movement quality has been suggested as a common characteristic of movement of people with depression (Davis, 1981; Koch, Morlinghaus & Fuchs, 2007; Stanton-Jones, 1992). However, in this study, women with depression did not have statistically significantly more light movement than women without depression. Nevertheless, women without depression show more strong movements than Group 1. This might illustrate that women without depression show more strength than women with depression, and women without depression might be more able to show their anger and fighting quality (Morita, Nagai & Moritsu, 2013). In addition, the use of strong movement might present a sense of self boundary and differentiation between self and the world (Amighi, 1999), which might indicate that women with depression in Taiwan might have less sense of boundary and differentiation from the world than women without depression. Interestingly, clear personal boundary is a sign of individualisation, and this result seems to echo with another result in the survey: a negative correlation between personal orientation and depression. As mentioned in the Literature Review, the concept of self in Chinese culture is extended from physical self to others (Fei,1948), people with high personal orientation tend to have a lower level of depression, and might show more strong movement quality. It suggests that people with higher personal orientation have more strength to differentiate themselves from others, and consequently are more able to resist the social pressure coming from the highly socially oriented Taiwanese society. However, the cultural meaning of this assumption needs to be further examined.

Cipolletta (2006) suggested that light/strong can refer to the concepts of dispersed/undispersed dependency in personal construct psychology. Undispersed dependency is usually discovered in an infant and a child, for care givers such as parents are the key people to be depended upon. When the child grows older, the dependency becomes more dispersed as they realise that some people can meet some of their needs, and other people can meet their other needs (Walker, 2004). However, there is insufficient evidence to identify the connection between the use of strong movement and dispersed/undispersed dependency, and further research is needed. As for the connection between strong effort quality and tight construing, no statistically significant association (r=-.122, p=.588, two-tailed) was found.

7.3.3 The most common three movement qualities in Group 1 and 2

In order to identify the characteristics of movements of people with depression, identifying the movements which have been used the most might also help. The data of the

first session coded by the first rater is presented in Table 7.3, which illustrates the total amount and the percentage of each movement quality which had been coded in both groups. For instance, the rater coded a 'yes' when noticing isolation movements (which mean that body parts are not in an analysed minute for one participant, and the maximum times of coding 'yes' in terms of isolation movements the participants can be coded are four, due to four analysed minutes in total. Hence, the first rater coded that 'yes' for isolation movements 39 times in Group 2, and the maximum times the participants can be coded as isolation movements are 48 (four coded minutes × twelve participants), consequently the percentage is 81.25% $(39÷48)\times100$ .

	Movement categories		Group 1 (%) (N=11)		Group 2 (%) (N=12)	
Body	Isolation		36	81.8%	39	81.25%
	Whole coordin	nation	12	27.27%	17	35.42%
Effort	Time	Neutral	26	59.09%	26	54.12%
		Sudden	26	59.09%	27	61.36%
		Sustain	21	47.73%	37	84.09%
	Weight	Neutral	4	9.09%	1	2.08%
		Strong	8	18.18%	25	52.08%
		Light	42	95.45%	48	100%
	Space	Neutral	1	2.27%	5	10.42%
		Direct	37	84.09%	44	91.67%
		Flexible	21	47.73%	24	50%
	Flow	Neutral	6	13.64%	3	6.25%
		Bound	33	75%	29	60.42%
		Free	28	63.64%	43	89.58%
Space	Kinesphere	Small	37	84.09%	35	72.92%

Table 7.3: Movement usage between Groups 1 and 2 at the first assessment

		Large	20	45.45%	35	72.92%
		Far reach	23	52.27%	31	64.58%
	Dimension	Vertical	30	68.18%	31	64.58%
		Horizontal	27	61.36%	31	64.58%
		Sagittal	33	75%	46	95.83%
Shape	Shapeflow	·	38	86.36%	40	83.33%
	Directional	Arc-like	29	65.91%	29	60.42%
		Spoke-like	23	52.27%	36	75%
	Carving	·	2	4.55%	4	8.33%
Total			563	53.31%	686	59.55%
Maximum times of using movement			1056	100%	1152	100%

The three most common movement qualities in both groups are shown in Table 7.4. It can be seen from Table 7.4 that light movement is the most common movement quality which has been used in both groups (Group 1: 95.45%, Group 2: 100%). In Group 1, the second most common movement quality is shapeflow (86.36%), and the third is small kinesphere and direct (84.09%). In Group 2, the second is the sagittal dimension (95.83%), and the third is direct (91.67%). It can be seen that light and direct movement qualities occurred in both groups, and consequently the use of the two movement qualities might be culturally related.

	First	Second	Third	
Group 1	Light (95.45%)	Shapeflow (86.36%)	Small kinesphere (84.09%)	Direct (84.09%)
Group 2	Light (100%)	Sagittal (95.83%)	Direct (91.67%)	

As previously mentioned, the previous studies which were mainly conducted in the West suggest that light movement quality can be seen as a common movement quality that people with depression tend to use; however, in this study, light is the most common movement quality used by both women with and without depression. Light movement might present less sense of existence, less ability to express personal strength, and having a less clear boundary with others (Amighi, 1999), which might be a collective psychological characteristic of Taiwanese women. Since the participants were all women, interpreting this result as a generalised cultural phenomenon needs more evidence.

Moreover, shapeflow and small kinesphere are also used the most in Group 1, while the sagittal dimension is the second most used movement in Group 2. The sagittal dimension indicates that people without depression might have more interaction between self and environment than people with depression, as mentioned above. As for shapeflow, it is 'all about me' movement, because it describes "no relationship with others, to space or to any external event or object. Shapeflow appears when ... people take care of themselves or are simply self-involved" (Bradley, 2008, p.87). Hence, it is not surprising that the use of a small kinesphere is the third most common movement quality in Group 1; there is little interaction between self and environment, and it mainly focuses on self.

#### 7.3.4 YuHui and ChiMei's background information

YuHui was a participant in Group 1, aged between 40 and 45 years. She had a bachelor's degree. She had divorced several years before, and had two daughters aged 12 and 13. YuHui was living with her two daughters and her boyfriend, and did not have a job. She had been diagnosed with depression five years before, and had been taking medicine and receiving psychotherapy since then. She showed great interest in participating in the TBMA group when being informed of this in the first meeting, and kept emailing the researcher asking when the group would start. She told the researcher that she liked dancing, and was very enthusiastic about exploring herself; therefore she eagerly wanted to participate in this group.

ChiMei was a fashion designer. Her age was between 35 and 40, and she was single. She joined this intervention group because she "wants to be stronger". She moved out of Taipei before the first session started, and therefore she had to commute to Taipei every week to attend the sessions. Even though it took nearly two hours for ChiMei to travel from her home to the venue where the intervention took place, she did not miss any session. The reason for moving out of Taipei was because she changed her job. Nevertheless, she told the researcher in the pre-group interview that she considered changing her job again because she "cannot stay in one

position for a long time". Eventually she did get a new job during the 12-week intervention, and in the middle of the 12 weeks she changed her job.

# 7.3.5 Movement differences between YuHui and ChiMei

At the first assessment for the movement analysis in the first session, the most used movements for YuHui are free, light and small kinesphere. As for ChiMei, there are eight movement qualities that ChiMei uses the most at the first assessment, including sustained, sudden, light, direct, bound, free, sagittal dimension and shapeflow. Their most used movement qualities are consistent with the results of the characteristics of movement qualities of people with depression and without depression. For example, YuHui used small kinesphere the most, while ChiMei used sagittal movement the most. This represents that ChiMei seemed to have more interaction with the other participants than YuHui. In addition, ChiMei's movement qualities than YuHui's, since ChiMei had five more of the most used movement qualities than YuHui. The below descriptions of YuHui and ChiMei are excerpted from the researcher's note when watching the recorded video, which seems to echo their most used movement qualities.

"YuHui was the first participant to arrive in the therapy room in the first session. She took a small blanket out from her bag and put it on the floor, next to a wall. She sat on the blanket and faced the entry door. In other words, she could see every participant when they entered, and vice versa. This blanket seemed to provide her with a sense of security, because she drew her personal boundary through it. In addition, choosing a prominent spot seemed to show her willing to know the other participants and to be seen by them... (However,) her movement was quite light and her kinesphere was quite small. YuHui showed movement with large kinesphere at times, but it was usually soon replaced by small movement...When she spoke, her voice was very light and tender, which echoed her movement quality."

# As for ChiMei,

"she was quite willing to share in group, and the speed she spoke was very fast. Sometimes she spoke too fast to completely understand what she said... In the interview (pre-group assessment), she also spoke fast. She was also willing to share, but I felt that she seemed to be nervous, and she seemed to be unsure about herself because she sometimes asked me whether her answer was 'right'... She seemed not to have a clear tendency of her movement qualities...she kept changing. At this time she was light, and she changed to strong the next moment... I felt that she seemed to make much attempt to explore and experience herself, because she was eager to know herself." It can be seen from the note that their way of speaking seems to echoes their way of moving. In addition, YuHui's relatively rigid movement seem to represent her high level of tightness, while ChiMei seems to be more able to try different movement qualities, which can be related to her low level of tightness. People with a low level of tightness might be more able to try different possibilities. The attempt at trying different possibilities might be reflected in ChiMei's various most used movement qualities. YuHui and ChiMei's changes of construct system throughout the four assessments will be further discussed in Chapter Nine.

### 7.3.6 Conclusion

To conclude, people without depression show more movement variations than people with depression at the first assessment. In addition, Group 2 used statistically significantly more strong movement than Group 1, which might indicate that people without depression expressed their strength and personal boundary more than people with depression, and it might echo the result from the survey of a negative correlation between personal orientation and depression. Moreover, the participants in Group 2 used statistically significantly more movements relating to the connection between self and environment, such as sagittal movement, than Group 1, which illustrates that people without depression might have more social interactions than people with depression at the first assessment. This assumption can also be made about another result, which is that shapeflow and a small kinesphere are two of the most common movement qualities used in Group 1. These results might show that women with depression in Taiwan tend to have less social interaction, and are more focused on self than women without depression. Therefore, movements relating to the connection between self and environment might be a better indicator of depression in Taiwanese women than movements relating to the development of self, such as vertical movement, which might be a more effective indicator of depression in the Western world.

Furthermore, Groups 1 and 2 both use light movement the most. This might indicate that lightness may be a common characteristic of women's movement in Taiwan. It might show that while lightness can be seen as an indicator of depression according to some Western research, this might not be the case in Taiwan. Light movement gives a sense of indulgence, less sense of existence and less expression of anger; it might indicate a collective mentality in women in Taiwan; nevertheless, more research needs to be done before forming any conclusions.

Taking YuHui and ChiMei's movements as examples, it can be seen that their movement qualities are partly consistent with the quantitative results mentioned above. In addition, the way they spoke and behaved also echoes with their movement qualities.

Moreover, some considerations should not be ignored when discussing the data. Firstly, as already mentioned, the inter-rater reliability is not satisfactory, and the result is based on only one analyst. Secondly, due to the small sample size in this study, the statistical power is not sufficient, which might influence the result. Thirdly, the participants in this study suffered from mild to moderate depression, and they were all taking medicine. As mentioned in Chapter Four, none of the scores on the Taiwanese Depression Scale in Group 1 were higher than the cut-off calculated by the inventors of this scale. Consequently, the participants might be less likely to show the movement qualities expected from previous research on people with depression. Fourthly, one participant in Group 1 is a Chinese traditional dance dancer, and therefore her movement repertoire is larger than the others, which might also hugely influence the result due to the small sample size.

7.4 Research question seven, 'Are there changes in movement over the course of therapy?'

#### 7.4.1 The second assessment

7.4.1.1 The use of movement variation, coordination, kinesphere and vertical movement at second assessment

The same as the first assessment, Group 2 had statistically significant more movement variation than Group 1 (t=-2.369, p=.032) (see Table 7.5).

Movement categories			Group 1	Group 2	Two-tailed t-test
Body	Isolation		m=5.286,SD=1.496	m=4.091,SD=2.023	t=1.341, p=.020
	Whole coordination		m=1.143,SD=1.464	m=2.727,SD=2.102	t=1.736, p=.102
Effort	Time	Neutral	m=4, SD=.817	m=3.091,SD=1.7	t=1.311, p=.208
		Sudden	m=1.857,SD=1.215	m=4.455,SD=1.293	t=-4.248, p<.001
		Sustained	m=3.143,SD=1.215	m=4.364,SD=1.629	t=-1.697, p=.108
	Weight	Neutral	m=3.286, SD=.951	m=1.364,SD=1.206	t=3.558, p<.001

Table 7.5 The comparison of the movement qualities between Groups 1 and 2 at second assessment

		Strong	m=1.571,SD=1.718	m=3.364,SD=1.433	t=-2.397, p=.002
		Light	m=3.286, SD=.756	m=5.455, SD=.688	t=-6.283, p<.001
	Space	Neutral	m=2.857,SD=1.574	m=3.727,SD=1.794	t=-1.05, p=.308
		Direct	m=2.429,SD=1.512	m=2.727,SD=1.555	t=401, p=.692
		Flexible	m=2, SD=1.528	m=1.909,SD=1.136	t=.145, p=.886
	Flow	Neutral	m=1.857,SD=1.215	m=.636,SD=1.206	t=2.088, p=.054
		Bound	m=5.286, SD=.756	m=4.091,SD=1.514	t=1.926, p=.072
		Free	m=2.857,SD=1.345	m=5.364,SD=1.027	t=-4.482, p<.001
Space	Kine-	Small	m=4.571, SD=.976	m=4.455,SD=1.753	t=.160, p=.876
	sphere	Large	m=2.714,SD=1.976	m=4.364,SD=1.206	t=-2.214, p=.052
		Far- reaching	m=2.714, SD=1.38	m=3.546,SD=1.695	t=-1.085, p=.294
	Dimen-	Vertical	m=3.714,SD=1.38	m=4.546, SD=.934	t=-1.532, p=.146
	sion	Horizontal	m=2.857,SD=1.574	m=4.55,SD=1.128	t=-2.659, p=.018
		Sagittal	m=4, SD=1.528	m=4.546,SD=1.508	t=745, p=.468
Shape	Shapeflov	W	m=4.143,SD=1.773	m=4.455,SD=1.368	t=421, p=.680
	Direc-	Arc-like	m=3, SD=.817	m=3.818, SD=.982	t=-1.833, p=.086
	tional	Spoke-like	m=2.857, SD=2.116	m=3.182,SD=1.601	t=371, p=.716
	Carving		m=.286, SD=.488	m=1.546,SD=1.214	t=-2.593, p=.020
Movem	Movement variation		m=49.803, SD=11.174	m=60.036, SD=7.266	t=-2.369, p=.032

NOTE: a. t-test, two-tailed.

b. Figures in red are statistically significant results; in green are nearly statistically significant results.

As for coordination movement, at the first assessment Group 2 does not have statistically significantly more coordination movement than Group 1 (t=-.1.736, p=.102) (see Table 7.5). However, differing from the previous assessment, Group 1 has statistically significantly more isolated movement than Group 2 (t=1.341, p=.02) at the second assessment.

Moreover, in Group 1, the use of isolation movement at the second assessment is statistically significantly higher than that at the first assessment (Z=-2.280, p=.024) (see Table 7.6); while in Group 2, the use of coordination movement at the second assessment was

statistically significantly higher than at the first assessment (coordination: Z=-2.372, p=.018) (see Table 7.7). In addition, the participants in both groups might feel more secure in the sixth session than in the first session and be more able to express themselves; consequently, people with depression used more isolated movement while people without depression used more coordinated movement in the sixth session.

Mo	Movement categories		1 <sup>st</sup> and 6 <sup>th</sup>	6 <sup>th</sup> and 12 <sup>th</sup>	1 <sup>st</sup> and 12 <sup>th</sup>
Body	Isolation Whole coordination		Z=-2.280, p=.024	Z=.000, p=1.00	Z=-2.132, p=.034
			Z=.000, p=1.00	Z=-1.382, p=.168	Z=.000, p=1.00
Effort	<b></b>	Neutral	Z=-2.060, p=.04	Z=647, p=.518	Z=-1.725, p=.084
	Time	Sudden	Z=877, p=.38	Z=-1.594, p=.112	Z=877, p=.38
		Sustained	Z=-1.913, p=.056	Z=-2.414, p=.016	Z=-2.392, p=.018
	Weight	Neutral	Z=-2.414, p=.016	Z=-2.041, p=.042	Z=-2.058, p=.040
		Strong	Z=-1.633, p=102	Z=-1.807, p=.072	Z=-2.207, p=.028
		Light	Z=-1.890, p=.060	Z=-2.124, p=.034	Z=-2.081, p=.038
	Space	Neutral	Z=-2.226, p=.026	Z=850, p=.396	Z=-2.388, p=.018
		Direct	Z=-1.186, p=.236	Z=-2.214, p=.028	Z=-1.543, p=.124
		Flexible	Z=137, p=.892	Z=-1.682, p=.094	Z=-2.032, p=.042
	Flow	Neutral	Z=-2.251, p=.024	Z=-1.725, p=.084	Z=-1.512, p=.132
		Bound	Z=-2.392, p=.036	Z=577, p=.564	Z=-2.379, p=.018
		Free	Z=378, p=.706	Z=-1.869, p=.062	Z=-1.913, p=.056
Space	Kinesph	Small	Z=-1.857, p=.064	Z=-1.364, p=.172	Z=378, p=.706
	ere	Large	Z=-1.276, p=.202	Z=-1.841, p=.066	Z=-2.392, p=.018
		Far- reaching	Z=-1.604, p=.110	Z=-2.232, p=.026	Z=-2.392, p=.018
	Dimensi	Vertical	Z=-1.930, p=.054	Z=-2.226, p=.026	Z=-2.392, p=.018
	on	Horizontal	Z=-1.134, p=.258	Z=-1.000, p=.318	Z=-1.518, p=.130
		Sagittal	Z=-1.807, p=.072	Z=530, p=.596	Z=-2.032, p=.042
Shape	Shapeflov	W	Z=-1.025, p=.304	Z=105, p=.916	Z=-1.382, p=.168
		Arc-like	Z=-1.300, p=.194	Z=-2.264, p=.024	Z=-2.379, p=.018

Table 7.6 The changes of each movement quality at pair assessments in Group 1

	Directio nal	Spoke-like	Z=604, p=.546	Z=-1.166, p=.244	Z=-2.032, p=.042
	Carving		Z=.000, p=2.000	Z=-2.060, p=.04	Z=-2.060, p=.040
Movement variation		Z=676, p=.500	Z=-2.207, p=.028	Z=-1.992, p=.046	

NOTE: a. Wilcoxon test, two-tailed.

b. Statistically significant results are in red, and nearly statistically significant results are in green.

Table 7.7. The changes of each movement quarty in pair assessments in Gloup 2						
nent categories	5	$1^{st}$ and $6^{th}$	6 <sup>th</sup> and 12 <sup>th</sup>	1 <sup>st</sup> and 12 <sup>th</sup>		
Isolation		Z=-1.781, p=.076	Z=431, p=.666	Z=-1.713, p=.088		
Whole coord	ination	Z=-2.372, p=.018	Z=040, p=.968	Z=-1.124, p=.262		
T.	Neutral	Z=-1.917, p=.056	Z=362, p=.718	Z=-1.851, p=.064		
Time	Sudden	Z=-2.844, p=.004	Z=-2.102, p=.036	Z=353, p=.724		
	Sustained	Z=-2.039, p=.042	Z=141, p=.888	Z=-1.440, p=.150		
Weight	Neutral	Z=-2.558, p=.012	Z=-1.378, p=.168	Z=-2.724, p=.006		
	Strong	Z=-2.481,p=.0014	Z=899, p=.368	Z=-1.088, p=.278		
	Light	Z=-2.889, p=.004	Z=-1.265, p=.206	Z=-1.634, p=.102		
Space	Neutral	Z=-2.823, p=.006	Z=-2.823, p=.006	Z=-2.822, p=.006		
	Direct	Z=-1.681, p=.094	Z=-1.647, p=1.00	Z=-2.741, p=.006		
	Flexible	Z=587, p=.558	Z=-1.762, p=.078	Z=-1.974, p=.048		
Flow	Neutral	Z=816, p=.414	Z=677, p=.498	Z=-1.511, p=.132		
	Bound	Z=-2.831, p=.006	Z=-1.200, p=.230	Z=-2.671, p=.008		
	Free	Z=-2.885, p=.004	Z=-1.219, p=.224	Z=-1.253, p=.210		
Kinesphere	Small	Z=-1.964, p=.050	Z=427, p=.670	Z=-1.869, p=.062		
	Large	Z=-2.539, p=.012	Z=846, p=.398	Z=962, p=.336		
	Far-reaching	Z=-1.698, p=.090	Z=778, p=.436	Z=900, p=.368		
Dimension	Vertical	Z=-2.724, p=.006	Z=503, p=.616	Z=-2.380, p=.018		
	Horizontal	Z=-2.831, p=.006	Z=787, p=.432	Z=-1.786, p=.074		
	Sagittal	Z=-1.456, p=.146	Z=355, p=.722	Z=-1.140, p=.254		
Shapeflow		Z=-1.763, p=.078	Z=-2.257, p=.024	Z=-1.132, p=.258		
	Isolation Isolation Whole coord Weight Space Flow Kinesphere Dimension	Isolation         Isolation         Whole coordination         Whole coordination         Time       Neutral         Sudden       Sustained         Weight       Neutral         Veight       Strong         Space       Neutral         Flow       Neutral         Flow       Neutral         Flow       Small         Kinesphere       Small         Itarge       Far-reaching         Dimension       Vertical         Ionizontal       Sagittal	nent categories         1st and 6th           Isolation         Z=-1.781, p=.076           Whole coordination         Z=-2.372, p=.018           Time         Neutral         Z=-2.372, p=.018           Time         Neutral         Z=-2.372, p=.018           Weight         Neutral         Z=-2.372, p=.012           Weight         Neutral         Z=-2.039, p=.042           Weight         Neutral         Z=-2.558, p=.012           Strong         Z=-2.481, p=.0014           Light         Z=-2.889, p=.004           Space         Neutral         Z=-2.833, p=.006           Direct         Z=-1.681, p=.094           Flexible         Z=587, p=.558           Flow         Neutral         Z=-2.831, p=.006           Free         Z=-2.885, p=.004           Kinesphere         Small         Z=-1.698, p=.050           Large         Z=-2.539, p=.012           Far-reaching         Z=-1.698, p=.090           Dimension         Vertical         Z=-2.831, p=.006           Horizontal         Z=-2.831, p=.006           Sagittal         Z=-1.456, p=.146	nent categories       1st and 6th       6th and 12th         Isolation       Z=-1.781, p=.076       Z=431, p=.666         Whole coordiation       Z=-2.372, p=.018       Z=040, p=.968         Time       Neutral       Z=-2.372, p=.018       Z=040, p=.968         Sudden       Z=-2.372, p=.018       Z=040, p=.968         Time       Neutral       Z=-2.372, p=.018       Z=040, p=.968         Sudden       Z=-2.372, p=.018       Z=040, p=.968         Weight       Neutral       Z=-2.039, p=.042       Z=162, p=.016         Strong       Z=-2.2558, p=.012       Z=141, p=.888         Weight       Neutral       Z=-2.823, p=.004       Z=2899, p=.368         Strong       Z=-2.889, p=.004       Z=-1.265, p=.206         Space       Neutral       Z=-2.823, p=.004       Z=-1.647, p=1.00         Direct       Z=-1.681, p=.094       Z=-1.647, p=1.00         Flow       Neutral       Z=587, p=.558       Z=-1.647, p=.006         Flow       Neutral       Z=-2.831, p=.006       Z=-1.200, p=.230         Free       Z=-2.885, p=.004       Z=-1.219, p=.224       Xinsephere         Kinesphere       Small       Z=-1.598, p=.005       Z=427, p=.670         Large       Z=		

Table 7.7: The changes of each movement quality in pair assessments in Group 2

	Directional	Arc-like	Z=-2.558, p=.012	Z=103, p=.918	Z=-2.118, p=.034
		Spoke-like	Z=359, p=.680	Z=356, p=.722	Z=664, p=.508
	Carving	•	Z=-2.412, p=.016	Z=604, p=.546	Z=-2.047, p=.042
Movement variation		Z=311, p=.756	Z=712, p=.578	Z=714, p=.476	

NOTE: a. Wilcoxon test, two-tailed.

b. Statistically significant results are in red, and nearly statistically significant results are in green.

As for kinesphere, the result at the second assessment almost remains the same as that at the first assessment: Group 2 had nearly statistically significantly more movement with large kinesphere (t=-2.214, p=.054) (see Table 7.5). In Group 1, there were no statistically significantly changes in the use of three types of kinesphere from the first to second assessments (small: Z=-1.857, p=.064; large: Z=-1.276, p=202; far-reaching: Z=-1.604, p=.110) (see Table 7.6), while in Group 2, small and large kinesphere were statistically significantly increased from first to second assessment (small: Z=-1.964, p=.050; large: Z=-2.539, p=.012) (see Table 7.7). This illustrates that the movement repertoire in terms of kinesphere of the participants in Group 2 expanded more than in Group 1.

As for dimension, Group 2 did not have statistically significantly more vertical movement than Group 1 at the second assessment (t=-1.532, p=.146). However, Group 2 had statistically significantly more horizontal movement than Group 1 at the second assessment (t=-2.659, p=.018), which is not found at the first assessment. In addition, the statistically significant difference between the two groups in sagittal movement at the first assessment became insignificant at the second assessment (t=-.745, p=.468). As mentioned above, the sagittal dimension can refer to the relation between self and the world. The insignificant difference might illustrate that people with depression had more social interactions in the sixth session so that the differences in the two movements between the two groups became insignificant.

The vertical movement category for Group 1 had a nearly statistically significant increase and Group 2 had a statistically significant increase from first to second assessment (Group 1: Z=-1.930, p=.054, Group 2: Z=-2.724, p=.006). Based on the result of the correlation between tightness and vertical movement, this increase might suggest an increase of the level of tightness in the sixth session. However, as mentioned above, that assumption cannot be examined in this study as the level of tightness in the sixth session was not assessed, and therefore the correlation between tightness and vertical movement in the sixth session cannot be identified.

#### 7.4.1.2 Free, light and strong effort quality

The same as the result at the first assessment, Group 2 had statistically significantly more free movement than Group 1 at the second assessment (t=-4.482, p<.001, two-tailed). In addition, the same as the result at the first assessment, Group 2 had statistically significantly more strong movement than Group 1 (strong: t=-2.397, p=.002); however, different from the first assessment, Group 2 had statistically significantly more light movement than Group 1 (t=-6.283, p<.001). In addition, Group 1 had statistically significantly more neutral weight than Group 2 (t=3.558, p<.001).

From the results mentioned above, it can be seen that both groups expanded their movement repertoire from first to second assessment; however, for Group 2, the 15 movement qualities used have statistically significantly increased from the first to the second assessment, while only six movement qualities have statistically significantly increased in Group 1. This illustrates that the movement repertoire of people without depression expanded more than people with depression at the second assessment. This might be related to more social interaction with the environment for people without depression, an assumption which is based on the result that people without depression used more sagittal movement than people with depression at the first assessment. Therefore, people without depression might take less time familiarising with the environment and building up trust toward the group than people with depression, and consequently they might have been more willing to explore the inner and outer world through movement.

Moreover, when looking at the statistically significant increase of the movement qualities from first to second assessment for Group 1, it can be seen that these movements are bound, isolated and in neutral time, weight, space and flow. Bound movement gives a sense of constraint and tension, and neutral movement gives a sense of "suspended animation" (Amighi, 1999, p.66). It seems that members of this group might not only feel tense and not feel safe enough to explore themselves and the environment as much as people without depression did in the sixth session, but also were even tenser than in the first session. However, as mentioned above, people with depression seem to have more social interaction at the second assessment than at the first assessment because the difference between Groups 1 and 2 in the use of sagittal

movement became insignificant at the second assessment. The statistically significant increase of these tense movements might result from the nervousness accompanying the process of social interaction, since people with depression seem to be more self-conscious in a group (Smith & Greenberg, 1981). However, due to the research limitations mentioned above, this assumption needs to be further examined.

# 7.4.1.3 The three most common movement qualities

Table 7.8 illustrates the percentage of the use of each movement quality at the second assessment, and Table 7.9 presents the three movement qualities which have the highest percentages in both groups. The participants in Group 1 still used the most small kinesphere and shapeflow movements at the second assessment, which might show that the participants in Group 1 still felt self-conscious in the sixth session. In Group 2, all three dimensions were equally often used the most, which illustrates the expansion of movement repertoire in the sixth session.

Movement categories				Group 1(%) (N=7)		Group 2(%) (N=11)	
Body	Isolation		37	89%	45	68.18%	
	Whole coordin	ation	8	19.05%	30	45.45%	
Effort	Time	Neutral	28	66.67%	34	51.52%	
		Sudden	13	30.95%	49	74.24%	
		Sustained	22	52.38%	48	72.73%	
	Weight	Neutral	23	54.76%	15	22.73%	
		Strong	11	26.19%	37	56.06%	
		Light	23	54.76%	60	90.91%	
	Space	Neutral	20	47.62%	41	62.12%	
		Direct	17	40.48%	30	45.45%	
		Flexible	14	33.33%	21	31.82%	

Table 7.8: The movement usage in two groups in the sixth session

		1				
	Flow	Neutral	13	30.95%	7	10.61%
		Bound	37	89%	45	68.18%
		Free	20	47.62%	59	89.39%
Space	Kinesphere	Small	36	85.71%	49	74.24%
		Large	19	45.24%	48	72.73%
		Far-reaching	19	45.24%	39	59.09%
	Dimension	Vertical	26	61.90%	50	75.76%
		Horizontal	20	47.62%	50	75.76%
		Sagittal	28	66.67%	50	75.76%
Shape	Shapeflow	Shapeflow			49	74.24%
	Directional	Arc-like	21	50%	42	63.64%
		Spoke-like	20	47.62%	35	53.03%
	Carving		2	4.76%	17	25.76%
Total			506	50.20%	950	59.97%
Maximum times of using movement			1008	100%	1584	100%

Table 7.9: The three most common movement qualities in the sixth session

	First	Second	Third			
Group 1	Isolation (89%)	Bound (89%)	Small kinesphere (84.09%)	Shapeflow (69.05%)		
Group 2	Light (90.91)		Free (89.39%)	Three dimensions (75.76%)		

#### 7.4.2 The third assessment

7.4.2.1 The use of movement variation, coordination, kinesphere and vertical movement at second assessment

The third assessment was conducted in the twelfth session. The times and percentages of each movement quality being used are presented in Table 7.10. This shows that the mean of movement variation in Group 2 (55.81%) is lower than in Group 1 (63.1%). In addition, surprisingly, differing from the previous two assessments, the difference of the movement variation between Groups 1 and 2 did not reach statistical significance at the third assessment (t=.902, p=.382, two-tailed) (see Table 7.11). The movement of the participants in Group 1 became more various at the third assessment, which is even higher than Group 2, although statistical significance was not reached.

No statistically significant differences of coordination were found between Groups 1 and 2 (t=.042, p=.968). In addition, the participants in Group 1 used both more isolation and coordination movements at the third assessment than at the first assessment, although only the former reached statistical significance (isolation: Z=-2.132, p=.034, coordination: Z=.000, p=1.00; two-tailed) (see Table 7.6). This shows that the movement repertoire in relation to the category of Body for people with depression is expanded at the third assessment.

As for kinesphere, there was no statistically significant difference between the two groups in terms of small (t=-1.122, p=.28, two-tailed) and large kinesphere (t=.350, p=.732); in addition, Group 1 had nearly statistically significantly more movement with far-reaching kinesphere than Group 2 (t=1.992, p=.066). This shows that the movement repertoire for people with depression might be even bigger than people without depression as the difference of the use of the three kinespheres between people with and without depression not only becomes insignificant, but also the use of far-reaching kinesphere is statistically significantly higher than in people without depression. This might be because the participants in Group 1 gradually became more intimate with each other than those in Group 2 throughout the 12-week intervention, and the expansion of the movement repertoire for people with depression in the last session seemed to show that they trusted each other and felt secure in reaching out in the group. The participants in Group 1 chatted to each other outside the therapy room after sessions, and they had lunch together afterwards from the fifth or sixth session to the last session. They even spontaneously planned a short trip going to hot springs (the therapy venue is situated in a

hot spring area) together after eighth session. On the contrary, the participants in Group 2 did not build such intimate relationships as Group 1. The intimacy that people with depression built might be a reason that their movements expanded even more than their counterparts in Group 2 in the second half of the sessions.

In addition, for Group 1, the increase of movement with small kinesphere changes from nearly statistically significant from first to second assessment (Z=-1.857, p=.064, two-tailed) to statistically insignificant from second to third assessment (Z=-1.364, p=.172) (see Table 7.6); and its difference between first and third assessment is statistically insignificant (Z=-.378, p=.706). Moreover, large kinesphere increased nearly statistically significantly (large: Z=-1.841, p=.066), while far-reaching increased statistically significantly from second to third assessment (far-reaching: Z=-2.232, p=.026). In addition, both large and far-reaching were statistically significantly increased from first to third assessment (large: Z=-2.392, p=.018, far-reaching: Z=-2.392, p=.018). It can be seen that the participants in Group 1 expanded their movement repertoire in terms of kinesphere in the 12-week therapy, and the expansion was greater in the second half of the sessions than in the first half. This might illustrate that people with depression explored the environment more in the second half of the sessions.

On the contrary, the participants in Group 2 had a statistically significant increase of small (Z=-1.964, p=.050) and large (Z=-2.539, p=.012) movements from first to second assessment, but the change in small, large and far-reaching movements did not reach statistical significance between the second and third assessments (small: Z=-.427, p=.670, large: Z=-.846, p=.398, far-reaching: Z=-.778, p=.436). This result illustrates that the expansion of the movement repertoire increased more in the first half of the sessions than in the second in Group 2. It might again be connected to the intimacy that people with depression built in the second half of the sessions exceeding that in Group 2.

Furthermore, as in the first and second assessments, there was no statistically significant difference of vertical movement between Groups 1 and 2 at the third assessment (t=1.003, p=.332) (see Table 7.11). As for Group 2, although the participants used statistically significantly more vertical movement from first to second assessment (Z=-2.724, p=.006) (see Table 7.7), the times of moving vertically did not reach statistical significance from second to third assessment (Z=-.503, p=.616), as they did in Group 1. This again illustrates that people without depression expanded their vertical movement more in the first half of the sessions.

For the sagittal dimension, the use of sagittal movement kept increasing throughout the three assessments in Group 1; however, the increase in the first half (Z=-1.807, p=.072) and in the second half of the sessions (Z=-.530, p=.596) was not statistically significant (see Table 7.6). Nevertheless, the increase from first to third assessment is statistically significant (Z=-2.032, p=.042). For Group 2, no statistically significant differences between assessments were found. This suggests that people with depression kept increasingly interacting with the environment and group members throughout the 12-week sessions; but for the people without depression, who generally tend to have more social interaction than people with depression, the increase of sagittal movement is not significant (first and second: Z=-1.456, p=.146; second to third: Z=-.355, p=.722; first to third: Z=-1.140, p=.254).

Moveme	Movement categories			(%) (N=7)	Group 2(%) (N=11)	
Body	Isolation	Isolation		88.1%	47	71.21%
	Whole coordi	nation	15	35.71%	23	34.85%
Effort	т <sup>.</sup>	Neutral	24	57.14%	37	56.06%
	Time	Sudden	22	52.38%	31	46.97%
		Sustained	38	90.48%	45	68.19%
	Weight	Neutral	12	28.57%	25	37.88%
		Strong	23	54.76%	30	45.45%
		Light	37	88.1%	53	80.3%
	Space	Neutral	16	38.1%	51	77.27%
		Direct	30	71.43%	14	21.21%
		Flexible	27	64.29%	8	12.12%
	Flow	Neutral	6	14.29%	11	16.67%
		Bound	38	90.48%	52	78.79%
		Free	33	78.57%	48	72.73%
Space	Kinesphere	Small	23	54.76%	46	69.7%

Table 7.10: The movement usage in two groups at the third assessment

		Large	27	64.29%	41	62.12%
		Far-reaching	33	78.57%	34	51.52%
	Dimension	Vertical	38	90.48%	52	78.79%
		Horizontal	22	51.16%	44	66.67%
		Sagittal	33	78.57%	48	72.72%
Shape	Shapeflow		30	71.43%	28	42.42%
	Directional	Arc-like	34	80.95%	40	60.61%
		Spoke-like	28	65.12%	36	54.55%
	Carving		10	23.81%	20	30.3%
Total			636	63.1%	884	55.81%
Maximum	times of using	movement	1008	100%	1584	100%

Table 7.11: The comparison of the movement qualities between Groups 1 and 2 at the third assessment

Movem	ent categoi	ries	Group 1	Group 2	Two-tailed t-test
Body	Isolation		m=5.286, SD=1.496	m=4.1, SD=2.283	t=1.2, p=.250
	Whole co	ordination	m=2.143, SD=1.773	m=2.1, SD=2.283	t=.042, p=.968
Effort	T.	Neutral	m=3.429, SD=1.718	m=3.5, SD=2.273	t=070, p=.946
	Time	Sudden	m=3.143, SD=1.345	m=2.5, SD=1.581	t=.875, p=.396
		Sustained	m=5.429, SD=.535	m=3.9, SD=2.079	t=1.885, p=.08
	Weight	Neutral	m=1.714, SD=1.127	m=2.5, SD=2.014	t=932, p=.366
		Strong	m=3.286, SD=2.059	m=2.9, SD=1.524	t=.445, p=.662
		Light	m=5.286, SD=1.113	m=4.7, SD=1.829	t=.751, p=.464
	Space	Neutral	m=2.286, SD=1.496	m=4.5, SD=2.321	t=-2.211, p=.044
		Direct	m=4.286, SD=1.89	m=1.4, SD=1.776	t=3.213, p=.006
		Flexible	m=3.857, SD=1.345	m=.7, SD=1.567	t=4.322, p<.001
	Flow	Neutral	m=.857, SD=1.069	m=1.1, SD=1.663	t=339, p=.74
		Bound	m=5.429, SD=.535	m=4.6, SD=1.838	t=1.149, p=.270

		Free	m=4.714, SD=1.799	m=4.3, SD=2.263	t=.402, p=.694
Space	Kine-	Small	m=3.286, SD=1.496	m=4.2, SD=1.751	t=-1.122, p=.28
	sphere	Large	m=3.857, SD=1.069	m=3.6, SD=1.713	t=.350, p=.732
		Far-reach	m=4.714, SD=1.113	m=2.8, SD=2.348	t=1.992, p=.066
	Dimen-	Vertical	m=,5.429, SD=.787	m=4.6, SD=2.066	t=1.003, p=.332
	psion	Horizontal	orizontal m=3.143, SD=1.773 m=3.8, SD=		t=727, p=.478
		Sagittal	m=4.714, SD=1.254	m=4.5, SD=1.9	t=.260, p=.798
Shape	Shapeflow	N	m=4.286, SD=1.38	m=2.7, SD=1.889	t=1.889, p=.078
	Direc-	Arc-like	m=4.857, SD=.9	m=3.4, SD=2.221	t=1.632, p=.124
	tional	Spoke-like	m=4, SD=1.155	m=3.4, SD=2.011	t=.708, p=.492
	Carving		m=1.429, SD=1.272	m=1.6, SD=2.011	t=198, p=.846
Movement variation		m=62.732, SD=10.438	m=58.965, SD=6.871	t=.902, p=.382	

NOTE: a. t-test, two-tailed.

b. Statistically significant results are in red.

# 7.4.2.2 Free, light and strong effort qualities

At the first and second assessments, the participants in Group 2 used statistically significantly more movement with free effort quality than in Group 1; at the third assessment, no difference of free effort quality between Groups 1 and 2 was found (t=.402, p=.694) (see Table 7.11), and Group 1 even had more free movement than Group 2. The use of free movement kept increasing throughout the three assessments in Group 1, but only the increase from second to third assessment is nearly statistically significant (Z=-1.869, p=.062) (see Table 7.6); in addition, the increase of free movement from first to third assessment is nearly statistically significant (Z=-1.869, p=.062) (see Table 7.6); in addition, the increase of free movement from first to third assessment is nearly statistically significant in Group 1 (Z=-1.913, p=.056). The increase of the use of free movement seems to show that people with depression became more and more psychologically free throughout the three assessments; however, this is only an assumption and needs more evidence. In Group 2, there was a statistically significant increase of free movement from first to third assessments (Z=-2.885, p=.004) (see Table 7.7), but a slight decrease from second to third assessments, and the change of the use of free movement from first to third assessments did not reach statistical significance (Z=-1.253, p=.210). This result is similar to the previous results; people without depression show more movement expansion in the first half of the

sessions, while people with depression show more movement expansion in the second half of the sessions. Moreover, when examining the correlation between tightness at the post-group assessment and free quality at the third movement assessment, a statistically significant result is found (r=.600, p=.008) (see table 7.2).

As for light and strong effort qualities, at the first and second assessments, Group 2 used statistically significantly more strong and light movement than Group 1; however, at the third assessment, Group 1 used both more light and strong movement than Group 2, although no statistically significant differences were obtained (light: t=.751, p=.464; strong: t=.445, p=.662, two-tailed) (see Table 7.11). For Group 1, the use of strong movement kept increasing throughout, but only the increase from first to third assessment reached statistical significance (Z=-2.207, p=.028, two-tailed) (see Table 7.6). This seems to indicate that people with depression were more and more able to show their strength throughout the session, especially in the second half of the sessions. Moreover, lightness decreased nearly statistically significantly from the first to the second to the third assessment for people with depression (Z=-2.124, p=.034). This shows that the increase of showing their strength does not mean the decrease of their lightness; rather, at the final assessment, the movement repertoire in regard to weight effort was expanded.

In Group 2, the change of the use of both strong and light movement did not reach statistical significance from the first to the third assessment (strong: Z=-1.088, p=.278, light: Z=-1.634, p=.102) (see Table 7.7), although a statistically significant increase from the first to the second assessment was found (strong: Z=-2.481, p=.014, light: Z=-2.889, p=.004). The situation is similar to the previous results: the use of movement has a relatively more dramatic increase in the first half of the sessions in Group 2, while the increase is more dramatic in the second half of the sessions in Group 1.

As for the correlation between light, strong and tightness, it was found that there was a positive correlation between light and tightness (r=.483, p=.042) at the third assessment, while a correlation between strong and tightness was not found (r=.356, p=.146) (see Table 7.2).

#### 7.4.2.3 The three most common movement qualities

For Group 1, it can be seen from Table 7.12 that shapeflow movement does not appear as one of the three most commonly used movement qualities at the third assessment; in addition, arc-like movement appears for the first time. This might indicate that people with depression had more interaction with the environment in the twelfth session, and became less self-conscious. Moreover, interestingly, these percentages of the first three most used movement qualities in Group 1 were all higher than those in Group 2. This echoes another result that Group 1 had more movement variation than Group 2 at the third assessment, although the difference does not reach statistical significance (t=.902, p=.382) (see Table 7.11). It illustrates that at the third assessment, people with depression expanded their movement repertoires and were more able to express themselves through movement. In addition, it is interesting to note that light is almost in the top three of the movements which were used the most by both people with and without depression at the three assessments (except the second assessment in Group 1). The possibility of explaining this phenomenon from the perspective of culture has been addressed above.

	First	Second		Third		
Group 1	Sustained (90.48%)	Bound (90.48%)	Vertical Dimension (90.48%)	Isolation (88.1%)	Light (88.1%)	Arc-like (80.95%)
Group 2	Light (80.3%)			Bound (78.79%)	Vertical Dimension (78.79%)	Sagittal Dimension (72.72%)

Table 7.12 The three most common movement qualities at the third assessment

7.4.3 YuHui and ChiMei's movement changes over the course of therapy

At the second assessment for the movement analysis in the sixth session, the most used movements for YuHui are free, bound and small kinesphere. At the third assessment for movement analysis in the twelfth session, the most used movement for YuHui becomes strong and bound. This shows that at the beginning of the 12-week intervention, YuHui's kinesphere was small and she did not show much strength, the same as the other participants with depression.

However, at the second assessment, light movement is replaced by bound movement, which suggests that YuHui starts to move with more strength because strength is more needed when doing bound movement than light movement. However, bound movement quality is more like a 'passive' way of showing strength. YuHui's bound quality made the researcher associate it with her movement expression in the sessions. YuHui often looked calm, elegant and polite in the sessions. Nevertheless, through the therapy sessions, when she moved with closed eyes, sometimes her spontaneous movement was not as elegant or light as usual. When watching YuHui moving in the video, the researcher sometimes sensed the feeling of anger; however, she seemed to attempt to suppress her anger. The researcher wonders whether she attempted not to show her anger because she might think that showing anger is not appropriate. In addition, in her post-group repertory grid results, her ideal self is close to 'peaceful', which might partly explain that why she did not like to show her anger. Therefore, her bound movement quality seems to represent her struggling between showing anger and being polite and peaceful.

At the third assessment, small kinesphere is not on the list of the most commonly used movements; and YuHui uses strong and bound movements the most at the last session. This suggests that she might express herself and connect to the environment more than at the previous two assessments. In addition, she shows more of her strength in a more active way because of the use of strong movement – which is also a characteristic of people without depression. Although YuHui still used bound movement, which might illustrate that the struggling mentioned above still existed, the use of strong movement is at least a signal showing that YuHui might be more able to express her anger and strength after the 12-week therapy than before. Moreover, her movement qualities are changed from 'depressive' to 'less depressive', which might indicate the decrease of YuHui's level of depression. This will be addressed in the next chapter.

As for ChiMei's movement, bound and sustained movement qualities are used the most by ChiMei throughout the three movement assessments. Both qualities are not the most used movement for people without depression at the second assessment, and the sustained quality also did not exist at the third assessment. This seems to show that ChiMei might not feel comfortable in the group, because one makes bound and sustained movement when one feels cautious and alert (Amighi, 1999). However, it might not only relate to her feelings in the group but also to her inner state. At the pre-group assessment, she said that she knew she was impatient and could not stay in a workplace for a long time. She wanted to 'change', and to know what is happening to her in the sessions. Therefore, her cautious movement qualities might also indicate that she wanted to be 'careful' and to behave differently.

The above interpretations are only assumptions, and both YuHui's and ChiMei's cases will be further explored in the next chapter.

#### 7.4.4 Conclusion

To conclude briefly, both people with and without depression have movement changes over the course of therapy. First, both groups expanded their movement repertoire from first to second assessment. In Group 1, six movement qualities increased from first to second assessment, such as isolated and bound effort movements, while 15 movement qualities increased in Group 2, such as strong, light, sudden, sustained etc. This indicates that people without depression expanded their movement repertoire more than people with depression. In addition, people without depression do not use more sagittal movement than people with depression at the second assessment, which might indicate that people with depression have more social interactions through the intervention. At the third assessment, people with depression expanded their movement repertoire more than people without depression. In Group 1, 10 movement qualities increased from second to third assessment, such as variation, farreaching, direct, and arc-like movements, while only three movement qualities increased in Group 2. The movement of people with depression became even more various than people without depression at the third assessment. In addition, while small and shapeflow movements are the most commonly used movement qualities at the first and second assessments in Group 1, these two movement qualities do not appear at the third assessment.

The above results can be partially observed in the changes of YuHui and ChiMei's movement over the course of therapy. YuHui's movement quality changes from less to more social interaction, and she can gradually express her strong quality. Moreover, ChiMei's most used movement quality were from eight to four, which might relate to her increased tightness through the sessions.

# 7.5 Conclusion

## 7.5.1 Correlation between tight construing and rigid movement

This chapter aims to explore research question five, 'Is rigid movement related to tight psychological construing?' Four rigid movement qualities are examined for their associations with tightness, which respectively are variation, coordination, vertical dimension and small kinesphere. It is found that only vertical dimension is correlated to tightness at both first and third assessments. The remainder of the three movement qualities are correlated to tightness either at the first assessment or at the third assessment. This result might illuminate the treatment of depression for women in socially oriented Chinese culture. Instead of encouraging the participants with depression to make vertical movement to decrease depression as Koch, Morlinghaus and Fuchs suggest (2007), making sagittal movement might be more helpful. Nevertheless, as mentioned above, due to the deficits of the research, this correlation needs to be further examined.

#### 7.5.2 Movement differences between people with and without depression

#### 7.5.2.1 Commonality between Western literatures and this research

This chapter also aims to explore research question six, 'Are there movement differences between people with and without depression?' This question will be responded to in comparison with Western literatures.

Some data collected in this study are consistent with Western research, even though the participants in these Western researches are both male and female. For example, women with depression tend to move with a small kinesphere and more shapeflow movement. This suggests that people with depression might be more self-conscious in a group and focus more on the self than on the outer world. Consistently with Western literature, women without depression showed more strength than people with depression, which might indicate that people without depression were more able to show their strength, and have a clearer personal boundary. In addition, it is assumed that people with depression might tend to present social withdrawal, as indicated by less use of sagittal movement.

## 7.5.2.2 Dissimilarity between Western literatures and this research

Although as in Western literature, the participants in this study might be assumed also to show social withdrawal, the degree of social withdrawal for the participants in this study seems to be higher. Based on the assumption that sagittal movement presents social interaction, this is illustrated by the finding that women with depression used statistically significantly less sagittal movement than women without depression. In Western research, lack of the use of vertical movement relating to the sense of self can be a characteristic of depression. However, in this study, women with depression did not use statistically significantly less vertical movement but did use less sagittal movement than people without depression. This shows that movement qualities might reflect social relationships and self-identity.

Light movement quality is also a characteristic of depression based on Western literature; however, this movement quality was used the most by women both with and without depression in this study. Therefore, lightness might present a cultural characteristic of Taiwan. However, it might only illustrate a characteristic of Taiwanese women since the participants in this study were all female. Consequently, the cultural and collective meaning of lightness needs further research.

## 7.5.3 Changes in movement over the course of therapy

This chapter also aims to respond to research question seven, 'Are there changes in movement over the course of therapy?' While people without depression had more movement expansion in the first half of the sessions, people with depression had more movement expansion of movement repertoire for people with depression kept increasing throughout the three assessments, and was even greater than for people without depression at the third assessment, although statistical significance was not reached. This suggests that people without depression might take less time to become acquainted with the environment and feel secure enough to express themselves in a group. On the contrary, due to their tendency for social withdrawal, people with depression might need more time to adjust to the environment. They might build enough sense of security after a couple of sessions, and then be more willing to express themselves with body and movement.

In this chapter, the correlation between movement and tightness, movement differences between people with and without depression, and changes in movement over the course of therapy, have been discussed. However, these findings need to be considered in the context of the limitations of the research as mentioned above, such as the small samples, low inter-rater reliability, and differences in the levels of depression between Groups 1 and 2. Moreover, since there are a number of statistical tests conducted in this study and the probability level is set at 5%, there is the probability of Type 1 error, with 5% of the statistical tests conducted in this study being significant by chance.

# **Chapter Eight: Case Studies**

#### 8.0 Introduction

This chapter aims to further explore the effectiveness of the intervention group and the connection between depression, conflict, tightness and social/personal orientations in an individual context. Two cases, one participant in Group 1 and one participant in Group 2, will be studied. The former participant is the only one who had a clinically significant decrease in both depression and somatisation throughout the sessions, and the latter participant is the only one in whom depression increased and somatisation scores clinically increased from pre-group to three-month follow-up. The names mentioned below are pseudonyms.

## 8.1 YuHui

#### 8.1.1 Survey and pre-group assessment

Table 8.1 shows YuHui's scores on personal/social orientation, depression, somatisation, conflict and tightness. Her social and personal orientation mean scores respectively are 3.7 and 2.6, which are lower than the sample means in Group 1 (social orientation: 4.3, personal orientation: 3.95). YuHui's social orientation is higher than her personal orientation, which is consistent with the result in Chapter Four), probably related to the considerable influence of collectivistic Chinese culture on Taiwanese people.

	Survey	First assessment	Second assessment	Third assessment	Fourth assessment
Personal orientation	Mean=3.7	N.A.	N.A.	N.A.	N.A.
Social orientation	Mean=2.6	N.A.	N.A.	N.A.	N.A.
Conflict	N/A	37.1%	32.7%	35.3%	36.7%
Tightness	N/A	68.17	64.78	43.12	45.17
Depression	50	41	29	17	8
Somatisation	N/A	86	80	26	17

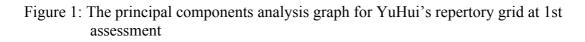
Table 8.1: YuHui's scores throughout the study

Her conflict between personal and social orientations is low, due to the mean scores of her two orientations both being lower than the large sample means (N=839) of the two orientations (M of social orientation, 4.43; M of personal orientation, 4.03) obtained by Lu, Chang & Wu (2008). In addition, her overall conflict in construing is 37.1%, which is slightly lower than the mean of Group 1 (37.84%). However, her tightness as indicated by the percentage of variance accounted for by the first principal component from principal component analysis of her grid was 68.17, which is higher than the mean of Group 1 (57.06). This suggests that she has relatively low conflict and a relatively high level of tightness. Her ten constructs at the pre-group assessment are as below.

- Afraid not afraid
- Pressure free and unconstrained
- Undeniable letting go
- Closely bound up with everyday life selfless
- Worry honestly accepting one's life
- Getting far away confident
- Chaotic familiar with and knows clearly about boundaries
- Full of hope beating a dead horse
- Faith hopeless
- See oneself self-worthless

Figure 1 is a plot of elements in construct space from the principal components analysis of YuHui's repertory gird at the pre-group assessment. This graph shows that YuHui has an extreme perception of 'ideal self', because this element is the furthest from the origin of the graph. 'A normal person' is closest to 'ideal self', which indicates that the two elements are quite similar to each other. This is shown in Table 8.2, which gives the element Euclidean distance figures provided by the Idiogrid programme. The distance between 'a normal person' and 'ideal self' is 0.40, which is the shortest among the distances between a normal person and the other nine elements. According to Winter (1992), a distance of 0 illustrates that the two elements are construed as exactly the same by the construer. A distance of less than 0.5 shows that two elements are construed in a similar way. A distance of more than 1.5 indicates that the two elements are very differently construed.

In addition, 'a normal person' and 'how other people would like me to be' are also relatively close to each other, as the distance between the two elements is 0.43. Moreover, 'how other people would like me to be' is also relatively close to ideal self, as the distance between them is 0.55. This means that YuHui similarly perceives a normal person, ideal self and 'how other people would like me to be'.



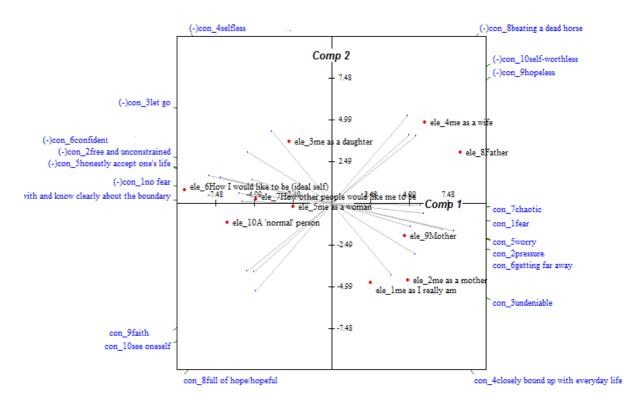


Table 8.2: The distances between elements in YuHui's grid at four assessments

		Am	M.M	M.D.	Wife	Wom	I.S.	Other	F.	M.	N.P.
Me as I really	1 <sup>st</sup> assessment	0.00									
am (Am)	2 <sup>nd</sup> asmt.	0.00									
	3 <sup>rd</sup> asmt.	0.00									
	4 <sup>th</sup> asmt.	0.00									
Me as a mother	1 <sup>st</sup> asmt.	0.33	0.00								
(M.M.)	2 <sup>nd</sup> asmt.	0.92	0.00								
	3 <sup>rd</sup> asmt.	0.46	0.00								

	4 <sup>th</sup> asmt.	0.45	0.00							
Me as a	1 <sup>st</sup> asmt.	1.01	1.13	0.00						
daughte r	2 <sup>nd</sup> asmt.	0.83	0.77	0.00						
(M.D.)	3 <sup>rd</sup> asmt.	0.77	1.07	0.00						
	4 <sup>th</sup> asmt.	1.08	0.86	0.00						
Me as a wife	1 <sup>st</sup> asmt.	1.01	0.96	0.96	0.00					
(Wife)	2 <sup>nd</sup> asmt.	0.59	0.75	0.32	0.00					
	3 <sup>rd</sup> asmt.	0.41	0.39	1.02	0.00					
	4 <sup>th</sup> asmt.	1.15	0.78	0.73	0.00					
Me as a woman	1 <sup>st</sup> asmt.	0.79	0.88	0.66	1.03	0.00				
(Wom.)	2 <sup>nd</sup> asmt.	1.09	0.78	0.82	0.79	0.00				
	3 <sup>rd</sup> asmt.	0.55	0.39	1.18	0.26	0.00				
	4 <sup>th</sup> asmt.	1.32	0.98	1.24	0.66	0.00				
Ideal self	1 <sup>st</sup> asmt.	1.31	1.49	0.81	1.57	0.73	0.00			
(I.S.)	2 <sup>nd</sup> asmt.	1.27	0.83	0.62	0.76	0.79	0.00			
	3 <sup>rd</sup> asmt.	1.16	1.05	1.30	1.07	1.22	0.00			
	4 <sup>th</sup> asmt.	0.88	0.71	0.90	0.60	0.91	0.00			
How other	1 <sup>st</sup> asmt.	0.91	1.08	0.53	1.21	0.48	0.55	0.00		
people would	2 <sup>nd</sup> asmt.	0.74	0.83	0.63	0.56	0.71	0.95	0.00		
like me to be	3 <sup>rd</sup> asmt.	1.24	1.42	1.10	1.37	1.55	1.50	0.00		
(Other)	4 <sup>th</sup> asmt.	1.14	0.82	0.90	0.43	0.59	0.60	0.00		
Father	1 <sup>st</sup> asmt.	1.01	0.84	1.14	0.55	1.13	1.75	1.33	0.00	
(F.)	2 <sup>nd</sup> asmt.	0.94	1.58	1.50	1.30	1.84	1.99	1.33	0.00	
	3 <sup>rd</sup> asmt.	0.81	1.06	0.72	1.09	1.20	1.58	1.32	0.00	
	4 <sup>th</sup> asmt.	1.72	1.44	0.98	0.90	1.17	1.12	0.95	0.00	

Mother (M.)	1 <sup>st</sup> asmt.	0.58	0.43	0.97	0.81	0.85	1.43	1.04	0.72	0.00	
(111.)	2 <sup>nd</sup> asmt.	0.70	1.17	1.15	0.86	1.17	1.47	1.00	0.99	0.00	
	3 <sup>rd</sup> asmt.	0.58	0.74	0.55	0.79	0.95	1.16	1.22	0.62	0.00	
	4 <sup>th</sup> asmt.	1.25	1.01	0.31	0.71	1.19	0.91	0.83	0.78	0.00	
A	1 <sup>st</sup> asmt.	0.98	1.18	0.67	1.38	0.57	0.40	0.43	1.53	1.16	0.00
normal person	2 <sup>nd</sup> asmt.	0.66	0.71	0.65	0.56	0.86	1.01	0.50	1.16	0.83	0.00
(N.P.)	3 <sup>rd</sup> asmt.	0.45	0.53	0.98	0.36	0.52	1.23	1.39	0.94	0.66	0.00
	4 <sup>th</sup> asmt.	1.45	1.27	1.37	1.00	0.94	0.86	0.77	1.10	1.28	0.00

'Ideal self' and 'how other people would like me to be' are situated closest to the four construct poles, 'free and unconstrained', 'familiar with and know clearly about one's life', 'no fear' and 'honestly accept one's life', which can define YuHui's perception of 'ideal self' and 'how other people would like me to be'. Apart from 'no fear', the other three construct poles as well as 'confident' and 'faith' are also close to 'a normal person', which can define YuHui's perception of 'a normal person'. This is illustrated in Table 8.3, which shows that the four construct poles are the most related to this element among all the construct poles. The relationships between elements and constructs are indicated by the direction cosines between constructs and elements provided by the Idiogrid programme. Positive cosines show that elements are related to the construct poles on the right side of the table, while negative cosines show that elements are related to the construct poles on the left side.

In addition, YuHui perceives 'me as I really am' as being the most distant from the above three elements, 'ideal self', 'how other people would like me to be' and 'a normal person' (see Table 8.2); and actual self and ideal self are the most distant from each other compared to the distances between actual self and the other two elements. In other words, YuHui perceives her actual self as different from her ideal self. Her actual self is closest to 'me as a mother', which suggests that YuHui most closely identifies with herself as a mother. Both of these elements are closest to the following construct poles: 'closely bound up with everyday life', 'undeniable', 'fear', 'pressure', and 'worry', which can therefore define 'me as I really am' and 'me as a mother'. In addition, 'mother' is also close to YuHui's actual self and 'me as a mother'.

(-1)	A.M.	M.M.	M.W.	I.S.	Other.	F.	M.	N.P.	(+1)
Not afraid	0.60	0.72	0.66	-0.91	-0.77	0.76	0.53	-0.80	Afraid
Free and unconstrained	0.63	0.82	0.62	-0.95	-0.91	0.75	0.82	-0.83	Pressure
Letting go	0.66	0.90	0.21	-0.85	-0.71	0.65	0.87	-0.70	Undeniable
Selfless	0.80	0.90	0.04	-0.68	-0.64	0.26	0.85	-0.45	Closely bound up with everyday life
Honestly accept one's life	0.55	0.81	0.62	-0.91	-0.87	0.78	0.81	-0.89	Worry
Familiar with and know clearly about the boundary	0.47	0.68	0.72	-0.92	-0.75	0.84	0.60	-0.93	Chaotic
Beating a dead horse	0.34	0.00	-0.89	0.59	0.63	-0.84	-0.35	0.74	Full of hope
Hopeless	0.20	-0.18	-0.91	0.69	0.74	-0.91	-0.46	0.83	Faith
Self-worthless	0.11	-0.10	-0.81	0.68	0.48	-0.80	-0.42	0.77	See oneself

Table 8.3 The cosines between elements and construct poles in YuHui's grid at 1st assessment

Furthermore, YuHui's ideal self is the most distant from 'father' (1.75), and ideal self and 'mother' are also very distant from each other (1.49), which means that YuHui perceives her parents as quite different from her ideal self. The construct poles which define 'father' are 'hopeless', 'chaotic' and 'beating a dead horse', as they are situated closest to 'father'. 'Hopeless', 'beating a dead horse' and 'self-worthless' also define 'me as a wife' as these three construct poles are situated closest to 'me as a wife', which is also closest to 'father'.

To conclude, YuHui's high social orientation seems to be reflected in a similar perception of her ideal self, 'how other people would like me to be' and 'a normal person'. YuHui seems to recognise that how other people would like her to be is also what she wants. In addition, she seems to idealise a normal person as she perceives a normal person as 'familiar and clearly know the boundary', 'honestly accept one's life', 'confident' 'free and unconstrained' and 'faith'. Moreover, she seems to perceive that being a normal person might be close to how other people would like her to be.

YuHui seems to identify herself most as a mother; however, she seems to be under pressure and worries; in addition, she seems to deal with the pressure every day as she is 'closely bound up with everyday life'. She perceives herself as like her mother, which might illustrate that YuHui thinks that the way she is being a mother is similar to how her mother is a mother. Her self, 'me as a mother' and 'mother' are distant from her ideal self, which might illustrate that she is not satisfied with her current situation.

YuHui perceives her father as the most distant from her ideal self, which might illustrate that she least wants to be like her father. However, she perceives her father as closest to 'me as a wife', which is also quite distant from her ideal self. It is interesting to note that she seems to perceive herself when in a maternal relationship as like her mother and when in a marital relationship as like her father. She perceives both her father and 'me as a wife' as 'hopeless' and 'beating a dead horse', which seem to be the descriptions of her marriage; however, differently from her perception of her father, she also perceives 'me as a wife' as 'self-worthless'. This seems to show that she might feel self-worthless in the relationship with her boyfriend (because she was not married and lived with her boyfriend for years, YuHui had been informed that the element 'me as a wife' can refer to 'me in a relationship with my boyfriend').

At the pre-group interview, YuHui told the researcher that she felt confused about herself during the interview, because "*I do not know what I really want*". In addition, it took her much time to come up with constructs and a rating for each element, and she seemed to be unsure about her answers after her construct/rating was given.

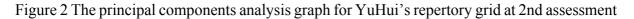
#### 8.1.2 Post-group assessment

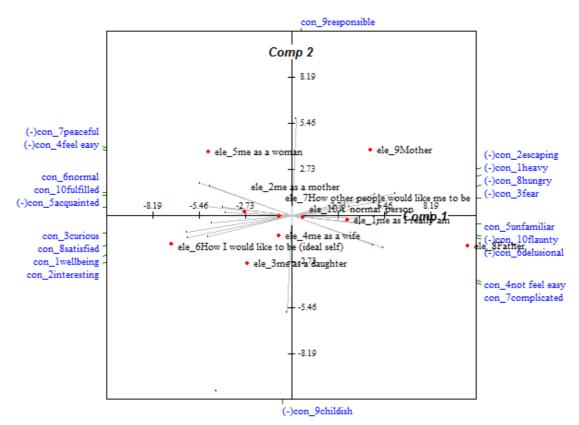
At the second assessment, both conflict and tightness are slightly decreased (conflict: 32.7%, tightness: 64.78) (see Table 8.1). In addition, somatisation is slightly decreased from 86 to 80. Nevertheless, the level of depression has a relatively more obvious decrease from 41 to 29, which is just one point over the cut-off of 28.

Her ten constructs at this assessment are given below:

- Wellbeing heavy
- Interesting escaping
- Curious fear
- Not feel easy feel easy
- Unfamiliar acquainted
- Normal delusional
- Complicated peaceful
- Satisfied hungry
- Responsible Childish
- Fulfilled flaunty

It can be obviously seen from Figure 2 that the elements and constructs that load highly on the first principal component (horizontal axis) become closer to each other than at the first assessment. This suggests that YuHui similarly perceives her constructs, although one might then expect that the percentage variance accounted for by Component 1 would increase.





YuHui perceives 'father' most extremely at this assessment, and as the furthest element from her ideal self, the same as at the previous assessment (see Table 8.2). At the previous assessment, ideal self is closest to 'how other people would like me to be' and 'a normal person'; at this assessment, ideal self is more distant from 'how other people would like me to be' and 'a normal person'. Nevertheless, the distance between 'how other people would like me to be' and 'a normal person' is only slightly increased from 0.43 to 0.50. The construct poles closest to ideal self are 'interesting', 'fulfilled', 'curious' 'peaceful', 'satisfied' and 'feel easy' (see Table 8.4).

(-1)	A.M.	M.M.	M.W	I.S.	Other	F.	M.	N.P.	(+1)
Heavy	-0.79	0.49	0.03	0.76	0.41	-0.77	-0.81	0.29	Wellbeing
Escaping	-0.62	0.51	0.31	0.86	0.38	-0.86	-0.88	-0.25	Interesting
Fear	-0.52	0.16	0.70	0.84	-0.16	-0.83	-0.45	-0.38	Curious
Feel easy	0.78	-0.69	0.00	-0.77	-0.02	0.87	0.41	0.15	Not feel easy
Acquainted	0.42	-0.75	-0.16	-0.75	0.44	0.70	0.35	0.21	unfamiliar
Delusional	-0.51	-0.17	0.47	0.72	0.44	-0.77	-0.38	-0.27	Normal
Peaceful	0.81	-0.17	-0.31	-0.79	-0.20	0.87	0.29	0.23	Complicated
Angry	-0.48	0.59	0.21	0.77	0.33	-0.85	-0.86	-0.25	Satisfied
Childish	0.05	0.09	-0.62	-0.34	0.13	-0.11	0.48	0.10	Responsible
Flaunty	-0.52	0.45	0.42	0.85	0.08	-0.97	-0.57	-0.44	Fulfilled

Table 8.4 The cosines between elements and construct poles for YuHui at 2nd assessment

There are not strong relationships between the above construct poles and 'how other people would like me to be' and 'a normal person'; however, the two construct poles, 'unfamiliar' and 'normal', are moderately related to the former element, while 'flaunty' is related to the latter element. This suggests that after the intervention, YuHui perceives her ideal self as dissimilar to 'a normal person' and 'how other people would like me to be', and she seems not to perceive the latter two elements as positively as at the first assessment. In addition, the element closest to ideal self is 'me as a daughter'. These are closer to each other than at the

first assessment, the distance between them decreasing from 0.81 to 0.62; the construct poles close to 'me as a daughter' are 'curious' and 'childish'.

The element which is closest to 'me as I really am' is 'me as a wife'; the distance between these two elements reduced from 1.01 at the first assessment to 0.59 at the second assessment. The same as at the first assessment, her actual self is furthest from her ideal self; however, the distance between these two elements is reduced from 1.31 to 1.27. Construct poles which define YuHui's actual self are 'complicated', heavy' and 'not feel easy'. In addition, 'actual self' became more distant from 'me as a mother' than at the first assessment, from 0.33 to 0.92. The construct pole closest to 'me as a mother' is 'acquainted'. This suggests that YuHui identifies herself more as a wife than as a mother at the second assessment. The construct pole which most defines 'me as a wife' is 'curious'. YuHui's actual self and 'mother' are more distant from each other than at the first assessment, while her actual self and 'father' are closer than at the first assessment.

Moreover, at the first assessment, she seems to identify herself as a mother with her mother and identity herself as a wife with her father. However, at the second assessment, the distances between 'me as a mother' and 'mother', and between 'me as a wife' and 'father', both increase; the former from 0.43 to 1.17, and the latter from 0.55 to 1.30.

YuHui seems to generate her own ideas of what her ideal self is like, which is different from 'how other people would like her to be' and 'a normal person'. In addition, she seems to acknowledge and idealise 'how other people would like me to be' and 'a normal person' less than at the first assessment. In addition, she seems to identify herself more as a wife, while she perceives herself more as a mother at the first assessment. She perceives 'me as a wife' as more positive, as the construct poles defining this element at the first assessment are 'hopeless', 'selfworthless' and 'beating a dead horse', while at the second assessment, the construct pole closest to this element is 'curious'. Moreover, she identifies herself less as a mother and perceives her role as a mother less negatively at the second assessment. At the first assessment, she perceives 'me as a mother' as 'worry' and 'bound up with everyday life'; at the second assessment, she perceives this element as 'acquainted'.

YuHui seems to view herself differently at the second assessment. At the first assessment, she perceives herself as 'fear', 'pressure', 'worry' and 'clearly bound up with everyday life'; at the second assessment, she perceives herself as 'complicated', 'heavy' and 'not feel easy'.

Although her actual self is still distant from the ideal self, she seems less bound up with negative emotions. Moreover, the increased distances between 'me as a wife' and 'father', and 'me as a mother' and 'mother' suggest that YuHui might perceive herself as a mother and a wife more differently from her parents.

To conclude, YuHui seems to perceive herself as more different from her parents and 'a normal person', and perceives her ideal self as more different from other people's expectations at the second assessment. In addition, although she perceives her actual self as still quite different from her ideal self, she seems to perceive herself less negatively and have fewer negative emotions.

These changes might echo the reflections she wrote after the sessions. After the postgroup interview, YuHui emailed the researcher. She wrote:

"I imitated the movements of my relatives I do not like and who make me feel embarrassed during the sessions. At last, surprisingly, I found that I started to know who I am, and can peacefully be myself. I always have a particular frame of perceiving what is right and what is wrong. Through the practice with the other participants in the group, I eventually find that sacrifice and dedication are not stupid."

Compared to what she said before the intervention: "I do not know what I want", she seems to be more self-accepting and knows more about herself after the intervention.

#### 8.1.3 Three-month follow-up assessment

YuHui's level of conflict in construing was slightly increased from 32.7% at the second assessment to 35.3% at the third assessment (which was at three-month follow-up), whilst levels of tightness were dramatically decreased from 64.78 to 43.12 and levels of depression were decreased from 29 to 17. Moreover, surprisingly, her level of somatisation was also dramatically decreased from 80 to 26.

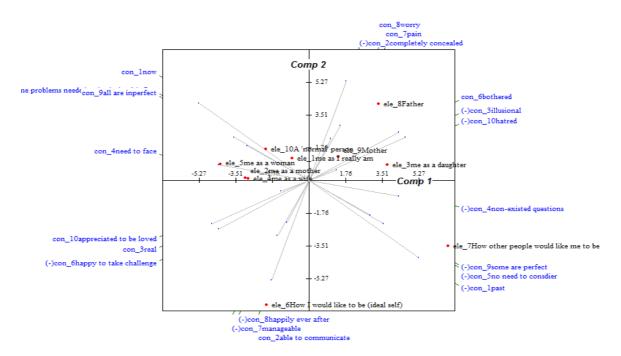
YuHui's ten constructs at the third assessment are shown below:

- Clear blurry
- Able to communicate completely concealed
- Real delusional
- Need to face non-existent problems
- Some problems needed to be dealt with first no need to consider

- Bothered happy to take a challenge
- Pain manageable
- Worry happily ever after
- All are imperfect some are perfect
- Appreciate to be loved hatred

According to Figure 3, it can be seen that the construct lines become distant to each other again; in addition, YuHui extremely perceives her ideal self and 'how other people would like me to be'. However, her ideal self is closer to 'me as I really am' than at the previous assessment, the distance reducing from 1.27 to 1.16 (see Table 8.2). Yet YuHui's ideal self is even more distant from 'how other people would like me to be' and 'a normal person'; the distance between ideal self and the former is increased from 0.95 to 1.50, while the distance between ideal self and the latter is increased from 1.01 to 1.23. The construct poles closest to ideal self are 'manageable' and 'happy to take a challenge' (see Table 8.5). In addition, 'how other people would like me to be' are 'some are perfect' and 'non-existing problems'.

Figure 3 The principal components analysis graph for YuHui's repertory grid at 3rd assessment



(-1)	A.M.	M.M.	M.W.	I.S.	Other.	F.	M.	N.P.	(+1)
Past	0.58	0.69	0.76	-0.44	-0.63	-0.09	-0.23	0.85	Now
Completely concealed	-0.31	0.31	0.38	0.59	0.35	-0.78	-0.71	-0.07	Able to communicate
Illusional	0.11	0.57	0.70	0.68	-0.57	-0.67	-0.54	0.26	Real
Non- existent problems	0.57	0.87	0.79	0.07	-0.79	-0.40	-0.41	0.44	Need to face
No need to consider	0.65	0.58	0.85	-0.39	-0.59	-0.27	-0.45	0.63	Some problems need to be dealt with first
Happy to take a challenge	-0.01	-0.64	-0.49	-0.73	0.56	0.71	0.21	-0.20	Bothered
Manageabl e	0.30	-0.12	-0.33	-0.83	0.10	0.82	0.37	0.18	Pain
Happily ever after	0.36	-0.20	-0.31	-0.62	-0.05	0.90	0.25	0.00	Worry
Some are perfect	0.05	0.30	0.21	0.15	-0.89	0.15	0.38	0.41	All are imperfect
Hatred	-0.15	0.58	-0.02	0.49	-0.49	-0.07	0.12	-0.30	Appreciate to be loved

Table 8.5: The cosines between elements and construct poles for YuHui at 3rd assessment

Apart from 'how other people would like me to be', the other elements are closer to YuHui's actual self at the third assessment than at the second assessment. Her actual self is closest to 'me as a wife', and these two elements become closer to each other through the three assessments. This suggests that YuHui is strongly identifying herself as a wife. The construct pole closest to her actual self and 'me as a wife' is 'some problems needed to be dealt with first'; the construct pole 'clear' is also close to 'me as a wife'. 'Me as a wife' and 'me as a mother' get closer throughout the three assessments; the distance reducing from 0.96 at the

first assessment to 0.75 at the second assessment to 0.39 at the third assessment. The construct pole closest to 'me as a mother' is 'need to face'.

'Father' is perceived as less extreme than at the previous two assessments; 'father' and 'me as I really am' become closer to each other throughout the three assessments. The construct poles closest to 'father' are 'worry', 'pain' and 'completely concealed'. 'Mother' is the element closest to 'father'; the construct pole closest to 'mother' is 'completely concealed'.

Moreover, it is interesting to discuss the changes of the distance between 'me as a woman' and 'how other people would like me to be' throughout the three assessments. At the first assessment, 'how other people would like me to be' is closest to 'me as a woman' with a distance of 0.48; indicating that YuHui's perception of being a woman is very close to other people's expectations of her. At the second assessment, the distance between these two elements is increased from 0.48 to 0.71; indicating that YuHui might develop her own perception of 'me as a woman' which is not necessarily the same as other people's expectations. At the third assessment, the distance between the two elements is increased to 1.55, and 'how other people would like me to be' is the furthest element from 'me as a woman'. The construct poles closest to 'me as a woman' are 'problems needed to dealt with first', 'need to face' and 'clear', which suggests that YuHui might want to deal with some 'problems' surrounding her role as a woman. In addition, her perception of being a woman is quite different from other people's expectations.

To conclude, YuHui's actual self and ideal self become closer to each other throughout the three assessments, and this suggests that she becomes more self-accepting. In addition, elements relating to the self are closer to the actual self at the third assessment than at the previous assessments, suggesting that YuHui might perceive the roles she takes as more integrated. Among the elements relating to the self, 'me as a wife' has a dramatic decrease of the distance from actual self, suggesting that YuHui might be more able to express her actual self in her relationship with her boyfriend. In addition, 'father' gets closer to her actual self throughout the three assessments, which suggests that she gradually perceives her father as less different from herself; which might indicate that she becomes more accepting of her father.

Moreover, YuHui's ideal self gets more distant from 'a normal person' and 'how other people would like me to be' throughout the three assessments; in addition, 'me as a woman' also gets more distant from 'how other people would like me to be' throughout the three assessments. This suggests that YuHui might become more and more opinionated about her expectations of herself and perception of being a woman, which are more and more different from other people's expectations.

Furthermore, it is worth noting that YuHui seems to become 'less emotional' when perceiving herself at the third assessment. For example, she perceives her actual self as 'problems needed to be dealt with first', 'me as a mother' as 'need to face', and 'ideal self' as 'manageable'. This can be seen from the decrease of the percentage of YuHui using emotional constructs. At the pre-group and post-group assessments, 50% of the ten constructs are emotional constructs. However, at the three-month follow-up, only 40% of the ten constructs are emotional constructs. She seems to show more of her emotions when perceiving her father: she perceives her father as 'worry', 'pain' and 'completely concealed'. Being 'less emotional' might echo the decrease of depression scores; however, it is not clear whether the emotions in relation to the self have disappeared or are just 'concealed'. Nevertheless, it could be assumed that YuHui seems to change her view of herself, and this reconstruing might be facilitated by the decrease of her tightness at the third assessment.

#### 8.1.4 Six-month follow-up assessment

YuHui's tightness and level of conflict in construing shows little change at this assessment; the former slightly increases from 43.12 at the three-month follow-up to 45.17 at the six-month follow-up, and the latter is also slightly increased from 35.3% to 36.7%. Nevertheless, depression and somatisation have a rather large decrease; the former is decreased from 17 to 8, while the latter is decreased from 26 to 17.

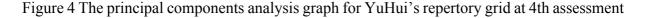
The ten constructs elicited from YuHui at the fourth assessment are shown below:

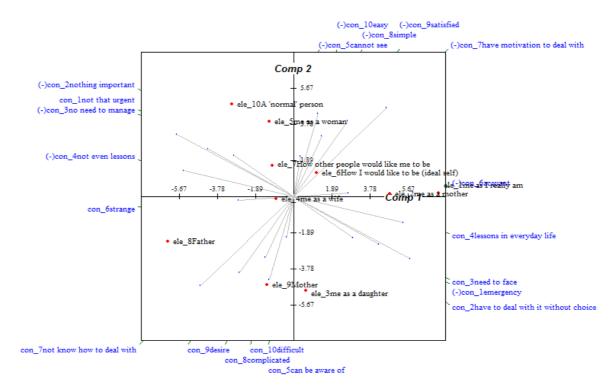
- Not that urgent emergency
- Have to deal with it without choice nothing important
- Need to face no need to manage
- Lessons in everyday life not lessons
- Can be aware of cannot see
- Strange acquainted
- Not know how to deal with have motivation to deal with
- Complicated simple

- Desire satisfied
- Difficult easy

It can be seen from Figure 4 that the elements are spread out again; in addition, she perceives her actual self as the most extreme.

Her ideal self and 'how other people would like me to be' become closer again at the fourth assessment than at the second and third assessments (see Table 8.2). This suggests that YuHui perceives her ideal self as similar to 'how people would like her to be' at the fourth assessment. In addition, ideal self is closest to 'me as a wife' and 'how other people would like me to be', suggesting that the latter two elements are closer to her perception of her ideal self at the fourth assessment. The ideal self and 'a normal person' also get closer to each other again, from 1.23 at the third assessment to 0.86 at the fourth assessment. So do 'a normal person' and 'how other people would like me to be'; they are closer to each other at the fourth assessment than at second and third assessments.





This suggests that she might think that her own and others' expectations about herself might not be incompatible, or she might accept others' expectations about her as her own expectation of herself at this assessment. However, the distances between the three elements at the fourth assessment are not shorter than at the first assessment. This suggests that even though YuHui might perceive that her ideal self is not that different from others' expectations at the fourth assessment, she still perceives these three elements as more different than at the first assessment.

The 'ideal self' is close to the following construct poles, "can be aware of', 'need to face', 'have motivation to deal with' and 'strange' (see Table 8.6). The construct poles close to 'how other people would like me to be' are 'strange', 'easy', 'simple' and 'have motivation to deal with'. The construct poles close to 'a normal person' are 'have motivation to deal with', 'cannot see', and 'satisfied'. However, YuHui's ideal self is even closer to her actual self at the fourth assessment, suggesting that she seems to gradually be more satisfied with herself throughout. In addition, her actual self is more distant from 'father', 'mother', 'me as a wife' and 'a normal person' at the fourth assessment than the previous three assessments. In addition, the element closest to her actual self is 'me as a mother', indicating that YuHui identifies herself most as a mother, which is the same as at the first assessment.

(-1)	A.M.	M.M.	M.W	I.S.	Other	F.	M.	N.P.	(+1)
Emergency	-0.83	-0.72	0.55	0.00	0.55	0.53	-0.29	0.58	Not that urgent
Nothing important	0.63	0.60	-0.07	0.30	-0.38	-0.54	0.33	-0.68	Have to deal with it without choice
No need to manage	0.81	0.79	-0.18	0.19	-0.63	-0.61	0.20	-0.68	Need to face
Not lessons	0.95	0.87	-0.41	0.31	-0.56	-0.72	-0.04	-0.56	Lessons in everyday life
Cannot see	0.01	-0.09	-0.30	0.02	-0.72	0.51	0.47	-0.23	Can be aware of
Acquainted	-0.47	-0.74	-0.30	0.24	0.02	0.66	0.21	0.59	Strange
Have motivation to deal with	-0.62	-0.73	0.09	-0.21	-0.21	0.80	0.81	-0.02	Not know how to deal with
Simple	-0.40	-0.20	0.62	-0.49	-0.16	0.41	0.59	-0.69	Complicated
Satisfied	-0.48	-0.44	0.01	-0.76	-0.25	0.70	0.85	-0.27	Desire
Easy	-0.32	-0.19	0.36	-0.52	-0.13	0.48	0.82	-0.70	Difficult

Table 8.6: Cosines between elements and construct poles for YuHui at 4th assessment

The construct poles closest to 'me as I really am' are 'lessons in everyday life', 'emergency', and 'need to face'. The previous two construct poles also define as 'me as a mother'; nevertheless, apart from these two construct poles, 'have motivation to deal with' also defines this element.

As mentioned above, the element closest to 'ideal self' is 'me as a wife'. It is interesting to further discuss the changes of the distance between the two elements throughout. At the first assessment, YuHui perceives 'me as a wife' as very different from her ideal self; apart from 'father', 'me as a wife' is the element from which her ideal self is the most distant. However, at the fourth assessment, 'me as a wife' becomes the element closest to ideal self. This might show that the relationship between YuHui and her boyfriend improves, and she might value herself more in this relationship.

To conclude, YuHui seems to become more self-accepting with her lessening distance between her actual and ideal self throughout. In addition, her ideal self and 'how other people would like me to be' and 'a normal person' from being close to each other at the first assessment, are distant from each other at the second and third assessments, and then become close to each other again. This might show that YuHui has experienced a journey of reconstruing her ideal self: from identifying her ideal self as similar to others' expectations, perceiving that her expectations are different from others', and then perceiving that construing her own ideal self might not necessarily mean being different from others or others' expectations. This can also be seen from the construct poles close to these three elements. YuHui seems to less idealise 'how other people would like me' and 'a normal person' after the intervention, and to build up her own perception of what her ideal self might be.

'Father' is close to 'me as a wife' at the first assessment, and then becomes distant from the elements relating to the self at the three later assessments; this suggests that she does not think she is similar to him after the intervention. In addition, 'me as a wife' gets closer to her ideal self, suggesting that YuHui might be more satisfied with herself being a wife.

Consequently, YuHui seems to have made a great improvement throughout; she seems to be more self-accepting and to value herself more, which echoes her decrease of depression and somatisation scores. However, as mentioned above, YuHui seems gradually to show a relative lack of emotional constructs after the intervention. At the six-month follow-up, only 10% of ten constructs are emotional constructs. It is possible that YuHui is so keen to get herself 'better' that she avoids recognising the existence of some of her emotions or thoughts which might not necessarily be 'good' from her perspective. Consequently, this might result in the dramatic decrease in her depression and somatisation scores.

#### 8.2 ChiMei

#### 8.2.1 Survey and pre-group assessment

ChiMei has high conflict between personal and social orientations, because her means for the two orientations are higher than in the data collected by Lu, Chang & Wu (2008). Moreover, her personal (86) and social (93) orientation scores are also higher than the sample mean (social orientation: 87.88, personal orientation: 77.78). In addition, her level of conflict in construing at the pre-group assessment (41.1%) is also higher than the mean in Group 2 (37.842%), while her tightness at the pre-group assessment (35.47) is much lower than the mean in Group 2 (48.36). The low tightness could be partly reflected in her consistent change of jobs. She told the researcher in the pre-group interview that she considered changing her job again because she "*cannot stay in one position for a long time*". Eventually she did get a new job during the 12-week intervention.

	Survey	First assessment	Second assessment	Third assessment	Fourth assessment
Personal orientation	Mean=4.3	N.A.	N.A.	N.A.	N.A.
Social orientation	Mean=4.65	N.A.	N.A.	N.A.	N.A.
Conflict	N.A.	41.1%	36%	31.1%	35.3%
Tightness	N.A.	35.47	42.61	45.94	41.23
Depression	36	28	31	44	29
Somatisation	N.A.	35	57	71	56

Table 8.7: ChiMei's scores throughout the study

Her depression scores are higher than the cut-off throughout; only one point higher than the cut-off at the first assessment but they kept increasing after the intervention until the threemonth follow-up assessment. Moreover, somatisation scores are increased from lower than the cut-off at the first assessment to higher than the cut-off at the next three assessments. The reasons for this change and the impact of the intervention on ChiMei will be further explored in this section. The ten constructs elicited from ChiMei at the first assessment are shown below.

- 1. Conflict manageable
- 2. Be able not to care important
- 3. Social everyone is unique
- 4. Achievement an easy life/not to pursue something
- 5. "Have one's own way" meet other people's imagination
- 6. Traditional thoughts modern
- 7. Not understand the values same values
- 8. To be familiar with not understand the positions
- 9. Special ordinary
- 10. Constantly trying to play certain roles common person

From Figure 5 it can be seen that ChiMei perceives a normal person in a more extreme way than other elements, as this element is most extremely located. She perceives her actual self as closest to her ideal self (see Table 8.8), suggesting that she has a relatively high level of self-acceptance. The construct poles 'same values', 'conflict' and 'modern' are close to her actual self (see Table 8.9); the construct pole 'conflict' might echo ChiMei's high conflict. This suggests that ChiMei might experience some inner conflict during this period of time. Her ideal self is close to 'meet other people's imagination', 'modern', and 'same values'. In addition, the placement of her actual self and ideal self in the opposite quadrant to 'mother', which is near the construct pole 'manageable', suggests that ChiMei views the former two elements as different from 'mother'.

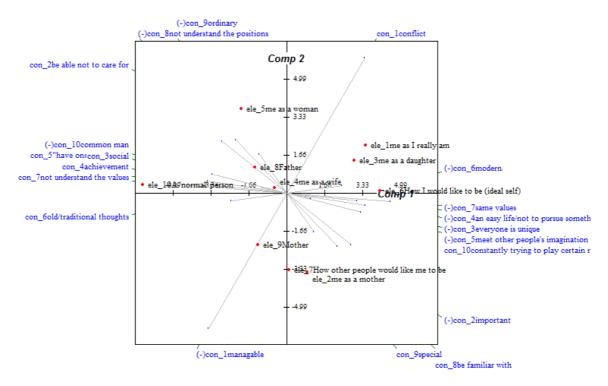


Figure 5 The principal components analysis graph for ChiMei's repertory grid at 1st assessment

		Am	M.M	M.D.	Wife	Wom	I.S.	Other	F.	M.	N.P.
Me as I	1 <sup>st</sup> asmt.	0.00									
really am (Am)	2 <sup>nd</sup> asmt.	0.00									
	3 <sup>rd</sup> asmt.	0.00									
	4 <sup>th</sup> asmt.	0.00									
Me as a mother	1 <sup>st</sup> asmt.	0.98	0.00								
(M.M.)	2 <sup>nd</sup> asmt.	1.24	0.00								
	3 <sup>rd</sup> asmt.	1.16	0.00								
	4 <sup>th</sup> asmt.	0.83	0.00								
Me as a daughter	1 <sup>st</sup> asmt.	0.87	1.03	0.00							
(M.D.)	2 <sup>nd</sup> asmt.	0.71	1.12	0.00							
	3 <sup>rd</sup> asmt.	0.95	0.44	0.00							
	4 <sup>th</sup> asmt.	0.86	1.12	0.00							

r	r		1	1	1			1		1	1
Me as a wife	1 <sup>st</sup> asmt.	0.90	0.79	0.95	0.00						
(Wife)	2 <sup>nd</sup> asmt.	1.08	0.66	0.88	0.00						
	3 <sup>rd</sup> asmt.	0.69	1.28	1.07	0.00						
	4 <sup>th</sup> asmt.	1.13	0.95	0.97	0.00						
Me as a	1 <sup>st</sup> asmt.	1.04	1.10	1.09	0.87	0.00					
woman (Wom.)	2 <sup>nd</sup> asmt.	1.23	1.07	0.85	0.80	0.00					
	3 <sup>rd</sup> asmt.	0.79	1.24	1.09	0.34	0.00					
	4 <sup>th</sup> asmt.	1.38	1.09	1.24	0.53	0.00					
Ideal self	1 <sup>st</sup> asmt.	0.68	0.78	1.00	1.08	1.09	0.00				
(I.S)	2 <sup>nd</sup> asmt.	1.49	0.94	1.55	1.13	1.43	0.00				
	3 <sup>rd</sup> asmt.	1.11	0.78	0.89	1.14	1.11	0.00				
	4 <sup>th</sup> asmt.	0.55	0.88	0.85	1.05	1.22	0.00				
How other people	1 <sup>st</sup> asmt.	0.99	0.36	1.00	0.78	1.05	0.92	0.00			
would like me to be	2 <sup>nd</sup> asmt.	1.19	0.71	0.97	0.40	0.83	0.98	0.00			
(Other)	3 <sup>rd</sup> asmt.	0.98	0.83	0.70	1.14	1.18	1.15	0.00			
	4 <sup>th</sup> asmt.	0.38	0.81	0.90	1.03	1.30	0.51	0.00			
Father	1 <sup>st</sup> asmt.	1.16	0.95	1.02	0.99	0.79	1.07	0.98	0.00		
(F)	2 <sup>nd</sup> asmt.	1.13	0.46	0.94	0.42	0.95	0.88	0.37	0.00		
	3 <sup>rd</sup> asmt.	1.05	0.87	0.81	1.18	1.20	1.12	0.65	0.00		
	4 <sup>th</sup> asmt.	1.24	1.43	0.75	0.94	1.11	1.05	1.20	0.00		
Mother	1 <sup>st</sup> asmt.	1.10	0.61	0.89	0.84	0.99	1.01	0.53	0.71	0.00	
(M.)	2 <sup>nd</sup> asmt.	1.08	1.10	1.01	0.66	0.85	1.29	0.66	0.87	0.00	
	3 <sup>rd</sup> asmt.	0.51	1.11	0.88	0.49	0.51	0.99	1.05	1.15	0.00	
	4 <sup>th</sup> asmt.	1.16	0.94	0.78	0.87	1.10	1.06	1.10	0.87	0.00	
L		L	1	1	1	1	1	1	1	L	

A normal	1 <sup>st</sup> asmt.	1.39	1.22	1.48	1.09	1.01	1.51	1.13	1.16	0.98	0.00
person (N.P.)	2 <sup>nd</sup> asmt.	1.14	1.20	0.75	0.96	0.77	1.44	0.96	0.99	1.13	0.00
	3 <sup>rd</sup> asmt.	1.17	1.12	1.00	1.28	1.35	1.17	0.66	1.03	1.17	0.00
	4 <sup>th</sup> asmt.	1.12	0.80	1.18	0.58	0.66	0.96	1.07	1.19	1.03	0.00

Table 8.9: The cosines between elements and construct poles for ChiMei at 1<sup>st</sup> assessment

(-1)	A.M.	M.M	I.S.	Other	M.	N.P.	(+1)
Manageable	0.66	-0.66	0.46	-0.77	-0.64	-0.39	Conflict
Important	0.24	-0.49	-0.36	-0.36	-0.37	0.78	Be able not to care
Everyone is unique	-0.50	-0.39	-0.59	0.00	0.32	0.79	Social
An easy life/ not to pursue something	-0.52	-0.10	-0.12	-0.18	0.27	0.53	Achievement
Meet others' imagination	-0.05	-0.28	-0.80	0.06	0.07	0.30	Have one's own way
Modern	-0.60	-0.24	-0.75	0.15	0.63	0.73	Traditional thoughts
Same values	-0.67	-0.35	-0.73	-0.26	0.54	0.64	Not understand the values
Not understand the positions	0.44	0.38	0.44	0.35	0.14	-0.10	To be familiar with
Ordinary	0.19	0.52	0.60	0.33	-0.03	-0.25	Special
Common man	0.10	0.12	0.26	0.08	0.32	-0.69	Constantly trying to play certain roles

Moreover, 'how other people would like me to be' is closest to 'me as a mother', and distant from her actual self and ideal self. The former two elements are closest to the construct pole 'manageable', which is the opposite pole of 'conflict'. This seems to illustrate that other people would like her to be a mother, and this is quite different from (or probably the opposite of) the actual self.

Based on the discussion above, ChiMei seems to show her strong personal and social orientations and high conflict in the grid. Firstly, the construct pole close to her ideal self is 'meet other people's imagination', illustrating her high social orientation. Secondly, her strong personal orientation is indicated by the short distance between her actual and ideal self, and these two elements are distant from 'how other people would like me to be'. This illustrates that she has her own opinions about herself which are not similar to others' expectations. In

addition, 'a normal person' is quite distant from all the other elements, suggesting that she might perceive herself as different from a normal person. Thirdly, both strong personal and social orientations might illustrate her high conflict; she seems to be aware of this conflict as she describes her actual self as 'conflict'.

### 8.2.2 Post-group assessment

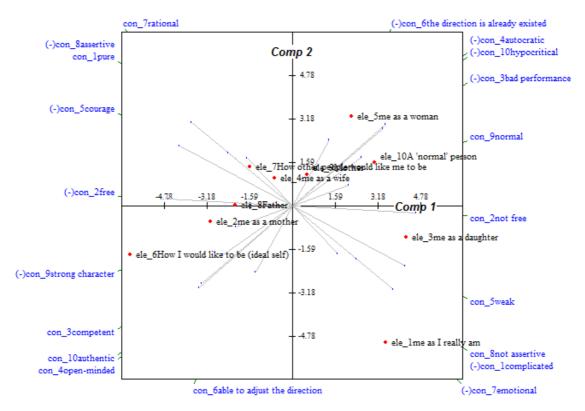
At the post-group assessment, ChiMei's overall conflict in construing is decreased from 41.1% to 36%, which is only slightly under the sample mean of 36.66 in Group 2. Her tightness is increased from 35.467 to 42.61. However, her depression scores are three points higher than that at pre-group assessment and the somatisation scores are highly increased from 35 to 57. She mentioned that she was "*under high pressure in the new job*", and this may be a reason for the increase in her depression and somatisation scores.

The ten constructs elicited at the post-group assessment are shown below.

- Pure complicated
- Not free free
- Competent bad performance
- Open-minded autocratic
- Weak courage
- Able to adjust the direction the direction is already existed
- Rational emotional
- Not assertive assertive
- Normal strong character
- Authentic hypocritical

The principal components analysis graph for ChiMei's repertory grid at the second assessment is shown in.

Figure 6 The principal components analysis graph for ChiMei's repertory grid at 2nd assessment



At the post-group assessment, her actual self becomes very distant from her ideal self and almost all the other elements relating to the self (see Table 8.8). Her actual self is close to the construct poles 'weak', 'not assertive' and 'complicated' (see Table 8.10) indicating that ChiMei's actual self is highly defined by these poles. In addition, compared to the first assessment, she seems to perceive herself more negatively at the second assessment. Her ideal self is also quite distant from all the other elements; the construct poles close to her ideal self are 'free' and 'open-minded'. 'How other people would like me to be' is closest to 'father', and second closest to 'me as a wife'. 'Free' is a construct pole closest to 'how other people would like me to be'; 'courage' and 'authentic' are close to 'father', and 'strong character' is relatively close to 'me as a wife'.

(1)	A 192	M.M.	Wife	I.S.	Other	F.	M.	N.P.	(+1)
(-1)	Am	IVI.IVI.	whe	1.5.	Other.	Г.	IVI.	N.P.	(+1)
Complicated	-0.73	0.35	0.53	0.38	0.67	0.36	0.45	-0.52	Pure
Free	0.47	-0.19	-0.23	-0.74	-0.76	-0.59	-0.26	0.54	Not free
Bad performance	-0.07	0.46	-0.03	0.66	0.13	0.60	-0.45	-0.06	Competent
Autocratic	0.07	0.75	-0.21	0.70	-0.04	0.52	-0.41	-0.61	Open- minded
Courage	0.86	-0.63	-0.40	-0.60	-0.62	-0.68	0.12	0.27	Weak
The direction already exists	0.31	-0.18	-0.53	0.68	-0.28	-0.29	0.12	-0.14	Able to adjust the direction
Emotional	-0.65	0.27	-0.17	0.47	0.23	0.26	-0.48	0.33	Rational
Assertive	0.75	-0.44	0.03	-0.47	-0.24	-0.50	0.59	-0.20	Not assertive
Strong character	0.07	-0.51	-0.59	-0.24	-0.37	-0.53	-0.34	0.94	Normal
Hypocritical	0.07	0.75	0.20	0.62	0.07	0.67	-0.45	-0.61	Authentic

Table 8.10: The cosines between elements and construct poles for ChiMei at 2nd assessment

To conclude, unlike the high conflict between social and personal orientations at the first assessment, she seems to be more socially oriented and less personally oriented. Firstly, her actual self becomes very distant from her ideal self. Secondly, both her ideal self and 'how other people would like me to be' can be defined by the construct pole 'free'. This suggests that what she would like to be is close to how other people would like her to be. In addition, 'how other people would like me to be' moves closer to 'father' and 'me as a wife', and the construct poles close to the latter two elements are 'courage' and strong character', which are very different from the construct pole 'weak'. This seems to indicate that she perceives her actual self relatively negatively, and perceives how other people would like her to be relatively positively. Moreover, since her actual self is distant from all the other elements relating to the self, ChiMei might perceive that her actual self is close to a normal person. In other words, she might think she is not as special as she was at the first assessment.

The above discussion seems to indicate that ChiMei's mental health becomes 'worse' after the intervention, which echoes the increase of depression and somatisation scores at the second assessment. However, she defines her actual self as 'complicated', which might suggest that she discovers different parts of herself during the intervention; the new discoveries might increase her level of anxiety, which might relate to the increase in depression.

ChiMei mentioned her positive experiences in the intervention group. At the post-group interview, ChiMei said that although the new job made her feel pressured, this group gave her space and time to be with herself. She also mentioned that she found something about herself that she did not know before.

# "I found I am quite disobedient, and some other things relating to my personality...Is that me? If I am like this, do I want to accept this kind of me?"

It is interesting to note that when her grid shows that her social orientation might be increased, she described herself as 'disobedient'. Nevertheless, ChiMei seems to have some different understanding about herself after the sessions and to be in a process of re-construing her self-understanding; this might connect to the increase of her depression and somatisation scores.

#### 8.2.3 Three-month follow-up assessment

At the three-month follow-up assessment, ChiMei's conflict in construing decreased to 31.1%, and tightness kept increasing to 45.94. Depression scores increased to 44, and somatisation also kept increasing to 71.

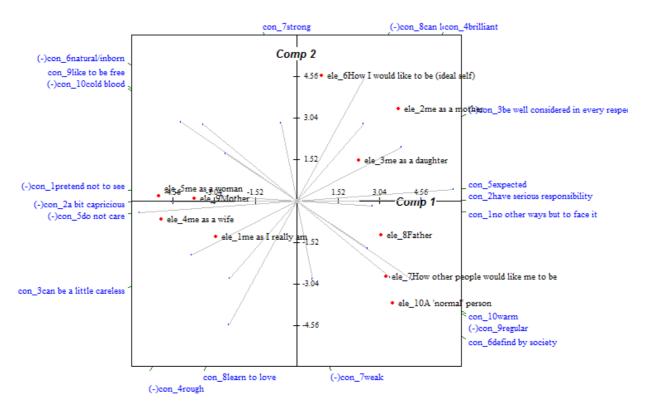
ChiMei's ten constructs which were elicited at the first follow-up are shown below:

- 1. No other way but to face it pretend not to see
- 2. Have serious responsibility a bit capricious
- 3. Can be a little careless be well considered in every respect
- 4. Brilliant rough
- 5. Expected do not care
- 6. Defined by society natural/inborn
- 7. Strong weak
- 8. Learn to love –can love naturally
- 9. Like to be free regular

#### 10. Warm – cold blooded

The principal components analysis graph for ChiMei's repertory grid at the third assessment is shown in Figure 7 below.

Figure 7: The principal components analysis graph for ChiMei's repertory grid at the 3rd assessment



At the third assessment, ChiMei's actual self becomes less distant from the ideal self than at the second assessment (see Table 8.8). Her perception of her actual self as less different from her ideal self is not consistent with her increased depression scores in view of the association between the distance between her actual self and ideal self and depression.

The construct poles close to her actual self are 'do not care' and 'can be a little careless', while the construct pole closest to her ideal self is 'can love naturally' (see Table 8.11). Her actual self becomes closer to 'how other people would like me to be' again, and the distance between the two elements at the third assessment is even less than that at the first assessment. 'Regular' is the construct pole which is closest to 'how other people would like me to be'. 'Father' and 'a normal person' are closest to 'how other people would like me to be'. The construct pole closest to 'a normal person' is 'defined by society'.

(-1)	A.M.	M.M	M.D.	Wife	M.W	I.S.	Othe r	F.	M.	N.P.	(+1)
Pretend not to see	-0.19	0.60	0.74	-0.63	-0.53	-0.38	0.60	0.44	-0.40	-0.04	No other way but to face it
A bit capricious	-0.30	0.54	0.37	-0.93	-0.92	0.24	0.56	0.62	-0.73	0.44	Have serious responsibility
Be well considered in every respect	0.64	-0.72	-0.42	0.70	0.64	-0.57	-0.35	0.05	0.62	-0.43	Can be a little careless
Rough	-0.58	0.76	0.43	-0.46	-0.34	0.45	0.01	0.60	-0.64	-0.29	Brilliant
Do not care	-0.66	0.74	0.57	-0.88	-0.80	0.14	0.64	0.66	-0.93	0.41	Expected
Natural/in born	-0.40	-0.06	-0.19	-0.49	-0.54	0.03	0.65	0.46	-0.61	0.87	Defined by society
Weak	-0.10	0.32	0.16	0.12	0.22	0.37	-0.40	0.28	-0.06	-0.82	Strong
Can love naturally	0.49	-0.71	-0.60	0.51	0.44	-0.75	0.25	0.25	0.19	-0.03	Learn to love
Regular	0.57	-0.27	-0.43	0.50	0.57	0.44	-0.85	-0.51	0.67	-0.63	Like to be free
Cold blooded	0.22	0.17	0.36	-0.57	-0.81	-0.28	0.58	0.44	-0.46	0.41	Warm

Table 8.11: The cosines between elements and construct poles for ChiMei at 3<sup>rd</sup> assessment

ChiMei's actual self is much closer to 'mother' at the third assessment than at the previous two assessments, and 'mother' becomes the element closest to the actual self. 'Mother' is very close to the construct poles 'do no care' and 'a bit capricious'. ChiMei's ideal self is relatively close to 'me as a mother', and the latter element is closest to the construct poles: 'brilliant', 'expected' and 'be well considered in every respect'. Moreover, her ideal self becomes more and more distant from 'how other people would like me to be', while 'how other people would like me to be' grows more and more distant from 'a normal person' throughout the three assessments. Construct poles closest to 'a normal person' are 'defined by society' and 'weak'.

To conclude, it is interesting to note that ChiMei's depression and somatisation scores increase while the actual and ideal self get closer to each other. At the first assessment, she defines her ideal self as 'meet other people's imagination'; at this assessment, her actual self gets closer to 'how other people would like me to be'. It seems that ChiMei becomes the one she wants to be; however, this seems not to help her from feeling depressed, as her depression

scores are increased. This might be because both her social and personal orientations are higher than the mean.

High personal orientation might present in her description of herself: 'disobedient'. It is worth noting that while her actual self becomes closer to 'how other people would like me to be' at the three assessments, the distance between the ideal self and 'how other people would like me to be' becomes greater at the three assessments. In other words, when her actual self gets closer to other people's expectation, her ideal self becomes distant from it. This seems to show that although ChiMei wants to meet other people's expectation/imagination, she seems not to be satisfied about herself, and she expects herself to be different from other people's expectation. This illustrates her high level of conflict between social and personal orientations. She seems to be aware of her high inner conflict, as she described herself as 'complicated'. She also describes herself as 'conflict' at first assessment and as 'complicated' at second assessment.

At the first assessment, although her level of conflict is high, she seems to be able to manage the conflict, and the depression and somatisation scores are low. However, when she attempts to meet other people's expectations – in other words, to be more social-oriented – she seems to become more depressed.

#### 8.2.4 Six-month follow-up assessment

ChiMei's conflict in construing at this last assessment is increased to 35.3%, while tightness in decreased to 41.23. In addition, her depression scores are decreased to 29, and somatisation is also decreased to 56. However, both are still above the cut-off point.

Her ten constructs elicited at the six-month follow-up assessment are shown below:

- 1. Abundant limited
- 2. Accepted resisted
- 3. Can be abandoned cannot be abandoned
- 4. Not clear clear
- 5. Easier to describe difficult to explain
- 6. Not agree with agreeable
- 7. Not flexible flexible
- 8. No negotiation able to negotiate

#### 9. Have expectations - doesn't matter

10. Awkward - natural

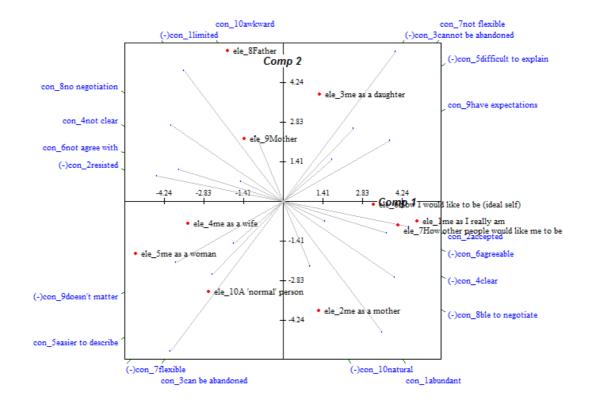


Figure 8 The principal components analysis graph for ChiMei's repertory grid at 4<sup>th</sup> assessment

Based on Figure 8, it can be seen that ChiMei's actual self, ideal self and 'how other people would like me to be' are close to each other, suggesting that ChiMei perceives the three elements similarly. According to Table 8.8, the actual self is even closer to her ideal self at the fourth assessment than at the first assessment; in addition, her actual self is closest to 'how other people would like me to be', and these two elements at the fourth assessment are closest to each other than at the previous assessments. Furthermore, the ideal self is also closest to 'how other people would like me to be' at the fourth assessment, and these two elements at the fourth assessment are closest to the construct poles 'able to negotiate', 'accepted' and 'agreeable' (see Table 8.12). The ideal self is closest to the construct poles 'have expectations' and 'able to negotiate'. In addition, 'how other people would like me to be' is closest to the construct poles 'able to negotiate', 'accepted' and 'clear'. Moreover, 'me as a mother' becomes much closer to 'a normal person' at the fourth assessment than at the previous three assessments. The construct pole closest to 'a normal person' is 'can be abandoned'.

(-1)	Am	M.M.	M.D.	Wife	M.W	I.S.	Other	F.	M.	N.P.	(+1)
Limited	0.64	0.49	-0.50	-0.30	-0.23	0.62	0.65	-0.73	-0.73	0.33	Abundant
Resisted	0.79	0.54	0.20	-0.76	-0.64	0.52	0.75	-0.53	-0.14	-0.54	Accepted
Cannot be abandoned	-0.39	0.38	-0.72	0.64	0.81	-0.39	-0.36	-0.47	-0.36	0.83	Can be abandoned
Clear	-0.50	-0.38	0.22	0.27	0.66	-0.37	-0.71	0.46	0.04	0.05	Not clear
Difficult to explain	-0.43	0.42	-0.71	0.37	0.54	-0.49	-0.49	-0.20	0.28	0.60	Easier to describe
Agreeable	-0.78	-0.53	-0.28	0.48	0.68	-0.25	-0.57	0.60	0.15	0.28	Not agree with
Flexible	0.56	-0.57	0.47	-0.26	-0.43	0.35	0.55	0.42	-0.40	-0.66	Not flexible
Able to negotiate	-0.80	-0.46	0.36	0.50	0.40	-0.73	-0.85	0.61	0.61	0.12	No negotiation
Doesn't matter	0.58	-0.07	0.50	-0.92	-0.83	0.73	0.42	0.18	0.06	-0.56	Have expectations
Natural	-0.13	-0.87	0.33	0.12	0.23	0.18	-0.23	0.68	-0.38	-0.07	Awkward

Table 8.12: The cosines between elements and construct poles for ChiMei at 4<sup>th</sup> assessment

Based on the results of the four assessments, it is interesting to note that the changes of ChiMei's level of depression and somatisation seem to be more connected to the changes of the distance between 'ideal self' and 'how other people would like me to be' than the changes of the distance between 'actual self' and 'ideal self'. At the pre-group assessment, the distance between 'ideal self' and 'how other people would like me to be' is 0.92; at the post-group assessment, the distance between the two elements is slightly increased to 0.98, while the depression and somatisation scores are also increased.

At the three-month follow-up assessment, in which ChiMei has her highest scores of depression and somatisation, the distance between her ideal self and 'how other people would like me to be' also reaches its peak, 1.15. When ChiMei's depression and somatisation scores are decreased at the six-month follow-up assessment, the distance between the two elements is also shortened and becomes 0.51. This suggests that for ChiMei, the distance between 'ideal self' and 'how other people would like me to be' might connect to depression and somatisation. ChiMei has high social and personal orientations, which means that she cares very much about other people's opinions, and at the same time she also has strong needs of actualising herself.

Therefore, when her ideal self (personal orientation) is distant from 'how other people would like me to be' (social orientation), the tension between the two orientations might relate to the increase of depression scores and accompanied somatisation.

Her level of conflict seems to be negatively related to depression and somatisation scores, as her conflict decreases while the latter two scores are increased at the second and third assessments, and conflict increases while these two scores are decreased at the fourth assessment. Since both her social and personal orientations are strong, it is possible that the conflict between these two orientations seems to create a 'balance' and keep her depression scores down. The decrease of the conflict might indicate the decrease of either her social or personal orientation, and/or the increase of the other. Consequently, ChiMei's depression might be increased as she might feel 'dissatisfied' with the decrease of either one orientation. Nevertheless, in Chapter Six, there is no correlation between the changes of overall conflict and the changes of depression between pre-group and three-month follow-up assessments. Therefore, the association between depression and conflict needs to be further researched.

#### 8.3. Discussion

This chapter aims to explore the effectiveness of the intervention group and the connection between depression, conflict and tightness in the individual context. At the first assessment, YuHui has low conflict, and both her social and personal orientations are lower than the sample mean. In addition, she seems to identify with other people's expectations about herself more than with her own expectations of herself. At the fourth assessment, she seems to identify with herself more and becomes more self-accepting and considers other people's expectations less.

As for ChiMei, her increased depression might be related to her change to a new job during the 12-week intervention. However, she has high conflict, and both her social and personal orientations are above the sample mean. Her conflict is decreased after the intervention, which might make her 'imbalanced' so that the depression increases. In other words, the intervention seems to 'activate' her imbalance between the two orientations.

Nevertheless, YuHui's decrease of depression scores might not fully show her psychological statement, but rather her strong desire not to become depressed. Moreover, the intervention seems to activate ChiMei's increase of depression scores. However, this might not necessarily be a 'bad' thing as she seems to explore herself in the intervention and the new

understanding of herself might increase the depression. Therefore, the 'imbalance' might be a part of the process of gaining a new form of 'balance'; if this intervention were longer than 12-weeks, ChiMei might be able to explore herself more, and to find a 'balance' between the two orientations in the sessions.

In the next chapter, a conclusion of the overall research will be made, including the findings and the contribution of the research, research limitations and reflections.

# **Chapter Nine: Conclusion**

#### 9.0 Introduction

In this chapter the findings based on each research question are discussed in turn in relation to the relevant literature with respect to the aim of the research. The contribution, limitations of the research, reflection of the study, and the clinical implications are also presented, followed by suggestions for further research.

#### 9.1 Overview of the aim of the research

The aim of the research was to explore the connection between modernisation and depression in women in Taiwan. This connection was discussed from two aspects, individualisation and body/mind dualism. From the former aspect the psychological factors in relation to depression in women were explored; from the latter aspect a non-dualistic treatment, The BodyMind Approach was explored in a cultural context that also does not favour dualism. Seven research questions were accordingly generated and researched, and the findings will be examined in turn below.

## 9.2 The findings based on research question 1

Research question 1 was, "How do collectivistic and individualistic characteristics relate to depression in Taiwanese women?" This can be discussed from two aspects; both of which are connected to the first finding in this study, which is that the sample mean of social orientation is higher than the mean of personal orientation. This illustrates that Taiwanese women might be more socially oriented, and this research result is consistent with the other researches indicating that Taiwan is a high socially-oriented society which is highly influenced by Confucianism. In this society, personal boundary is blurry, and 'self' is not restricted to oneself, but can expanded to family, friends, society, even nation. Hence, in order to respond to this research question, the first aspect is that personal orientation is moderately negatively correlated to depression for women in Taiwan. In this socially-oriented society, high personal orientation might help in confronting social pressure and expectation. Women in Chinese culture are particularly expected to devote themselves for the sake of family interests, and are less able, less allowed or less willing to set clear personal boundaries than men. Therefore the

development of personal orientation might be even more important for women in Taiwan to confront social pressure.

It can be seen from YiRue's story that she was under pressure for not playing the role 'wife' appropriately in her friends' eyes. She suffered from depression partly because her personal orientation was not high enough to confront her friends' opinions. This is the same with DeYin. Because of DeYin's high social orientation and the Confucian values of expanding herself, she cared very much about keeping harmony in her family. She therefore sacrificed herself by spending much more energy on taking care of her family than of herself and by not expressing some of her opinions. The tendency to ignore her own needs might be one of the reasons for acquiring depression.

YiRue's story reflects a result in this study that a correlation is found between depression and the distances involving social roles such as the positive correlation between depression and the distance between 'ideal self' and the mean distance between 'me as a mother', 'me as a wife' and 'me as a daughter'. As mentioned in Chapter Four, the teaching of Confucianism is that every social role has its 'li', which means standards and regulations; as long as everyone can 'correctly' play social roles well and try their best to cultivate themselves to achieve 'ren', which is social harmony, the society will be wonderful. YiRue was not happy in her family, but her friends could not sympathise with her because her behaviour and complaints did not meet social expectations. Due to YiRue's high social orientation and internalised Confucian values, she still tried to be a 'good' wife. Consequently, her actual self was distant from her social role of being a wife, and depression was generated. Therefore, the construing of elements relating to social roles might be an indicator of depression in women in Taiwan.

The second finding relating to this research question is that medically unexplained symptoms might be a way of presenting depression in this socially-oriented society. It is found that both women with and without depression have higher somatisation than in the data elicited from people with depression researched by Rief and Hiller (2003). This shows that not only women with depression but also women without depression tend to have high somatisation, although women with depression have statistically significantly higher MUS than women without depression in this study. This might partly be because psychological depressive symptoms are stigmatised in socially-oriented Chinese culture, and presenting physical symptoms is 'safer' as it is relatively more accepted by society.

The prevalence of MUS in Taiwan might also be due to less emotional vocabulary in the Chinese language and less encouragement to directly express emotions in Chinese culture, because people who have fewer emotional constructs might have more somatic symptoms (Winter, 1992). This addresses the research results that Groups 1 and 2 both use statistically significantly fewer emotional constructs than in the data elicited from people with depression in Feixas' (2003) research at pre-group assessment. This therefore suggests that the use of emotional constructs might not be a characteristic of depression in Chinese culture, although Feixas (2003) proposes that it is a characteristic of depression based on his research in Spain. Nevertheless, although people with depression use fewer emotional constructs than people without depression in this study, this difference does not reach statistical significance.

Moreover, this shows that both women with and without depression in Taiwan seem to tend to explore and show their self-identity through physical suffering (Wang & Yu, 2001). This can be seen from DeYin's frequent urination. It is possible that DeYin (consciously or unconsciously) thought it inappropriate for her to take too much care of herself, and her needs of being taken care therefore shown through frequent urination. This somatic way is morally accepted, which made DeYin felt morally comfortable in taking care of herself. It is also possible that frequent urination is a presentation of the fact that DeYin did not know how to verbally express her emotional needs.

Moreover, the case of WayShow's overweight after returning to Taiwan from Australia can be seen as a way of showing her anger towards her parents. In this Confucian society, she might internalise the value that confronting parents or not being beside her parents is morally unforgivable. Therefore, although she consciously obeyed her parents by moving back to Taiwan, her anger towards her parents was transformed into a way of making her parents worry very much about her bodily condition. However, her overweight might also be a form of self-punishment for not staying in Australia or being angry towards her parents.

Before the end of responding to this research question, it is interesting to ask one question: since personal orientation and depression are negatively correlated, why has the population of people with depression in Taiwan obviously increased through the development of modernisation in which personal orientation has been developing? Is it possible that social orientation might be even stronger when personal orientation has been developing? Or, is it

possible that personal orientation has actually not been increased through modernisation? This needs to be further researched.

#### 9.3 The findings based on research question 2

Research question 2 was: 'How does conflict between collectivistic and individualistic characteristics relate to depression in Taiwanese women?'

There is insufficient evidence to support the association between conflict and depression in this study. Firstly, the group of 'high conflict' in which both orientations are higher than the mean of the two orientations provided by Lu, Chang & Wu (2008) does not have statistically significantly higher depression scores than the 'low conflict' group. In addition, overall conflict in construing also does not correlate to depression at pre-, post-, or the two follow-up assessments.

Although no correlation was found between conflict and somatisation at all four assessments, conflict seems to be connected to depression in the case study. YuHui's depression scores were decreased when the level of conflict was increased, while in ChiMei's case study depression scores were increased when the level of conflict was decreased. Nevertheless, the increase of conflict might indicate that the participants had a more complicated construct system after the intervention, and that the correlation between conflict and depression needs to be further researched.

The changes in conflict and in somatisation are statistically significantly positively correlated between pre- and post-assessments, and pre- and the third assessment. As mentioned above, WayShow's overweight might represent her anger towards her parents. Apart from this possibility, her overweight might also manifest her psychological conflict between her social orientation (being with her parents and making them happy) and personal orientation (pursuing personal achievement). This conflict might be too painful to bear, and overweight might have become a somatic symptom to manifest this conflict, which might make it more bearable. Therefore, when WayShow told the researcher that she wanted to lose weight, this might represent her decision to be willing to face her own conflict through the TBMA intervention. Consequently, her scores of somatisation decreased, and her level of conflict increased.

## 9.4 The findings based on research question 3

The third research question is: 'How does psychological rigidity relate to depression in Taiwanese women?'

In this research, psychological rigidity is measured as tightness in construing. This research suggests that tightness and depression do not correlate with each other at all four assessments. At the six-month follow-up assessment, the mean of tightness in Group 2 is even higher than that in Group 1. In addition, the changes of depression are also not correlated to the changes of tightness at four assessments.

The lack of correlation between tightness and depression might be related to the small sample size, an insensitive depression scale, and participants with depression taking medication, which will be further discussed in the research limitations section. In addition, as mentioned in Chapter Four, the fact that tightness is not correlated to depression in this study might be because tightness is not a symptom which needs to be 'diminished' as much as possible; rather, it is a way of psychological construing and is essential at times for a well-functioning person.

However, even though the above findings indicate that there is not an association between depression and tightness, the following three findings might somehow be able to suggest a correlation between tightness and depression. Firstly, at the pre-group assessment, Group 1 (people with depression) had statistically significantly higher tightness than Group 2 (people without depression). Secondly, people without depression statistically significantly described more ways of self-regulating their inner conflict than people with depression in the survey. Thirdly, when some participants in Group 1 complained that this intervention group provided 'too much' freedom and should be more structured, some participants in Group 2 recommended that the intervention was too fixed and should provide more freedom. Expecting more structured sessions might be a sign of high tightness: being relatively more rigid and less flexible to adjust to unpredictability. On the contrary, expecting more loosely structured sessions might indicate low tightness: being flexible enough to handle unpredictability and even looking forward to it. In addition, in Chapter Eight, it can be seen that YuHui's tightness is quite high at the first assessment, and it decreased through the four assessments accompanied by the decrease of depression. The connection between depression and tightness is consistent with findings from Western research (Winter, 1992).

However, considering the possibility of the connection between tightness and depression for Taiwanese women, are there any characteristics of this connection for the population in Taiwan compared to the Western world? This question can be explored again from the perspective of Confucianism. The connection between depression and the distance between actual self, ideal self, and social roles has been discussed above; women who succumb to depression might internalise the values of Confucian teaching, in which they are asked to play social roles properly and ignore their own needs. Therefore, it can be assumed that they might suffer depression if they tightly construe these values; in other words, a high level of tightness of construing the values relating to 'how to play social roles properly' might relate to depression. This assumption echoes a result in this study: women with depression have statistically significantly more value constructs than women without depression. It also echoes the result that an increase of personal orientation relates to a decrease of depression; women with high personal orientation might be more able to confront and reflect the values, and therefore they do not tightly construe and embrace the Confucian values; consequently their depression scores ar relatively low.

The connection between tightness and depression might also be a response to the connection between tightness and the distance between actual self and a normal person. As is mentioned above when discussing YuHui's story, the distance between the two variables might relate to 'altered Confucianism' in modern times.

## 9.5 The findings based on research question 4

Research question four was: 'How does the BodyMind Approach reduce depression and MUS in Taiwanese women?'

# 9.5.1 Does The BodyMind Approach<sup>TM</sup> reduce depression?

The BodyMind Approach<sup>TM</sup> (TBMA) seems to have limited effectiveness in reducing depression in this study. Firstly, there is no statistically significant decrease of depression for either Group 1 or Group 2, except that in Group 1 there is a nearly statistically significant decrease of depression from pre-group to first follow-up. Similar results also occur from using intention-to-treat analysis.

However, the mean of depression scores in Group 1 is statistically significantly higher than that in Group 2 at pre-group assessment, which becomes statistically insignificant at post-

group and at the two follow-up assessments. This might suggest that the intervention is effective in reducing the difference of depression between the two groups. Secondly, as for clinical significance, there were four participants in Group 1 who moved from over the cut-off of depression before the intervention to under the cut-off after the intervention; yet only one of them showed reliable change. In addition, there are two participants in Group 2 who are over the cut-off of depression before the intervention and under the cut-off after the intervention, only one of whom shows reliable change. There is also one participant in Group 2 who has a reliable change in the increase of depression from under the cut-off at pre-group assessment to over the cut-off at post-group assessment.

Thirdly, the intervention seems to be effective in enabling participants to become less concerned about other people, which can become less of a source of depression, because distance scores involving elements concerned with social roles are correlated to depression at pre-group assessment but not correlated after the intervention. This can be illustrated by YuHui's case. At the pre-group assessment, the elements of ideal self and 'how other people would like me to be' are close to each other; nevertheless, the two elements become more and more distant at post-group assessment. This shows that she becomes less concerned about other people's thoughts and generates her own thoughts of what her ideal self might be.

Fourthly, depression was correlated to the distance between actual self and ideal self at pre-group, post-group and three-month follow-up assessments, but is not correlated at the sixmonth follow-up assessment. This shows that the connection between actual self and ideal self might be a strong indicator of depression; however, it might also show that the intervention is less effective on issues relating to intra-relationship (distance between actual self and ideal self) than on issues relating to social relations (i.e., distance between ideal self and 'how other people would like me to be') which would be understandable in a group context. It is not possible to identify whether the statistically insignificant correlation between depression and the distance between actual self and ideal self at the six-month follow-up is a result of the intervention or other untested variables.

This result might echo the result that Taiwan is a more socially-oriented culture, in which issues relating to social relations seem to be of much concern and can be indicators of depression. However, it is not possible to examine whether less concern for other people refers

to higher personal orientation, because the participants were not asked to complete the personal and social orientation scale after the intervention.

#### 9.5.2 Does The BodyMind Approach reduce MUS?

The study shows that TBMA seems to be more effective in reducing MUS than depression. Firstly, the mean of somatisation scores in Group 1 was statistically significantly higher than that in Group 2 at pre-group assessment, but the difference in somatisation scores between the two groups becomes insignificant at the following three assessments. This suggests that the intervention might be effective in reducing the difference in somatisation scores between the two groups. Secondly, in Group 1, the change of somatisation scores between post-group and first follow-up assessments is statistically significant, and is nearly statistically significant between pre- and post-assessments. In addition, in Group 2, this change is also statistically significant between pre- and first follow-up assessment. Thirdly, the overall change of somatisation in Group 1 is statistically significant, and that in Group 2 is nearly statistically significant. Similar results occur by conducting an intention-to-treat analysis.

Fourthly, four out of seven participants in Group 1 showed a clinically significant reduction in MUS, from over the cut-off at pre-group assessment to under the cut-off after the intervention. However, only one out of these four participants in Group 1 reaches clinical change. Moreover, two participants out of 11 participants in Group 2 move from over the cut-off of the MUS scores at pre-group assessment to under the cut-off after the intervention. One participant's MUS score moves from under the cut-off at pre-group assessment to over the cut-off after the intervention, and this change reaches reliable change. Furthermore, the participant with the increase of somatisation also has reliable change in the increase of depression.

Fifthly, it is worth noting that MUS scores are highly correlated to depression at all four assessments, indicating the known tight connection between MUS and depression. In addition, the change of MUS and depression scores between pre- and first assessments, and post- and first assessments, are correlated. This result indicates that the decrease of MUS scores is accompanied by a decrease of depression scores. As mentioned in Chapter Six, medication might be less effective in treating the physical symptoms of depression, such as MUS, than the psychological symptoms (Hong & Lee, 2008). This finding consequently suggests that TBMA might provide an alternative treatment in decreasing both the physical and the psychological

symptoms of depression. However, further research is needed as the decrease of depression is not as significant as that of somatisation throughout the four assessments.

Sixthly, TBMA might be able to lead to sustaining the effectiveness after the intervention, as is also proposed by Payne and Stott (2010). The trends of the changes of depression, somatisation, conflict and tightness throughout the four assessments are similar. These scores keep decreasing from pre-group assessment to three-month follow-up assessment. Although these scores are increased at the six-month follow-up assessment, they do not become higher than at pre-group assessment. However, this assumption needs to be further examined as most of the differences between assessments in this study are not statistically significant.

Seventhly, from the perspective of movement observation, TBMA might be effective in increasing social interaction with others for women with depression. At the first assessment, people with depression use statistically significantly less sagittal movement than people without depression; however, this becomes statistically insignificant at the following three assessments. In addition, people with depression use more movement which might represent their self-consciousness and social withdrawal, such as shapeflow and a small kinesphere; however, people with depression do not use these two movement qualities the most at the second follow-up assessment. This might show that TBMA enables people with depression to have more social interaction and become less self-conscious after the intervention, although that assumption cannot be examined within this study.

# 9.5.3 Illumination from the stories of WayShow and DeYin

Based on the discussion above, it can be seen that TBMA seems to be effective on women in Taiwan, especially for the decrease of somatisation. This might be because TBMA can effectively respond to the possible causes of the high prevalence of MUS in women in Chinese culture. As mentioned above, three reasons might partly explain the prevalence of MUS. Firstly, psychological depressive symptoms are stigmatised. Secondly, expressing emotions is not welcomed in this society, and therefore both the participants with and without depression in this study were not accustomed to using emotional constructs. Thirdly, the philosophy of the union of body and mind is popular in Chinese culture, and bodily expression is the combination of psychological and physical aspects. In WayShow's case, her anger towards her parents and herself, and her conflict between social and personal orientations, were presented through overweight. In DeYin's case, frequent urination seemed to give her legitimacy in taking care of herself. Through TBMA sessions, they were encouraged to explore their inner world. In these 12-week sessions, expressing emotions and being depressed were accepted by both the facilitator and the participants. When they were able to look inwardly, deal with their psychological difficulties, explore their inner conflict and take care of themselves, the changes could occur. Hence, after the TBMA sessions, WayShow faced her inner conflict between obeying her parents and pursuing her own achievement. She took her decision to look for work opportunities outside of Taiwan. DeYin became more able to take care of herself; she no longer needed somatic symptoms to legitimise her desire to take care of herself.

## 9.6 The findings based on research question 5

Research question five was: 'Is rigid movement related to tight psychological construing?'

The study shows that only movement in a vertical dimension is positively correlated with tightness. This result is different from researches conducted in the Western world. According to Koch and her colleagues' research (2007), making vertical movement is effective in decreasing depression. Considering the positive correlation between depression and tightness, vertical movement might be negatively correlated to tightness. However, in this research, vertical movement is positively correlated to depression, which might also imply the increase of tightness. In other words, making vertical movement might not decrease depression for women in Taiwan, but even increase their depression.

Taking the example of YiJin, she made many vertical movements in the first session. Her level of tightness was quite high, and her vertical movement seemed to present her selfawareness, nervousness and less social interaction. However, this generates a question. Why can depression be decreased through making vertical movement in a personally-oriented Western society, but seem not to work for women in Taiwan? This question will be further discussed in the next section when responding to research questions six and seven.

#### 9.7 The findings based on research question 6

Research question six was: 'Are there movement differences between people with and without depression?'

There are some movement differences between people with and without depression. For example, people with depression use statistically significantly less sagittal movement than people without depression, but there is no difference between the two groups in the frequency of using vertical movement. While lack of vertical movement is suggested as a characteristic of people with depression in some Western research (Koch, Morlinghaus & Fuchs, 2007; Serlin, 1996), lack of sagittal movement might be a characteristic of women with depression in Chinese culture. As mentioned above, sagittal movement might indicate interacting with others and the environment, while vertical movement might refer to the relationship with self. Therefore, the lack of sagittal movement for people with depression echoes the fact that Chinese culture is very socially oriented and therefore sagittal movement, if it reflects relationships with others, might be more able to indicate depression in women in Taiwan. Moreover, people with depression use more movement that might represent their selfconsciousness and social withdrawal such as shapeflow and a small kinesphere. In addition, people without depression use more strong, free and large kinesphere movements than people with depression.

Nevertheless, there are also movement similarities between the two groups, which might illustrate characteristics of women in Chinese culture that are possibly different from Western cultures. It is found that both Groups 1 and 2 use light movement the most. In Western research, light movement is suggested as a movement characteristic of people with depression (Stanton-Jones, 1992); however, in this study, light movement might be rather a characteristic of women in Chinese culture. Frequently moving with light movement quality suggests that women in Chinese culture might have a lesser sense of self and personal boundary, and be less able to express anger. Light movement might represent social expectations of women not to show strength, not to express their own opinions, and to be silent and keep quiet in order to preserve social harmony.

The differences of the movement between women with and without depression can also be seen in YuHui and ChiMei's movements. In the first session, YuHui made more movement with small kinesphere and less strength. This might illustrate that YuHui tended to be in her own world and have less interaction with others. As for ChiMei, her movement was more varied, with larger kinesphere, and had more social interaction with others. This echoes the research results suggested above that women without depression seem to have a greater tendency to interact with others, while women with depression tend to be more isolated. However, the question mentioned at the end of last section, 'Why can depression be decreased through making vertical movement in a personally-oriented Western society, but seem not to work for women in Taiwan?' still cannot be answered by knowing that women with depression tend to have less social interaction than women without depression. This question will be responded to in the next section.

9.8 The findings based on research question 7

Research question seven was: 'Are there changes in movement over the course of therapy'?

There are movement changes over the course of therapy in both Groups 1 and 2. Firstly, while people without depression had more movement expansion in the first half of the sessions, people with depression had more movement expansion in the second half of the sessions. An assumption for this phenomenon is that people without depression might spend less time familiarising themselves with the environment and building up trust with the group, and therefore they have been more willing to explore their inner and outer world though movement in the first two sessions. People with depression took more time to adjust to the environment, and therefore their movement repertoire expanded more in the second half of the sessions.

Secondly, it is found that the difference of the use of sagittal movement between Groups 1 and 2 became insignificant at the second and third assessments; in addition, the use of sagittal movement in Group 1 kept increasing throughout the three assessments. It seems to illustrate that people with depression gradually had more social interaction with others throughout. This can also be seen from the other research result; in Group 1, shapeflow and small kinesphere movement qualities were the most commonly used movement qualities at the first and second assessments, but did not appear at the third assessment. People with depression might have had more social interaction with the environment and become less self-conscious in the second half of the sessions.

The changes of the movement qualities of the participants with and without depression can also be shown from the changes of YuHui and ChiMei's movements. YuHui's movements subsequently changed from small kinesphere and less strength in the first session to larger kinesphere and strong. This might indicate that YuHui became more able to show her strength, and had a stronger sense of self. This change might connect to the increase of personal orientation, which might respond to her decrease of depression. Unlike YuHui, ChiMei had larger kinesphere, and she was more able to show her strength in the first session. In addition, ChiMei's movement is more varied. Various movement qualities might present her low tightness, and her less varied movement at the end of the 12-week session might present her increased tightness. This might show that ChiMei became more determined and more able to make decisions.

The discussion above seems to answer the question why the use of vertical movement might not be suitable for the decrease of depression in women in Taiwan, but the use of sagittal movement is. In a socially-oriented society such as Taiwan, which is deeply influenced by Confucianism, social interaction is inevitable. Due to less clear boundaries, expanded self and expectations of women when playing different social roles, social interaction might become pressured for women with relatively high tightness whose personal orientation is not high enough. Insufficiently high personal orientation means being less able to confront social expectations, and high tightness refers to the possibility of being less able to deal with the conflict between social and personal orientations. Hence, women with depression might tend to withdraw from social interaction and become more isolated.

Therefore, through encouraging the use of sagittal movement in TBMA sessions, women with depression in Taiwan might be able to learn a 'healthier way' of social interaction: they could interact with others without their personal boundaries being invaded. In addition, they could express themselves and show their strength, and at the same time social harmony could be maintained (or they might not be too afraid of breaking social harmony when group trust is gradually developed). Perhaps this is a reason for YuHui making more strong movement and bigger kinesphere at the end of the 12-week sessions; she was able to show her strength and have more social interaction among the group members whose personal boundaries were respected, and her need for social interaction could also be satisfied. Perhaps this is a reason for the relief of DeYin's frequent urination; she realised that she could take care of herself, which does not break social harmony or make her become an inappropriate mother or wife. Maybe this is a reason for YiRue leaving her original friends; she knew she could refuse to allow other people to cross her boundary and have good social relationships at the same time.

## 9.9 Academic contribution

Based on the findings above, the academic contributions to this research in three research fields will be discussed.

## 9.9.1 Cultural psychology

Firstly, exploring the specificity of psychological characteristics in different cultures is one of the major topics in cultural psychology. This research points out some specificity of psychological characteristics for women in Taiwan, which is consistent with previous research. For example, as in previous research, this research indicates that Taiwan is still a sociallyoriented society even though there has been a rapid development and deep influence of individualisation since 1987. In addition, as previous research has shown, it is found that the use of emotional constructs in women in Taiwan seem to be less common than in Western cultures, while MUS scores in Taiwan women seem to be much higher than in Western cultures.

Moreover, this research proposes some results which might be inconsistent with previous research. For example, this research suggests that the common use of light movement might be a characteristic of women in Taiwan, and this movement might present certain culturally specific psychological characteristic(s). Furthermore, this research suggests that some movement qualities such as light and sagittal movement might be related to women in Chinese culture, and vertical movement seems to correlate to tightness in women in Taiwan. Although strong evidence has not been provided of connections between movement qualities and construing, this research provides a small basis for further research to build on.

## 9.9.2 Cultural psychopathology

Secondly, this research provides some contribution to the field of cultural psychopathology. One of the main research topics in this field is exploring the connection between culture and psychopathology. Although it is generally recognised that Chinese culture is a collectivistic culture, how cultural collectivistic characteristics connect to depression in both psychological and physical aspects in Chinese culture still needs more research. This research suggests how high social orientation might be associated with depression. For example, this research has found that a concern with social relations, such as how people would like them to be, and how they perceive their social roles, might be indicators of depression in

women in Taiwan. In addition, one major topic in cultural psychopathology is to explore specific psychopathology in cultures. Although this research does not point out any specific psychopathology which only appears in women in Taiwan, it does explore the connection between conflict, tightness and depression. The research suggests that conflict between personal and social orientations is not correlated to depression, which is inconsistent with previous Western research claiming that conflict between overall conflict in construing and depression (Berry, 1990). In addition, the connection between overall conflict in construing and depression is explored. There is insufficient evidence supporting Sheehan's (1981, 1985) proposition of the negative association between depression and conflict. Moreover, differently from Western research (Winter, 1992), there is not sufficient evidence supporting the connection between tightness and depression in Taiwanese women. These results provide some indicators of further research which might be usefully conducted into the specificity of women in Chinese culture, in which other untested variables might be more related to depression.

Furthermore, this research found that women with depression seem to tend to use sagittal movement, which might illuminate the connection between depressed women's use of sagittal movement in Chinese culture. Therefore, this result provides an indication that the use of sagittal movement might be associated with depression in women in Taiwan.

#### 9.9.3 Psychotherapy

This research also provides some contributions in the field of psychotherapy. Firstly, this study provides a first attempt at practising The BodyMind Approach outside the UK. Therefore, it contributes to the evidence base research on the effectiveness of TBMA. Secondly, this research found that the decrease of depression and somatisation are associated with each other, which is consistent with Payne's research in the UK (Payne & Stott, 2010). This suggests that TBMA might be an effective alternative treatment for depression, as TBMA can decrease psychological and physical symptoms of depression at the same time. However, the research found that TBMA seems to be more effective in decreasing MUS than depression. This suggests that since TBMA is designed as a somatic-focused intervention, it might therefore be more effective in the decrease of MUS. This might also be because that the medication the participants took during the intervention might have less impact on the physical aspects than their psychological depressive symptoms. In addition, this might also relate to the

specificity of Chinese culture, in which women seem to show their emotions more in a somatic way, and to perceive the body as deeply connected to the mind.

#### 9.10 Research limitations

#### 9.10.1 Identification of research limitations

The above findings and contributions need to be considered in relation to the limitations of the research, as these limitations have potential impact on the research results. Firstly, the sample size is small in this study; consequently, the statistical power might be insufficient. Secondly, all participants in Group 1 were taking medication. This might result in relatively low depression scores in Group 1, and less obvious difference of depression scores between Group 1 and Group 2. Consequently, depression scores are controlled and the examination of the association between depression and other variables might be affected. In addition, this might influence the effectiveness of the intervention on the decrease of depression. Thirdly, as mentioned above, although the validity and reliability of the Taiwanese Depression Scale were examined by the inventor of this scale, it has not yet been widely examined and recognised as a depression scale. Therefore, this might affect the research results in relation to depression. Fourthly, only one researcher analysed the content of the personal constructs, which makes the reliability questionable. Fifthly, the researcher did not ask the participants to fill in the scale of personal and social orientations at the four repertory grid assessments; therefore, the changes of the two orientations from before to after the intervention are unknown. Sixthly, the researcher did not ask the participants to qualitatively explain their somatic symptoms. Without the qualitative data, only the changes of MUS scores can be obtained, and therefore it is not possible to further understand whether there were common physical symptoms among the participants in order to explore the potential connection between these symptoms and their culture, and the potential psychological meanings of these symptoms. Finally, all the participants were Taiwanese women living in Taipei, the capital city. Consequently, the results of this research might be questionable in relation to generalisation with respect to the wider population of both genders in Taiwan and China.

Research limitations in terms of the intervention group also need to be addressed. Firstly, no assessment scales relating to social relations were used. Consequently, the effectiveness of the intervention in relation to the changes of the perception of social relations could not be explored. Secondly, the inter-rater reliability of movement analysis was unsatisfactory. The

two raters had different training backgrounds, and might have had different opinions on the coding. Apart from the different training background, the poor quality of the videotape might be also one reason for unsatisfactory inter-rater reliability. As mentioned in Chapter Seven, the quality of the videotape was not good enough, as the participants usually overlapped on the camera which could not be moved during the intervention sessions. Consequently, the chance of misjudging the movement qualities by the two raters might have been increased. Moreover, it was the first time the facilitator had delivered a TBMA group after she had finished her TBMA training. Consequently, her relative inexperience in facilitating a TBMA group might also have influenced the effectiveness of the intervention.

## 9.10.2 Reflections on the research limitations

The research limitations mentioned above are further discussed in this section. Firstly, the researcher was aware that the sample size was small before the recruitment of the participants for the intervention groups. However, as with the other forms of psychotherapy groups, it is better for a psychotherapy group not to be a large group, and a group with a small number of participants is more likely to have higher effectiveness. A small group is particularly needed in TBMA intervention. A large space for the participants to move freely and safely is important, but the space should not be so large that the facilitator is unable to monitor every participant. Thus there should not be too many participants in one space, and it is appropriate to keep the group small. Therefore, both Group 1 and Group 2 had only 12 participants.

Secondly, the participants in Group 1 were taking medication, as they were all referred by a psychiatrist. Although medication may have had a high impact on the research results, it was difficult to find people with depression who did not take medication through referral by a psychiatrist. It might have been possible to look for people with depression not taking medication by administering depression scales to random samples. However, without a psychiatrist's diagnosis, it would be difficult to identify whether these people have other mental illness accompanied by depression. In addition, not referring these people to a psychiatrist or seeking other medical help after noticing that they might have depression would be an ethical issue.

Thirdly, a potential problem is that that the Taiwanese Depression Scale (TDS) has not been widely recognised and tested. The reason for choosing this scale was that this scale was designed to meet the needs of people in Taiwan. It contains more questions about physical symptoms than other well-known scales such as the Beck Depression Inventory. Even though TDS has not been widely recognised and tested, its reliability and validity were examined by its inventor; consequently, the TDS was chosen in this research.

Fourthly, having had only one person categorising the content of the constructs was problematic; the inter-rater reliability cannot therefore be examined and the reliability of the results was untested. The researcher tried to look for a second coder who had to be able to read English, be willing to read Feixas' (2003) article explaining the categorisation of the content of the constructs, and have time to code all the constructs elicited from the participants. In addition, this coder had to accept that payment was minimal. However, unfortunately, the researcher failed to find another coder meeting these criteria in the limited period of time. Consequently, only the researcher categorised all the content of the constructs. However, even though the reliability is untested, as far as the researcher is concerned, this research is the first research exploring the content of the constructs of people with and without depression in Taiwan, which still provides a small basis for future study in this field.

Fifthly, the personal and social orientations were not tested at the four repertory grid assessments, and therefore the changes of the two orientations cannot be known. The exploration of the changes of the two orientations was not one of the aims in this research, and had not been designed to be tested at the four assessments in the first place. However, because it was found that depression is negatively correlated to personal orientation and that conflict seemed to be positively correlated to social orientation, the changes of the two orientations became important. The association between the two orientations, depression and conflict, and the effectiveness of the intervention on the changes of the two orientations were well worth exploring further. Unfortunately, the four repertory grid assessments had already been conducted after its importance was realised; therefore the two orientations were not examined.

Sixthly, qualitative data relating to the participants' somatic symptoms has not been acquired in this study. Research question five was to explore the effectiveness of TBMA on somatisation and depression; therefore, the Screening for Somatoform Symptoms-7 (SOMS-7) was chosen to monitor the changes of the participants' MUS. When analysing the data collected from the assessments, the researcher found that the quantitative data collected by SOMS-7 only provided a general picture of the situation, and qualitative data regarding each participant's somatic symptoms would have helped to further understand the connection

between culture and MUS. However, the interviews had already been completed and the researcher had no chance to further explore this area.

Seventhly, the researcher found that without providing questionnaires about social relations, the effectiveness of the TBMA group in relation to the changes of the participants' perception of social relations could not be fully known. In order to answer research question five, only a depression scale was provided for the participants to complete at four assessments. Nevertheless, although a questionnaire about social relations was not used, the results from repertory grid assessments provided a partial understanding of this issue. In addition, the case studies in Chapter Eight also partially provide a further exploration of this issue.

Eighthly, the inter-rater reliability of movement analysis was unsatisfactory. As mentioned above, it might relate to the different training backgrounds of the raters and the poor quality of the videotape. Both the raters in this research were qualified dance movement therapists with at least two years of training in Laban Movement Analysis, but one was a certificated Laban Movement analyst and the other was not. Moreover, the poor videotape quality might also cause the low inter-rater reliability. In consideration of confidentiality, the researcher and others could not enter the therapy space. Consequently, no one could control the cameras, and participants overlapped or stayed out of the camera shot.

Ninthly, it was the first time the facilitator had conducted a TBMA group, which may have affected the effectiveness of the group. There was no qualified TBMA facilitator in Taiwan at that time as it was a new form of movement therapy in Taiwan. The facilitator was a qualified dance movement therapist; however after she agreed to facilitate this research group, she went to the UK to attend TBMA training workshops and became a certified TBMA facilitator. Consequently, it was not only her first time facilitating a TBMA group, but also the first time a TBMA group was facilitated in Taiwan.

Lastly, all the people completing the survey were Taiwanese women, and all the participants in the intervention group were Taiwanese women living in Taipei, and therefore it might be questionable whether the results of this research can be generalised to all people in Taiwan or in Chinese culture. However, the reason for conducting this research in Taipei was that the capital city was most influenced by modernisation in relation to the other cities in the country (Simmel, 1971). In addition, the prevalence of depression in urban areas seems to be

higher than that in rural areas (Ko, 1975; Yeh et al., 1986). Accordingly, the researcher chose Taipei to conduct the research.

9.10.3 Forward looking with respect to the research limitations

In order to make the sample size bigger, the facilitator might be able to facilitate two groups each for both people with and without depression. Consequently, if the number of participants for each group remained 12, there would be 24 participants for people with and without depression. The statistical power could then be increased. Moreover, the depression scale might be changed to a relatively more widely recognised standardised questionnaire.

In order to raise the reliability of the categorisation of the content of the constructs, two raters would be better; in addition, two coders of movement analysis should both be qualified Laban Movement Analysts. Moreover, in order to further increase the reliability, three raters and coders should be considered. When two raters/coders do not agree with each other, the third rater/coder's results can be compared with the other two raters/coders' results.

In addition, along with the repertory grid, the participants could also complete a personal and social orientation scale as well as a scale relating to social relations. Besides this quantitative data, the participants might also describe their experience of their medically unexplained symptoms. However, it also needs to be considered that the interview time might be too long if the participants have to complete all these questionnaires and describe their MUS. Therefore, a shorter version of personal and social orientation scales as invented by Lu (2011) might be selected. In addition, it is also appropriate to keep the scale examining the changes of the perception of social relations short. Moreover, in order to increase the quality of the videotape, more than two cameras should be used. They can be positioned on both the floor and the walls if the technical problems can be solved. With a higher camera angle the participants' movement might be clearer for the coders to watch.

Apart from the limitations mentioned above, some other considerations of the research also need to be addressed. Firstly, in this study, the researcher compares the results of this study with Western research results. However, the division between Chinese and Western cultures is only for the sake of convenience of discussion (Lu, 2007). In this study, Chinese culture is seen as a collective culture with high social orientation, and Western culture is generally defined as an individualistic culture with high personal orientation. However, Western culture is very

diverse. For example, there is research indicating that people from southern Italy seem to have a collectivistic culture (Triandis, 1988). Therefore, when the research indicates that people in Chinese culture seem to be more affected by social relations, it does not mean that people in the Western world do not care about social relations. In fact, many research studies in Western culture indicate the importance of social support and how the quality of social relations affects depression (Lin & Dean,1984; Paykel, 1994). This study only attempts to generally discuss a possible difference between collectivistic and individualistic cultures in terms of the connection between depression, the construct system and the participants' perception of social relations. Lastly, it is important to note the possibility of Type 1 error in that there might be 5% of results which are statistically significant by chance.

# 9.11 Reflections

After studying for an MA in London for around a year and a half, the researcher went back to Taiwan in 2010. The researcher stood on a street in East Taipei, the most glamorous and modern area in Taipei, in the evening waiting for a friend. The researcher wore a beautiful black woolen coat (at least the researcher thought it was beautiful) with a pair of flat shoes. The high-heeled boots that the researcher initially wanted to wear were under repair. The researcher felt more and more anxious while standing there: the researcher thought that she 'should' wear high heel shoes to match the coat, because 'people walking by me must think that I am not that beautiful because they notice that the shoes do not match the coat'. On the one hand, the researcher thought that she 'should' go to a department store nearby to buy a new pair of high-heeled shoes; on the other hand, she knew that she had no budget to buy any new shoes; besides, wearing high-heeled shoes is uncomfortable. Eventually, this inner conflict was resolved by buying a new pair of high-heeled shoes. When the researcher walked out of the department store with the new pair of high-heeled shoes, she suddenly started to ask herself: "What happened? What was I doing?" When the researcher shared this experience with some Taiwanese female friends studying in the UK, surprisingly they all said that they had had similar experiences.

This experience was the initial motivation for doing this research. Firstly, the researcher and her friends did not feel anxious about clothing when living in the UK; but what made them feel anxious in Taiwan? Why did they care so much about how other people might think? Do they represent some sort of collective psychological statement in Chinese culture? In addition, do other women also experience the conflict between personal and social values like the researcher and her friends? Is it possible that the inner conflict is related to mental illness, such as depression? The researcher initially would have liked to answer these questions; however, during the process of the research, more and more questions were raised which exceeded in number the questions that were aimed to be answered. It seemed to the researcher that there were no simple answers to these questions; the connections between depression and the construct system, body and mind, and between these variables and culture, are complicated and more research is needed to explore these possible connections.

The role of the researcher in the intervention is also worth further reflection. Before the intervention started, the researcher had an agreement with the facilitator that the participants had to inform the researcher if they wanted to stop attending the group, to be late or take one session off. The researcher thought these were 'administrative matters' and the facilitator only needed to focus on the facilitation. However, as the sessions went on week by week, the researcher gradually found that this created an unclear boundary between the researcher and the participants. Being late or taking sessions off can be good topics or issues to explore in the group. However, the participants did not inform the facilitator when they wanted to take sessions off or were late; consequently these issues were not further explored in the sessions. Because the participants would tell the researcher their personal reasons why they had decided to stop attending the group, the researcher seemed to partially take over the facilitator's role.

It is interesting to note that the researcher also grew up in Taiwan, a highly sociallyoriented collective culture. The researcher was afraid of asking the facilitator to do 'too much work', because the researcher already owed her a big 'renqing' as the facilitator delivered this group without payment. There is no 'free gift' in Chinese culture. If A gives B a 'gift', then B owes a 'renqing' to A, and B must find ways to repay A so that A can 'repay the debt of renqing' (Hwang, 1990). Consequently, people in Chinese culture tend not to receive gifts from others in order to avoid the chances of owing people 'renqing'. This social rule of social exchange might have influenced both the researcher and the facilitator; the former did not want to owe the facilitator too much 'renqing' and therefore 'helped' the facilitator to deal with 'administrative matters', and the latter accepted the social exchange and did not raise questions. Therefore, the relationships between the facilitator and the researcher might represent the specificity of social relations in Chinese culture, which might also parallel the situations of the social relations between the participants in the group, and the participants' perception of social relations.

Most participants were interested in their personal results from the repertory grid assessments, and the researcher promised them that she would tell them their results. The researcher already met YuHui in June 2015, and shared with her the results of both the repertory grid and movement assessments. What she told the researcher in relation to her results was interesting. For example, when she heard that the two elements 'actual self' and 'me as a wife' became closer in her grids, she said that her relationship with her boyfriend had gradually improved after the intervention, and she felt that she could share with her boyfriend all kinds of feelings and thoughts, and be herself in front of him. Her feedback is quite valuable as the results were not purely quantitative statistics, but also practically related to one person's real change.

#### 9.12 Further research

Further research is proposed based on the five research questions. Based on research question one, a question which needs to be further researched is that since personal orientation is negatively correlated to depression in Taiwan, why does the population of women with depression increase through modernisation, which encourages the development of personal orientation? Based on research question two, the correlations between conflict, somatisation and depression need to be further examined. For example, why are the changes of conflict and somatisation between paired assessments correlated, but conflict and somatisation do not correlate to each other? Based on research question three, more evidence in relation to the correlation between tightness and depression needs to be obtained. Is the result that there is no correlation between tightness and depression in this study due to the limitation of the research design or cultural issues? If it is related to cultural issues, how do cultural issues relate to depression? In addition, in this research, each variable was independently examined with respect to its correlation with depression. However, are there any possible connections between these variables? For example, tightness might be a mediator of the connection between conflict and depression. Therefore, the connections between depression, conflict, tightness, personal and social orientations also need more research. Based on research question four, the connection between movement qualities and the construct system needs to be further researched with higher inter-rater reliability. The meaning of the correlation between vertical

movement and tightness, and the meaning from a cultural perspective that the participants tend to move with light movement quality, also need to be further researched. Based on research question five, the effectiveness of TBMA on depression and somatisation in Taiwan can be further examined with more participants, and more questionnaires relating to social relations can be conducted. In addition, the changes of personal and social orientations before and after intervention can be monitored in future research; can personal orientation be increased through TBMA intervention?

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## Appendix

Appendix 1: The questions before questionnaires in the survey (English version)

This survey will be separated into two parts. In the first part, some personal information will be asked to provide. In the second part, one open question and three questionnaires will be asked to complete. This survey will only be used for academic research, your personal information will be confidential. Thank you for taking your time completing the survey!

## First part

- 1. age □20-24 □25-29 □30-34 □35-39 □40-44 □45-49 □50-55 □56-59 □60 及以上
- 2. marriage single married divorced separation widowed
- 3. children  $\Box$  yes  $\Box$  no If yes, how many?
- 4. occupation  $\Box$ housewife  $\Box$ IT  $\Box$ military personnel, civil servant and teacher  $\Box$ service  $\Box$ finanial service  $\Box$ business  $\Box$ arts  $\Box$ law  $\Box$ freelance  $\Box$ none  $\Box$ manufacture  $\Box$ medicine  $\Box$ student  $\Box$ translator  $\Box$ other
- 5. Education  $\Box$  primary  $\Box$  junior high  $\Box$  senior high  $\Box$  BA  $\Box$  master  $\Box$  PhD

## Second part

Have you ever experienced inner conflict? If so, could you give one example at least?

### (The Chinese version)

這個問卷將分成二個部分。在第一部分中,將請妳提供一些個人資料。第二部 分,包含一個開放式問題及四個量表。問卷內容僅做為學術研究之用,個人資料將不 會對外公開。謝謝您的作答!

第一部分

- 1. 年齡 □20-24 □25-29 □30-34 □35-39 □40-44 □45-49 □50-55 □56-59 □60 及以上
- 2. 婚姻狀況 □未婚 □已婚 □離婚 □分居 □喪偶
- 3. 有無小孩 □ 有 □ 無 若有小孩, 有幾位
- 4. 職業 □家庭主婦 □資訊業 □軍公教 □服務業 □金融保險 □商 □藝術 □法律□自由業 □無 □製造業 □醫學 □學生 □翻譯 □其他
  5. 學歷 □小學(含以下) □國中 □高中職 □學士 □碩士 □博士

第二部分

請問在日常生活中,在做某些決定的時候,妳曾經經歷過內心不同聲音之間的衝 突與掙扎嗎?如果有,請舉至少一個例子。 Appendix 2:The scale of individual-orientation self-view and social-orientation self-view (English and Chinese versions)

**\*\***The scale of individual-orientation self-view

(English versions)

1	Everyone should fulfil one's own potential regardless of one's gift.	1	2	3	4	5	6
2	One cannot lose self-confident regardless of the performance in reality.	1	2	3	4	5	6
3	People should keep individual thinking and executive ability regardless of the high pressure from the outer world.	1	2	3	4	5	6
4	Do not trust anything before making one's own judgements.	1	2	3	4	5	6
5	Everyone is a family should still keep individuality.	1	2	3	4	5	6
6	I do not mind how other people see me because I know who I am.	1	2	3	4	5	6
7	How do I think about myself do not influenced by others.	1	2	3	4	5	6
8	I do not accommodate myself and say something not coming from my heart to meet other people's expectations.	1	2	3	4	5	6
9	I make decisions for my important life events, and do not let others to do this for me.	1	2	3	4	5	6
10	I would like to do something that others have never done before.	1	2	3	4	5	6
11	People can only get everyone's respect through winning in the competitions.	1	2	3	4	5	6
12	It is only worthy to spend time managing relationships when there are advantages.	1	2	3	4	5	6
13	It is important for me to have better performances than others in every way.	1	2	3	4	5	6
14	Individual's success is more important than group's success.	1	2	3	4	5	6
15	One's own values are determined by what he/she have achieved.	1	2	3	4	5	6
16	I behave constantly in both public and private spaces.	1	2	3	4	5	6
17	I keep constant regardless of at home or outside.	1	2	3	4	5	6
18	I am not incoherent with my words and behaviour in daily life.	1	2	3	4	5	6
19	There is no contradiction of what I have said and done.	1	2	3	4	5	6
20	I remain the same regardless of whom I am with.	1	2	3	4	5	6
		•					

# (Chinese versioin)

				-			
		非常不同意	不同意	有點不同意	有點同意	同意	非常同意
1	不管個人天賦如何,每個人都應該最大程度地發揮自己 的能力						
2	不管實際的表現如何,對自己的信心不能動搖						
3	不管外界的壓力多大,人要保有自己的獨立思考和行動 能力						
4	不要輕易相信任何事情,要有自己的判斷						
5	我認為即使是一家人,仍應該保有各自的獨立性						
6	我對自己已有定見,不會在意別人的評價						
7	我對自己的看法,不會受到別人的影響						
8	忠於自我最重要,我不在乎別人怎麼看我						
9	我人生的重要決策都是自己作主,不會受別人左右						
10	我敢於做別人沒做過的事						
11	只有在競爭中勝出,才會得到大家的尊敬						
12	對自己有利的人際關係才值得投資心力去經營						
13	在各方面表現得比別人好,對我而言很重要						
14	個人的成功遠比團體的表現來得重要						
15	我覺得一個人最終的價值在於他成就了甚麼						
16	我在公開場合與私下場合的表現都一樣						
17	我是個很一致的人,在家裡和外面都一樣						
18	在日常生活中,我不會言行不一						
19	我的言行舉止不會前後矛盾						
20	不管和誰在一起,我的表現都一樣						

# \*\*The Scale for collective-oriented self values

# (English version)

1	I can understand people behave contradictorily.	1	2	3	4	5	6
2	There are different aspects of self which might be conflict between each other.	1	2	3	4	5	6
3	Being flexible means responding appropriately in different situations.	1	2	3	4	5	6
4	The way we get along with people should be distinguished by if they are close or distant to us.	1	2	3	4	5	6
5	People should behave appropriately depending on social roles and status.	1	2	3	4	5	6
6	My family is always the first priority because family is a community of life.	1	2	3	4	5	6
7	Our relationships with family are too close to separate.	1	2	3	4	5	6
8	An individual has to give up self interest in order to protect family's interests	1	2	3	4	5	6
9	I always see my intimate as part of myself.	1	2	3	4	5	6
10	My loved ones' happiness is more important than my own happiness.	1	2	3	4	5	6
11	Taking care of my loved ones is not enough; I should try hard to benefit more and more people.	1	2	3	4	5	6
12	We should focus on spiritual improvement, rather than the enjoyment of the senses	1	2	3	4	5	6
13	I believe self-cultivating is so important that people cannot be slack for even a second.	1	2	3	4	5	6
14	To keep making progress in the process of self-cultivating, it is important to introspect every day.	1	2	3	4	5	6
15	Moderation in all things is the best of rules.	1	2	3	4	5	6
16	I hide my own thoughts and preference to maintain harmony with my relationships.	1	2	3	4	5	6
17	How do I see myself is very much depend on how do other people see me.	1	2	3	4	5	6
18	People always have to be aware how other people think about self in order to react appropriately.	1	2	3	4	5	6
19	I think being different with others usually makes people become unpopular.	1	2	3	4	5	6
20	In order not to get negative opinions from others, being cautious of behaving and speaking is absolutely necessary.	1	2	3	4	5	6

# (Chinese versioin)

		非常不同意	不同意	有點不同意	有點同意	同意	非常同意
1	我可以理解人在不同的情境中,可能會表現出矛盾的行為						
2	我認為人有許多面,不同的面向之間可能是有衝突的						
3	依環境的不同要求,做出最合適的反應,才是一個有彈性的 人						
4	我們待人處事的方式應該有親疏遠近之分						
5	我認為人應該視自己的身分與角色,表現出適當的行為						
6	家庭是一個生命共同體,無論如何我都會把家人放在第一位						
7	我們與家人的關係是密不可分的,甚至到了休戚與共的程度						
8	個人應犧牲自己,以維護家庭的整體利益						
9	我總是將親密的人看做是自己的一部分						
10	親密的人的幸福遠比我個人的幸福來的重要						
11	我覺得照顧好自己身邊的人還不夠,還應不斷努力造福更多 的人						
12	我們應該專注精神層次上的提升,而非貪圖感官上的享受						
13	我相信道德修為是非常重要的,不應稍有懈怠						
14	我們要一日三省,才能不斷進步						
15	我們做人做事應採中庸之道,不要過於偏激						
16	我會隱藏個人的想法和喜好,以免破壞人際和諧						
17	我對自己的評價很大程度上取決於別人對我的看法						
18	我們要隨時注意別人對自己的觀感,並做出相應的調整						
19	我覺得特立獨行通常不會討人喜歡						
20	為免別人的負面評價, 謹言慎行是絕對必要的						

# Appendix 3: Taiwanese depression scale (English and Chinese versions)

# (English version)

			Lev	rel	
		Rarely 0	Sometimes 1	Often 2	Always 3
1	Tendency to commit suicide				
2	Disinterested in everything				
3	Thinking negatively				
4	Feeling guilty				
5	Feeling useless				
6	Feeling unable to achieve anything				
7	Feeling pressure				
8	Bad tempered				
9	Worried and/or disturbed				
10	Dear and/or scared				
11	Want to cry				
12	Feeling low				
13	No appetite or eating too much				
14	Sleeping unwell				
15	Physically tired				
16	Unable to concentrate				
17	Feeling unwell				
18	Forgetful				
19	Socially inactive				
20	Do not feel like to talk				
21	Prefer to stay indoors				
22	Having few friends				

# (Chinese versioin)

		很少如此	偶而如此	經常如此	總是如此
1	有自殺的念頭				
2	對甚麼事都失去興趣				
3	凡是往壞的方向想				
4	有罪惡感				
5	覺得自己很沒用				
6	無力感				
7	有壓力				
8	發脾氣、生氣				
9	擔心、煩惱				
10	害怕、恐懼				
11	想哭				
12	心情低落				
13	胃口不好(或暴飲暴食)				
14	睡眠狀況不佳				
15	身體疲憊				
16	無法專心做事				
17	身體不舒服				
18	記憶力不好				
19	不想與他人往來				
20	少說話(或不太愛說話)				
21	不想出門				
22	生活圈小				

Appendix 4: The Screening for Somatoform Symptoms-7 (English and Chinese versions)

(English version)

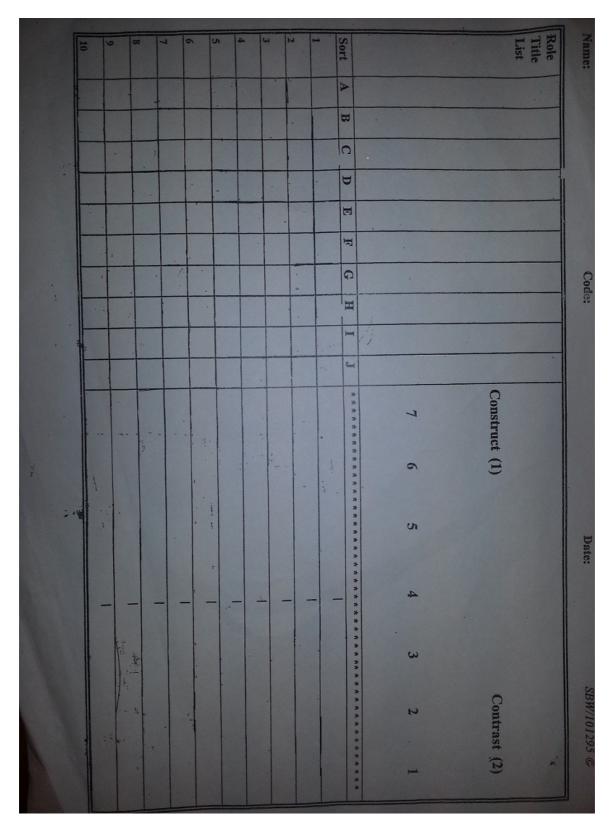
	symptom	1	Le 2	vel 3	4		symptom	Lev 1 2		4
1	Headache					27	Flushing or blushing			
2	Abnormal pain					28	Breathlessness without exertion			
3	Back pain					29	Painful breathing or hyperventilation			
4	Joint pain					30	Excessive tiredness upon mild exertion			
5	Pain in legs and/or arms					31	Blotchiness or discoloration of the skin			
6	Chest pain					32	Sexual indifference (loss of libido)			
7	Anal pain					33	Unpleasant sensations in or around the genitalia			
8	Pain during sexual intercourse					34	Impaired coordination or balance			
9	Pain during urination					35	Paralysis or localised weakness			
10	Nausea					36	Difficulty swallowing or lump in the throat			
11	Bloating					37	Aphonia (loss of voice)			
12	Discomfort in and around precordiun					38	Urinary retention			
13	Vomiting (excluding pregnancy)					39	Hallucinations			

14	Regurgitation of food	40	Loss of touch or pain sensations		
15	Hicoughing or burning sensation in chest or stomach	41	Unpleasant numbness or tingling sensations		
16	Food intolerance	42	Double vision		
17	Loss of appetite	43	Blindness		
18	Bad taste in mouth or excessively coated tongue	44	Deafness		
19	Dry mouth	45	Seizures		
20	Frequent diarrhea	46	Amnesia (loss if memory)		
21	Discharge of fluid from anus	47	Loss of consciousness		
22	Frequent urination	48	Painful menstruation		
23	Frequent bowel movements	49	Irregular menstruation		
24	Heart palpitations	50	Excessive menstrual bleeding		
25	Stomach discomfort or churning feeling in stomach	51	Continuous or frequent vomiting during pregnancy		
26	Sweating	52	Unusual or copious vaginal discharge		

# (Chinese versioin)

		從來沒有	偶而如此	有時如此	常常如此	總是如此
1	頭痛					
2	不正常的疼痛					
3	背痛					
4	關節痛					
5	四肢疼痛					
6	胸口痛					
7	肛門疼痛					
8	性交時疼痛					
9	排尿時疼痛					
10	噁心想吐					
11	肚子脹					
12	下胸部和附近不適					
13	嘔吐(不包括懷孕時期)					
14	反胃					
15	打嗝,胸口或胃灼熱感					
16	消化能力不佳(容易拉肚子 或脹氣)					
17	沒有食慾					
18	嘴裡有不好的味道或舌苔過 多					
19	嘴巴很乾					
20	經常性腹瀉					
21	從肛門排出液體					
22	頻尿					
23	腸道蠕動頻繁					
24	心悸					
25	胃不舒服或胃裡有翻攪的感 覺					

26	冒汗			
27	面頰潮紅			
28	不自覺的停止呼吸			
29	呼吸時感覺疼痛或用力呼吸			
30	輕微的用力就會感覺疲累		_	
31	皮膚上有斑點或是皮膚褪色			
32	缺乏性慾			
33	生殖器或其周圍有不適感			
34	協調能力或平衡感降低			
35	麻痺或局部無力			
36	吞嚥困難或喉嚨裡有異物			
37	失聲			
38	排尿不乾淨			
39	幻覺			
40	失去觸覺或痛覺			
41	不適的麻痺感或刺痛感			
42	看東西有雙影			
43	失去視力			
44	失去聽力			
45	癲癇			
46	健忘			
47	失去意識			
48	月經期間很痛			
49	月經不規律			
50	月經流血過多			
51	懷孕時持續且經常性的嘔吐			
52	不尋常或大量陰道分泌物			



Appendix 5: sample repertory grid sheet

Appendix 6: Ethical approval

UNIVERSITY OF HERTFORDSHIRE HEALTH & HUMAN SCIENCES M E M O R A N D U M TO YuChi Lin CC Helen Payne

FROM Dr Richard Southern, Health & Human Sciences ECDA Chairman DATE 24/01/13 Protocol number: PSY/06/12/YCL

Title of study: Chinese Culture and Depression in Taiwanese Women: The BodyMind Approach as a Treatment for Culturally-based Depression

Your application for ethical approval has been accepted and approved by the ECDA for your school.

This approval is valid:

From: 24/01/13 To: 30/06/13

Please note:

Approval applies specifically to the research study/methodology and timings as detailed in your Form EC1. Should you amend any aspect of your research, or wish to apply for an extension to your study, you will need your supervisor's approval and must complete and submit form EC2. In cases where the amendments to the original study are deemed to be substantial, a new Form EC1 may need to be completed prior to the study being undertaken.

Appendix 7: Extended ethical approval

UNIVERSITY OF HERTFORDSHIRE Health and Human Sciences M E M O R A N D U M

TO Yu Chi Lin CC Helen Payne and David Winter FROM Dr Richard Southern, Health and Human Sciences ECDA Chairman DATE 21/11/13

Protocol number: aPSY/06/12/YCL

Title of study: Rigidity, Culture-related conflict and Depression in Taiwanese Women: The BodyMind Approach as a Treatment for Culturally-based Depression

Your application to Amend the Title as detailed above, and Extend the Date on protocol number aPSY/06/12/YCL has been accepted and approved by the ECDA for your school.

This approval is valid: From: 21/11/13 To: 31/07/14

Please note:

Any conditions relating to the original protocol approval remain and must be complied with.

Approval applies specifically to the research study/methodology and timings as detailed in your Form EC1. Should you amend any aspect of your research, or wish to apply for an extension to your study, you will need your supervisor's approval and must complete and submit form EC2. In cases where the amendments to the original study are deemed to be substantial, a new Form EC1 may need to be completed prior to the study being undertaken.

Appendix 8: Consent letter for survey (English and Chinese version)

#### CONSENT FORM

Title of the Project: Chinese Culture and Depression in Taiwanese Women: The BodyMind Approach as a Treatment for culturally -based Depression

Protocol number: PSY/06/12/YCL

Statement by Participant

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read and understand the information presented in the information letter about a study being conducted by YuChi Lin of the School of Education at the University of Hertfordshire, under the supervision of Professors Helen Payne and David Winter.

I understand that my participation in the study is confidential and my identity will not be revealed.

I understand what my involvement will entail and any questions have been answered to my satisfaction.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses. In addition, I am aware that the group will be videotaped for the purpose of the research.

I am also aware that verbal excerpts from the interview and/or the learning group may be included in the thesis and/or publications to come from the research, with the understanding that quotations will be either anonymous or attributed to me only with my review and approval.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics committee at the University of Hertfordshire. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact YuChi Lin at +447585442848 and +886922843411.

With full knowledge of all foregoing, I agree, of my own free will, to participate in the first phase of the study.

Yes No

I agree to the use of direct quotations attributed to me only with my review and approval.

\_\_\_\_Yes \_\_\_\_No

I am interested in participating in a one-to-one interview, please contact me.

\_\_\_\_Yes \_\_\_\_No

I am interested in participating in a free learning group and follow-up interviews, please contact me before the group starts.

\_\_\_\_ Yes \_\_\_\_ No

 Participant's Name
 Date

Statement by Investigator

I have explained this project and the implications of participation in it to this participant without bias and I believe that the consent is informed and that he/she understands the implications of participation.

Investigator's Name	
---------------------	--

Investigator's		
Signature	 Date	

同意書

倫理審查登記號: PSY/06/12/YCL

研究題目:舞動中的人我關係—舞蹈治療對台灣女性的憂鬱症治療的運用

參與研究者之聲明:

雖然簽了這張表,妳仍然保有妳的法律權利,而研究者與相關機構也仍保有他們 的法律及職業責任。

我已經閱讀了介紹此研究的信,而這個研究是在赫特福德大學的 Helen Payne 教授、 David Winter 教授,以及政治大學李宗芹教授、台中榮民總醫院的莊凱迪醫師的指導下,由英國赫特福德大學(University of Hertfordshire)的博士候選人,林玉琪,所設計。

我了解關於我參與這個研究的任何資料都是被保密的,而且我的身分不會被接 露。

我已有機會詢問任何跟此研究相關的問題,而且得到了滿意的回覆。

這個研究已被赫特福德大學的倫理道德審查委員會審查通過。我被告知如果對這個研究有任何問題和疑慮,可以聯絡林玉琪,電話是+447585442848,+886922843411。

了解研究內容及相關資訊後,我同意參與第一階段(填寫問卷)的研究

□是 □否

我同意在我閱讀過後,在我的同意之下,可以直接引用我的句子。

□是 □否

我對參與第二階段的研究(一對一面談與免費成長團體)有興趣,請在研究開始之前跟我聯絡。

□是 □否

我對參與第三階段的研究(一對一後續面談)有興趣,請在研究開始之前跟我聯絡。

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□是□否

請填寫您常用的電子郵件信箱,做為日後聯絡後續研究以及詢問句子引用同意權 之用:

電子郵件信箱:

參與者簽名:\_\_\_\_\_ 日期:

研究者之聲明:

我已以沒有任何偏見的態度向研究參與者解釋了研究內容,以及參與者將如何參 與這個研究。我相信參與者已了解自己的權利,以及了解將如何參與本研究。

研究者簽名:

イイモー 林玉琪

日期: 2013/1/7

Appendix 9: Information sheet (English and Chinese version)

### INFORMATION SHEET

Title of the Project: Chinese Culture and Depression in Taiwanese Women: The BodyMind Approach as a Treatment for culturally -based Depression

Protocol number: PSY/06/12/YCL

#### Dear Miss:

This letter is an invitation to participate in a research study. As a full-time Ph.D. student in the Department of Education at the University of Hertfordshire, I am currently conducting research under the supervision of Professor *Helen Payne and Professor David Winter* on Chinese culture and depression, and a body-oriented approach as a treatment for culturallybased depression.

#### Study Overview

We make decisions every day, big or small. When making decisions, we could stand in two different positions, 'self' and 'others'. 'Self' means we think of ourselves more than others, while 'others' means we think of others more than ourselves.

Sometimes it is not difficult to choose a position. We make decision by judging which position is 'stronger' than the other. However, if the two positions are equally strong, decision-making will be tough.

Consequently, we might experience conflict between the two different positions. Sometimes we might even feel depressed when the conflict is too intense to manage. For many people, the depressive feelings are shown as physical symptoms, such as headache and backache. These symptoms seem to come from nowhere, and even doctors cannot give satisfactory explanations.

In the research, I want to explore the relationship between psychological conflict and depression in Taiwanese women. In addition, I want to explore if a body-oriented approach is an efficient treatment, since depression usually goes together with bodily symptoms.

### Your Involvement

There are four phases of this study, and you can choose how far you want to go in this participation.

The first phase of the study is a survey via email. It includes two questionnaires, plus additional questions. It will take about one hour to complete. If you agree to participate in the first phase of the study, the questionnaires will be emailed to you, and you could email them back after you complete.

Around two months later, the second phase of the study occurs. It will consist of a structured interview concerning your views of yourself and important people in your life, together with two questionnaires. It will last for about one hour.

If you agree to participate in the second phase, the interview would be arranged at a time convenient to your timetable. The interview takes place either in a classroom in the community college/university you attend or Dr. Juang Kai-Dih's clinic in Taipei. To ensure the accuracy of your input, I would ask your permission to audio record the interview.

The third phase of the study will take place approximately one week after the second phase. It is a learning group. It aims to facilitate you to explore yourself through movement, and connect your body to your mind. The body is like a container, which stores our various feelings, thoughts and memories. However, sometimes we might forget or ignore the messages our body tries to convey to us. Therefore, in the learning group, you will have an opportunity to listen to your body, and know yourself in a different way.

The learning group also aims to facilitate you to explore interpersonal relationships. For example, you will have an opportunity to understand your patterns of making friends, or to gain insight into your relationships with people who are important to you.

This learning group will be facilitated by MengYing Heish. She is a professional dance movement therapist, and has been working with various groups and individuals for three years. This group will meet once a week for 12 weeks, for two hours at a time. For the purpose of the research, I would ask your permission to videotape the group.

As for phase four, the participants will be expected to have an interview, similar to that in Phase 2, one week after the 12-week-group ends, 3 months later, and 6 months later. The interview will last for about one hour.

To thank you for your participation, a small gift will be provided to you after each phase of the study.

Participating in the interview and the learning group is entirely voluntary. There are no known or anticipated risks of participation in this study; however, there is a slight possibility of you getting physically hurt in the learning group if you are not careful while moving. Therefore, we will ask you to move depending on your own physical condition and situation. The room will also be completely tidied up to prevent you from getting hurt.

In addition, some negative feelings might be generated in the process of exploring your feeling and thinking in the group. For example, you might feel sad or angry when certain memories are aroused while moving in the group. However, the facilitator will never force you to talk, think or do anything you do not want to. If you like, you could explore your feelings and thinking with the support of the peers and the facilitator.

In this study, you may decline to answer any of the questions you do not wish to answer. Further, you may decide to withdraw from this study at any time, without any negative consequences, simply by letting me know your decision. All information you provide will be considered confidential unless otherwise agreed to, and the data collected will be kept in a secure location and confidentially disposed of in five years time.

Your name will not appear in any thesis or publications resulting from this study unless you provide express consent to be identified and have reviewed the thesis text and approved the use of the quote.

I hope that the results of my study will broaden the understanding of cultural-based depression and related physically symptoms. Consequently, this understanding will benefit the related medical professionals and those in need of support from them. In addition, I hope to provide evidence of the effectiveness of a body-oriented group for depression and any accompanying unexplained, persistent, physical symptoms.

## Contact Information

If you have any questions regarding this study, or would like additional information about participation, please contact me at 0922843411 or by email ninia0731@gmail.com.

I assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics committee at the University of Hertfordshire. However, the final decision to participate is yours.

Thank you for your interest and assistance with this research.

Yours very truly,

YuChi Lin

PhD student

研究簡介

倫理審查登記號: PSY/06/12/YCL

研究題目:舞動中的人我關係—舞蹈治療對台灣女性的憂鬱症治療的運用

首先謝謝您願意參與本次的研究!

本研究是由英國的赫特福爾德大學(University of Hertfordshire)與台灣的政治大學合作,企圖探索心理衝突與台灣女性的憂鬱症之間的相關性,而以身體為取向的治療方法是否能有效的減低憂鬱情緒以及因著憂鬱症而引發的身體症狀。

心理衝突可以是兩種不同價值觀之間的衝突。例如,一種價值觀是,"從別人的眼 光來看自己":

在意別人怎麼看自己,而有時別人對自己的意見,比我們怎麼看自己更重要。另 外一種價值觀是,別人的意見相對上來說並沒有那麼重要:即使別人並不同意我的看 法,我仍然做了某些決定,或是願意在團體裡表達自己的意見,即使這些意見可能會 破壞團體的和諧。

上述這兩種價值,形成時常意見不同的內在聲音。有時我們頗能協調這兩種聲 音,甚至不需多想就能做決定;有時我們可能會經歷來自於這兩種不同聲音的衝突。 如果這兩種聲音之間沒有良好的溝通,我們有時可能會感受到憂鬱的情緒。

憂鬱的情緒、心理的衝突會影響生理,可能會造成一些有時連醫生都無法解釋的 身體症狀,例如頭痛、背痛等等;而這些身體的不適可能又回頭增加了心理的不適。

因此,本研究將分為三階段,第一階段為問卷調查,第二階段為一對一面談,以 及一週一次、連續十二週的免費成長團體。謝孟穎舞蹈治療師,將帶領這個為期十二 週的成長團體。第三階段,為團體結束後的一對一後續面談。

參與者將可在十二週的免費成長團體中,探索蘊藏在自己身體中的情緒;不論是 否正在經驗憂鬱的情緒,透過團體中的自我探索與彼此分享,皆能增加許多內在聲音 間的相互溝通,也因此能增進與旁人的溝通。預期參與者在團體結束後,能更了解自 己、更明白如何與自處和與別人溝通,並減緩憂鬱程度以及與心理狀態相關連的身體 症狀。

台灣的憂鬱症人口在這幾年快速增加,尤其是女性,憂鬱症人口為男性的兩倍。 我嘗試從文化的角度出發,以身體動作為媒介,尋找治療憂鬱症的有效方法。因此, 您的參與將具有高度價值,對這個議題具有直接而龐大的貢獻。您的參與將會提供憂 鬱症與內在心理衝突是否具有關連的證明,以及以身體為取向的治療方法是否有效。 也因此,將能提供台灣精神醫療界另一種治療憂鬱症的有效方法。

如果妳想知道更多資訊,或是有任何問題,請聯絡:林玉琪 ninia0731@gmail.com 0922843411

林玉琪

博士候選人

赫特菲爾德大學(University of Hertfordshire)

### Appendix 10: Disclaimer notice (English and Chinese version)

### **Disclaimer** Notice

Please be aware that in the learning group, it is possible that you get physically hurt if you are not careful while moving. You have to move at your own risk. Therefore, I strongly recommend you moving depending on your own physical condition and situation. The room will be completely tidied up to prevent you from getting hurt, and the facilitator will keep the participants as safe as she can. However, if you are concerned about your physical safety and not willing to move at your own risk, please do not participate in the learning group. If you still would like to participate in the group, please sign below.

I agree to move at my own risk in the learning group.

Signature:

Date:

團體前重要提醒

請注意,如果妳在團體過程中忽略自己的身體狀況而在動作時不注意,可能會造 成肢體上的傷害。因此,強烈建議您依據自己身體的狀況做動作。為了防止受傷的可 能,進行團體的空間會整理乾淨,而團體的帶領者會盡力保護妳的安全。然而,如果 妳不願意為自己的身體安全負責,請妳不要參與這個團體。如果妳仍然願意參與這個 團體,請在下面簽名:

我同意為自己的身體安全負責,自行承擔可能受傷的風險

簽名:

日期:

Appendix 11: Consent letter for learning group (English and Chinese version)

### CONSENT FORM

Title of the Project: Chinese Culture and Depression in Taiwanese Women: The BodyMind Approach as a Treatment for culturally -based Depression

Statement by Participant

#### Ethical protocol: PSY/06/12/YCL

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read and understand the information presented in the information letter about a study being conducted by YuChi Lin of the School of Education at the University of Hertfordshire, under the supervision of Professors Helen Payne and David Winter.

I understand that my participation in the study is confidential and my identity will not be revealed.

I understand what my involvement will entail and any questions have been answered to my satisfaction.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses. In addition, I am aware that the group will be videotaped for the purpose of the research.

I am also aware that verbal excerpts from the interview and/or the learning group may be included in the thesis and/or publications to come from the research, with the understanding that quotations will be either anonymous or attributed to me only with my review and approval.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics committee at the University of Hertfordshire. I was informed that if I have any

comments or concerns resulting from my participation in this study, I may contact YuChi Lin at +447585442848 and +886922843411.

With full knowledge of all foregoing, I agree, of my own free will, to participate in the second phase of the study.

\_\_\_\_ Yes \_\_\_\_ No

With full knowledge of all foregoing, I agree, of my own free will, to participate in the third phase of the study.

\_\_\_\_ Yes \_\_\_\_ No

I agree to have the interview in the second phase of the study with audio-recorded.

\_\_\_\_ Yes \_\_\_\_ No

I agree to join the learning group in the third phase of the study with videotape.

Yes No

I agree to the use of anonymous verbal quotations in any thesis or publication that comes of this research. <u>Yes</u> No

I agree to the use of direct quotations attributed to me only with my review and approval.

Participant's Name

Participant's Signature Date .....

Statement by Investigator

I have explained this project and the implications of participation in it to this participant without bias and I believe that the consent is informed and that he/she understands the implications of participation.

Investigator's Name .		
Investigator's Signature	 Date	

同意書

倫理審查登記號: PSY/06/12/YCL

研究題目:台灣女性的僵化、文化相關的心理衝突及憂鬱:以身心取向治療法介入文 化相關之憂鬱症

雖然簽了這張表,妳仍然保有妳的法律權利,而研究者與相關機構也仍保有他們 的法律及職業責任。

我已經閱讀了介紹此研究的信,而這個研究是在教授 Helen Payne、David Winter 以及政治大學李宗芹教授的指導下,由赫特福德大學(University of Hertfordshire)教育學 院的博士候選人林玉琪所設計。

我了解關於我參與這個研究的任何資料都是被保密的,而且我的身分不會被揭 露。

我已有機會詢問任何跟此研究相關的問題,而且得到了滿意的回覆。

我知道為了研究的目的,整個成長團體的過程中會被錄影;錄影檔僅提供與此博 士論文相關之研究所使用,在研究結束之後,檔案也將會被銷毀。

我同時也知道在這次的研究當中,我所說的話有可能會被用於此次研究的論文或 出版物中,我也明白如果我的話被研究者引用,一定會在徵得我的同意後以匿名方式 處理。

我已被告知我可以在任何時候退出這個研究,且不需負擔任何責任。

這個研究已被赫特福德大學的倫理道德審查委員會審查通過。我被告知如果對這個研究有任何問題和疑慮,可以聯絡林玉琪,電話是 0922843411。

我同意參與第二階段的面談研究

□是 □否

280

我同意參與第三階段的團體與後續面談的研究

□是□否

我同意面談的時候全程錄音

□是 □否

我同意參與成長團體進行過程中全程錄影

□是 □否

我同意以匿名的方式讓我所說的話出現在跟這個研究相關的論文及出版品中

□是 □否

我同意只有在我看過原文及我的同意下,才能使用可能會顯露我的身分的句子

□是□否

參與者姓名:\_\_\_\_\_

參與者簽名:\_\_\_\_\_ 日期:

研究者聲明:

我已對參與者清楚解釋了這個研究以及參與者將如何參與研究的內容,且解釋過 程中不帶有偏見。我相信參與者參與研究的權利與義務已被告知清楚,並且參與者已 清楚了解。

研究者姓名.....

#### Appendix 12: Follow-up resources (English and Chinese version)

#### INFORMATION LEAFLET

#### ON SUPPORT AVAILABLE IF YOU FEEL DEPRESSED

Everyone may feel depressed or anxious, these emotions are natural reactions to disappointment or apprehension. However, if you think your mood has been low for some time and is affecting your ability to cope with day-to-day life, you should contact your GP or counselling services and/or seek help and advice from professional organisations. Some of these organisations are listed below:

If you are a student in the university, you could contact the centre of counselling in your university. The centre provides permanent counsellors, and the psychiatrists or therapists also visit the centre regularly.

There are also some resources available for you:

Teacher Chung Foundation Counselling Centre TEL: 02-85096180

Taiwan Counselling Net http://www.heart.net.tw/

PsychPark http://www.psychpark.org/clinic/index.htm

Taipei Counselling Psychologist Association http://tcpa.myweb.hinet.net/

Taiwan Dance Therapy Association http://blog.yam.com/tdta

Taiwan Guidance and Counselling Association http://www.guidance.org.tw/

Taiwan Community Counselling Association http://www.tccatw.org.tw/

Association for Taiwan Play Therapy http://www.atpt.org.tw/082.htm

Taiwan Art Therapy Association http://www.arttherapy.org.tw/aservice.php

相關資訊

過程中以及團體結束後接續的幫助

每個人都可能會有感到憂鬱或焦慮的時候,而這些情緒是面對挫折時自然的反 應。然而,如果妳認為妳的情緒已經低落了一段時間,且嚴重的影響妳的日常作息, 妳應該向專業的機構尋求幫助和建議。一些專業機構的資訊列於其後:

如果妳是大學生,妳可以聯絡學校的輔導中心。輔導中心有常駐心理師或諮商 師,且精神科醫師會定期駐診。

這裡也有一些資源可提供幫助:

主愛心靈診所羅斯福路三段 283 巷 14 弄 6 號 電話: 02-23651224

Teacher Chung Foundation Counselling Centre TEL: 02-85096180

Taiwan Counselling Net http://www.heart.net.tw/

PsychPark http://www.psychpark.org/clinic/index.htm

Taipei Counselling Psychologist Association http://tcpa.myweb.hinet.net/

台灣舞蹈治療協會 網址: http://blog.yam.com/tdta

Taiwan Guidance and Counselling Association http://www.guidance.org.tw/

Taiwan Community Counselling Association http://www.tccatw.org.tw/

台灣藝術治療協會 網址: http://www.arttherapy.org.tw/aservice.php

# Appendix 13: Movement coding sheet

# Coding sheet

Date:	Coder

$1^{st}$ $5^{th}$	10 <sup>th</sup> sess	ion 1	Number	r of the j	particip	ant:				
	Body	Effort				Space		Shape		
	Body usage Isolations (0) Whole body- coordinated movement (1)	Time Neutral (0) Sudden (1) Sustain (2)	Weight Neutral (0) Strong (1) Light (2)	Space Neutral (0) Direct (1) Flexible (2)	Flow Neutral (0) Bound (1) Free (2)	Kine- phere Small (0) Large (1) far reach (2)	Dimen- sion Vertical (0) Horizontal (1) Sagittal (2)	Shape- flow None (0) Yes (1)	Direc- tional None (0) Arc-like (1) Spoke-like (2)	Car- ving None (0) Yes (1)
1 <sup>st</sup> min										
2 <sup>nd</sup> min										
3 <sup>rd</sup>										
4 <sup>th</sup>										
5 <sup>th</sup>										
6 <sup>th</sup> min										
Total	(0): (1):	(0): (1): (2):	(0): (1): (2):	(0): (1): (2):	(0): (1): (2):	(0): (1): (2):	(0): (1): (2):	(0): (1):	(0): (1): (2):	(0): (1):
Total		(0):	(1	l):	(2):			(0):	(1):	(2):

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ADDENUIX 14.	The meralure res	earch and each re	esearch stage of the	DIOCESS
				p

Key words	<ol> <li>UHVPN</li> <li>depression</li> <li>depression and modernization /individualisation/ women/ Taiwan/culture/Chinese culture/personal construct/ resilience/ conflict/acculturation/non-verbal movement/ tightness/dance movement therapy/somatisation</li> <li>Confucianism, Confucian values, Confucianism and modernisation/women</li> <li>Medically explained symptoms, somatisation, somatisaiton and culture/Chinese culture</li> </ol>
Search engine	<ol> <li>Google ( https://www.google.co.uk/)</li> <li>Google scholar (https://scholar.google.co.uk/)</li> <li>Airiti library (http://www.airitilibrary.com/)</li> <li>NBINet (http://nbinet.ncl.edu.tw/)</li> <li>Taiwan Academia Sinica library (https://aslib.sinica.edu.tw/catalog/catalog1.html)</li> <li>Taiwan University library (http://tulips.ntu.edu.tw/search*cht/t)</li> <li>University of Hertfordshire library (https://uhvpn.herts.ac.uk/ptl/ResStudents2.nsf/,DanaInfo=w ww.studynet2.herts.ac.uk+Homepage?ReadForm&amp;alerts)</li> </ol>
Accessing number of times	<ol> <li>Google (more than 100 times)</li> <li>Google scholar (more than 100 times)</li> <li>Airiti library (more than 50 times)</li> <li>NBINet (more than 30 times)</li> <li>Taiwan Academia Sinica library (more than 70 times)</li> <li>Taiwan University library (more than 70 times)</li> <li>University of Hertfordshire library (more than 100 times)</li> </ol>
Each research stage of the process	