



Oxford Doctoral Course in Clinical Psychology

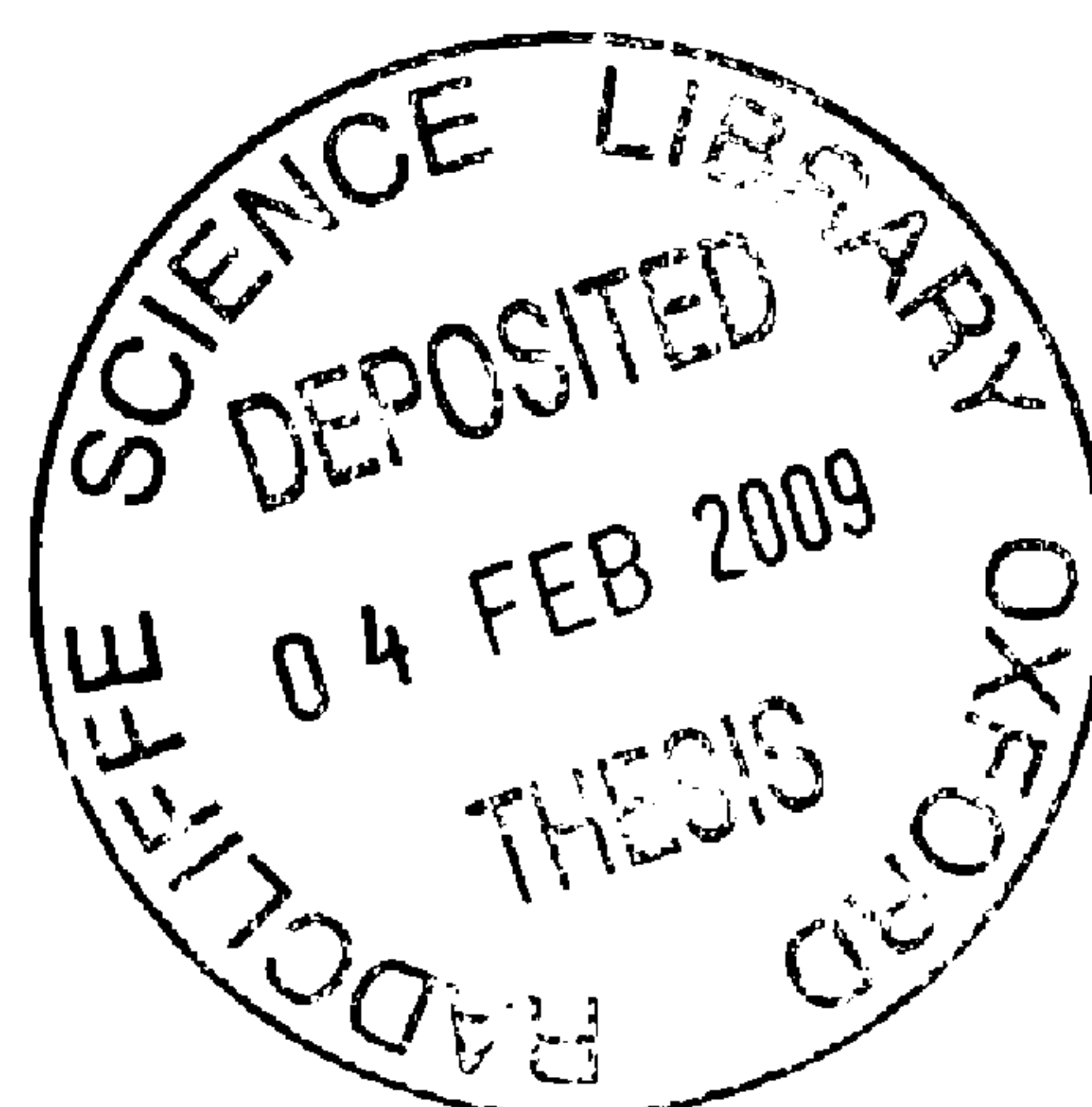
**Identity and its Relationship with
Borderline Symptoms. The Development
of an Identity Questionnaire.**

Mari Cairns

A thesis submitted in partial fulfilment of the requirements of the
degree of Doctor of Clinical Psychology, validated by the
University of Oxford.

8 July 2008

Word count: 24120



Identity and its Relationship with Borderline Symptoms. The Development of an Identity Questionnaire.

Mari Cairns

Harris Manchester College, Trinity term 2008

A thesis submitted in partial fulfilment of the requirements of the degree of Doctor of Clinical Psychology, validated by the University of Oxford.

Dissertation Supervisor: Dr Myra Cooper/ Research Supervisor: Dr Alexis Beedie

ABSTRACT

Objectives Clinical and theoretical literature suggests that some people who present with psychological problems have a poorly developed sense of their own identity. It has also been suggested that cognitive theory and therapy does not always adequately identify, conceptualise, and address these identity problems. The current study aims to develop a self-report questionnaire measure to assess these identity problems. It also tests some specific hypotheses about the relationship between identity problems and other psychological constructs, including borderline personality disorder symptomatology, anxiety and depression.

Design The study is a cross-sectional questionnaire study, using a within-subjects design, in a non-clinical population.

Method The study was internet based and participants completed the questionnaire measures online. Questionnaires included the: new Identity Questionnaire; Hospital Anxiety and Depression Scale (HADS); Borderline Symptom List-23 (BSL-23); Rosenberg's Self-Esteem Scale (RSE) and Socially Desirable Response Set (SDRS-5). Participants (N =535) completed the questionnaires as listed above and also provided demographic information on gender, age, occupation and education.

Results Four coherent factors emerged from the exploratory factor analysis. These were examined to determine themes that characterised the items contained in them. The four subscales were respectively labelled as: no sense of self; self defined by social roles/context; internal regulation and lack of belonging/connectedness. The results suggested overall good convergent and divergent validity for the new Identity Questionnaire. Further analyses confirmed the predicted positive relationship between levels of borderline personality disorder symptomatology, anxiety and depression, and identity problems.

Conclusion The results suggested that the Identity Questionnaire might be a useful clinical and research tool. Replication of this study, and extension to a clinical population, is recommended to further establish the validity and reliability of the questionnaire's psychometric properties.

Acknowledgements

I would like to extend a big thank you to Myra Cooper, my dissertation supervisor, for her continued enthusiasm and support for this project: your love for research has inspired me. I would also like to thank Helen Jenkins for her help during the initial stages of this project and Alexis Beedie, my research supervisor, for her helpful, motivating and supportive comments of my study. To Paul Griffiths: you will always remain my “stats-whiz”. My greatest thank you also to Nigel King: you are a great clinical supervisor.

I am grateful to all the participants who completed the online questionnaires and made this project possible and for the staff at the colleges of the University of Oxford and Oxford Brookes University.

My fellow trainees: thank you for sharing this journey with me; it’s been a (fun) rollercoaster ride. Thank you to all the course staff at the Isis and Maxine, Angela and Marianne: you are the best.

For my friends and family, especially my dad James and mom Marita: your love for people has shaped me. Your enthusiasm for learning and your words of dedication have motivated me: “If something is easy to get, it is probably not worth having”. For my beloved grandmother: Ouma, you will forever live in my heart.

And for all my patients – past, present and future: This is for you.

Contents

1	Introduction.....	6
1.1	Overview	6
1.2	Identity and the Self	7
1.3	Cognitive Theory and Identity/Self	8
1.3.1.	Cognitive Theory	8
1.3.2	Schema Focussed Theory	10
1.3.3	Schema Modes	10
1.3.4	Schema and Personality Disorder Symptomatology.....	11
1.4	Limitations of Cognitive Therapy and Schema Focussed Therapy	12
1.5	Predicting response to cognitive therapy	14
1.6	Conceptualisation of Identity/Self in cognitive theory and schema focussed theory	14
1.7	Psychodynamic and developmental theories	15
1.8	Empirical support for the presence of identity problems in clinical populations ...	17
1.9	Relationship between Identity Problems and other psychological problems and symptoms	17
1.9.1	Identity and Self-esteem	18
1.9.2	Identity and Borderline Personality Disorder	18
1.10	Rationale for current study.....	20
1.11	Research Questions.....	22
1.12	Hypotheses.....	23
2	Method.....	24
2.1	Participants.....	24
2.2	Study Design.....	24
2.3	Measures	24
2.3.1	Hospital Anxiety and Depression Scale (HADS)	25
2.3.2	New Identity Questionnaire	25
2.3.3	Borderline Symptom List-23 (BSL-23)	26
2.3.4	Rosenberg's Self-Esteem Scale (RSE)	27
2.3.5	Socially Desirable Response Set (SDRS-5).....	27
2.3.6	Other Information	28
2.4	Procedure	28
2.4.1	Website design	28
2.4.2	Recruitment.....	29
2.5	Ethical Considerations	29
2.5.1	Ethical Approval	29
2.5.2	Ethical Guidelines	29
2.6	Pilot Study.....	30

3	Results.....	32
3.1	Data analysis	32
3.1.1	Missing data	33
3.2	Description of the sample	34
3.2.1	Demographic characteristics.....	34
3.2.2	Questionnaire measures	35
3.2.3	Summary	37
3.3	Development of the new Identity Questionnaire	38
3.3.1	Factor Analysis	38
3.3.2	Descriptive statistics for the Identity Questionnaire	42
3.3.3	Internal consistency	42
3.3.4	Construct validity	44
3.3.5	Summary	46
3.4	Relationship with Borderline Personality Disorder symptomatology	47
3.4.1	Ability of Identity Questionnaire to predict borderline personality disorder symptomatology.....	49
3.4.2	Comparing groups of low and high scores on borderline personality disorder symptomatology.....	51
3.4.3	Summary	53
4	Discussion.....	55
4.1	Overview of results	55
4.1.1	Participants and questionnaire measures	55
4.1.2	Development of the Identity Questionnaire.....	57
4.2	Interpretation of findings	58
4.2.1	Identity Questionnaire and Subscales	58
4.2.2	Link with Borderline Personality Disorder Symptomatology and other symptomatology.....	63
4.3	Strengths and limitations of the study	63
4.3.1	Participant and sample characteristics	64
4.3.2	Use of the Internet.....	67
4.3.3	Identity Questionnaire Items.....	68
4.4	Implications of the results	69
4.4.1	Clinical and research implications	69
4.4.2	Theoretical implications.....	71
4.5	Directions for future research	72
4.6	Conclusion	75
	References.....	76
	Appendices.....	89

1 Introduction

The concept of identity has long been considered to be important in our understanding of psychological distress. The way individuals view themselves has an influence on how they interpret the world (Teasdale, 1995), on their emotions, including mental health (Brewin, 1996; Brewin, 1988, *cited in* Kapur *et al.*, 2006), and on their behaviour (Bandura *et al.*, 1977). It has been suggested that some people who present with psychological problems have a poorly developed sense of their own identity (Butler, 2002; Butler, 2004). Within a cognitive framework, Butler (2004) gives examples of the types of statements people with identity problems make about themselves. These statements include: ‘I have no value’; ‘I’m both here and not here’; ‘I’m not real’; ‘There’s no real me’; ‘I’m a non-person’; ‘I don’t really exist’; ‘I don’t know how to be me – what it would mean to be me’; ‘There’s no one there’; ‘There’s no space for me’ (Butler, 2004, p.295). Butler (2004) suggests that this group of people find it difficult to make use of cognitive therapy. She also suggests that the cognitive theories underlying cognitive therapy and also schema focussed therapy (which focuses more on perception of the self) do not adequately account for these “identity” difficulties, and that this may be what makes it difficult to know how best to intervene in clinical practice with this group (Butler, 2004).

1.1 Overview

The current study aimed to develop a questionnaire measure to identify individuals who have a poorly developed sense of their own identity. It also aimed to explore relationships between identity problems as assessed by the Identity Questionnaire and other

psychological problems, particularly borderline personality disorder symptoms. The Identity Questionnaire in the current study built on the semi-structured interview devised by Padgett (2006). The vision is that this Identity Questionnaire can be used as a clinical and research tool to help identify individuals who experience identity difficulties and to develop and tailor clinical interventions designed specifically for them.

1.2 Identity and the Self

Various terminologies have been used within the literature on identity. One definition of identity is that an individual's identity relates to that person's life-story and the meaning they give to life and its purpose (Rogers, 1951, *cited in* Hoyle *et al.*, 1998). Erikson (1959, *cited in* Wallace-Broschious *et al.*, 1994) discussed identity in relation to one's conscious sense of individual identity, one's unconscious striving for continuity of personal character, and one's ability to maintain an inner solidarity and identity. The term Identity has often been used interchangeably with *self* and has been described in a range of different ways. Terms used include 'self-concept', 'self-representation', 'self-image', 'self-esteem', 'self-worth', 'self-evaluations', 'self-perceptions', 'self-schemas', 'self-affects' and 'self-efficacy'. Self-schemas have been defined as knowledge structures developed by individuals to understand and explain their own social experiences (Markus & Sentis, 1982, *cited in* Onorato & Turner, 2004). Padgett (2006) refers to 'self-difficulties' and Butler (2004) refers to 'identity problems'. Examples of identity problems in clinical practice include not feeling like a person; not knowing or having a self-concept; being unable to reflect on one's thoughts, feelings or experiences; not having a sense of cohesion or connectedness; defining one's self through external

sources; having no self-value or self-worth and not being able to connect with others (Butler, 2004; Padgett, 2006). The term 'Identity' is frequently used by social constructionist writers (Burr, 1995). Burr (1995) noted that using this term "avoids the essentialist connotations of personality, and is also an implicitly social concept" (p.30). Social constructionism emphasises how identity depends on context, i.e. it views identity as a social concept. The term "identity problems" will be used in the current study to refer to the broad set of self-difficulties described by Butler (2002; 2004) and Padgett (2006). Although both have approached the topic from a cognitive perspective, both have also drawn on a wide range of other theories in their work, including those that incorporate psychodynamic and social dimensions of the self. A similar approach will be used here.

1.3 Cognitive Theory and Identity/Self

1.3.1. Cognitive Theory

The most widely used theory underlying the development and application of Cognitive Therapy is Beck's cognitive theory (Alford & Beck, 1997; Beck, 1991; Clark & Fairburn, 1997). Beck's cognitive theory suggests that the self plays a central role in psychological problems. It highlights the role of rigid, or what he terms 'maladaptive', self-schema which arise from adverse early experiences and make individuals vulnerable to psychological problems (Beck *et al.*, 2004). Cognitive theory suggests that schemata related to one's self are activated in psychological problems. This model is presented in Figure 1.

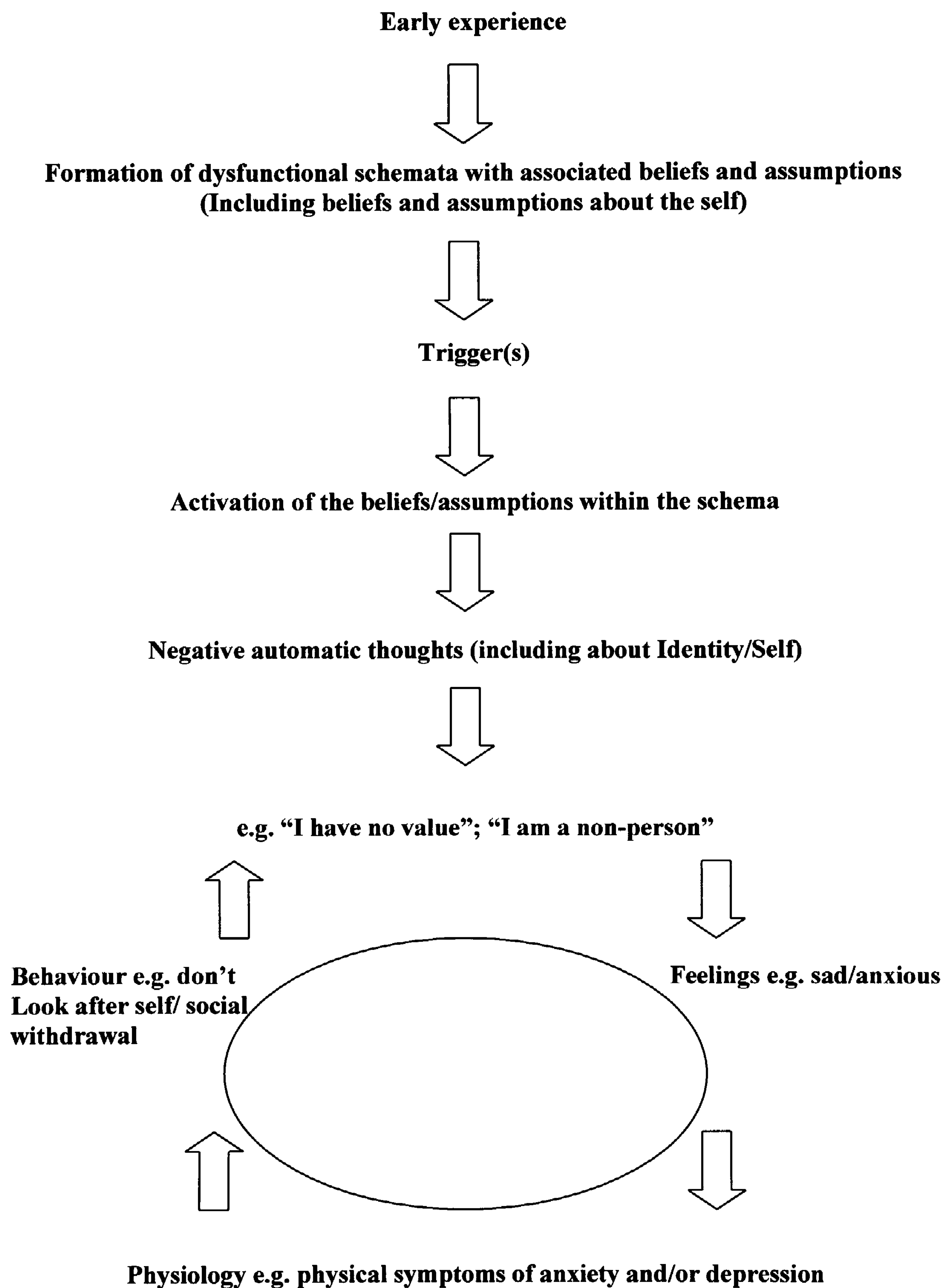


Figure 1 Diagrammatic presentation of Identity/Self in Cognitive Theory
(Diagram based on Beck’s Cognitive Model (Clark & Fairburn, 1997).)

1.3.2 Schema Focussed Theory

Schema Therapy is an integrative approach and combines theory and techniques from Cognitive Therapy, Psychodynamic, Gestalt, and Attachment approaches (Young, 1999). Schema Therapy is often used in the treatment of individuals with chronic and/or complex emotional disorders (Young, 1999). Young (1999) identifies 18 early maladaptive schemas in this theory and groups them into five domains. These domains are: disconnection and rejection; impaired autonomy and performance; impaired limits; other-directedness; and over-vigilance and inhibition. Schemas vary between individuals, and can be captured by Young's Schema Questionnaire (Young, 1999). Schema Theory has extended the conceptualisation of Beck's notion of schemas to include emotions and sensations. This broader conceptualisation may be important in understanding the experiences and early memories of individuals who have identity problems (Padgett, 2006).

1.3.3 Schema Modes

Young's theory extends to the concept of schema modes (Young *et al.*, 2003). Schema modes are the moment-to-moment emotional states and coping responses that individuals experience. Young (1999) described a mode as an extremely strong theme regarding the self and others that individuals learned at a very young age and that is self-defeating. He pointed out that "it has the strength of a lifetime of memories and of constant repetition to back it up" (Young, 1999, p.30). Schema modes are often triggered by life situations that individuals are oversensitive to, the so-called "emotional buttons" (Kellogg & Young, 2006). A schema mode is activated when particular schemas or coping responses have

erupted into strong emotions or rigid coping styles that take over and control an individual's functioning. A schema mode is also viewed as a facet of the self, which involves specific schemas or coping responses that have not been fully integrated with other facets. According to this perspective, schema modes can be characterized by the degree to which a particular schema mode state has become dissociated, or cut off, from an individual's other modes.

1.3.4 Schema and Personality Disorder Symptomatology

The term Dissociative Identity Disorder (formerly referred to as Multiple Personality Disorder) (American Psychiatric Association, 1994) is used to describe individuals who flip into schema modes that are at the extreme end of the dissociative spectrum. Dissociative Identity Disorder reflects a failure to integrate various aspects of identity, memory, and consciousness to the extent of experiencing different personality states (American Psychiatric Association, 1994). The mildest form of a schema mode, at the other extreme, is a normal mood shift, such as a lonely mood or an angry mood that may be experienced by most people at a certain point in their lives.

Young has proposed a specific schema mode model of Borderline Personality Disorder (BPD), and hypothesised that these individuals tend to flip between maladaptive schema modes. Borderline personality disorder is characterised by lack of control of anger, intense and frequent mood changes, impulsive acts, disturbed interpersonal relationships, and life-threatening behaviours, e.g. self-harming behaviour (American Psychiatric Association, 1994). Based on the schema mode model (Young *et al.*, 2003), individuals

with borderline personality disorder are characterised by four maladaptive modes, namely detached protector, punitive parent, abused/abandoned child, angry/impulsive child (Arntz *et al.*, 2005). Individuals who suffered trauma often experience difficulties due to the lack of development of healthy self-representations (Segal & Blatt, 1993). This is evident in children (Segal & Blatt, 1993) who suffer from Post-Traumatic Stress Disorder (PTSD) (American Psychiatric Association, 1994). It is well documented that individuals who suffer from Borderline Personality Disorder often suffered significant trauma and abuse (American Psychiatric Association, 1994). If a child suffered trauma at a very early age (say before aged 2 years), their identity formation may have been shattered and not given the opportunity to develop healthily.

1.4 Limitations of Cognitive Therapy and Schema Focussed Therapy

There is evidence that cognitive therapy based on Beck's cognitive theory is an effective treatment for many anxiety disorders, depression, and low self-esteem (Westbrook & Kirk, 2005; Elkin *et al.*, 1989). However, a sizeable minority of patients do not appear to benefit, particularly in everyday clinical practice. Westbrook and Kirk (2005) conducted a large study on the efficacy of psychological treatment in routine clinical practice. The authors examined data from 1,267 patients who suffered from a range of disorders and who were treated with Cognitive Behavioural Therapy (CBT) within the NHS between 1987 and 1998. Pre- and post-measures on the Beck Depression Inventory (BDI) (Beck *et al.*, 1996) and Beck Anxiety Inventory (BAI) (Beck *et al.*, 1988) were completed. The results indicated that by the end of treatment only about half of the patients were reliably improved, and only approximately one third had recovered into the normal range. The

data also indicated that there was no reliable change shown in BDI scores for over 40% of the patients.

This finding is consistent with those of other studies that have explored the ‘effectiveness’ of treatments, i.e. clinical outcomes using clinical samples in naturalistic settings. Overall, a less consistent picture of clinical effectiveness emerges than in more highly controlled treatment research trials (Roth & Fonagy, 2004).

Butler (2002) highlighted that often “we only make a big difference to relatively few people” in psychological treatments (p.291), and that insufficiently effective treatments, comorbidity, problems with techniques and also problems of identity, raise difficulties in clinical practice for clinicians (Butler, 2004).

There are very few studies of the effectiveness of schema focussed therapy although schema focussed therapy is often considered particularly appropriate for people with personality disorder symptomatology and ‘identity’ problems. Nevertheless, some recent evidence suggests that schema focussed therapy can be helpful in borderline personality disorder (Nordahl & Nysaeter, 2005). A large randomised controlled trial also suggests positive outcomes for schema focussed therapy with borderline personality disorder (Giesen-Bloo *et al.*, 2006) and Arntz and colleagues (2005) found empirical evidence in support of schema mode therapy for Borderline Personality Disorder.

1.5 Predicting response to cognitive therapy

Various studies have identified characteristics of individuals who do not respond to traditional Cognitive Behavioural Therapy. These include chronic or more severe levels of depression (e.g. Elkin *et al.*, 1985); perfectionistic traits (e.g. Shafran & Mansell, 2001); more severe anxiety traits and generalised anxiety disorder (Sanderson *et al.*, 1994); and individuals with a label of personality disorder (e.g. Beck *et al.*, 2004). Experience gained from clinical practice also suggests that individuals who express identity problems do not respond well to CBT (Butler, 2002; Butler, 2004). Of these sub-groups, individuals with identity problems have received the least research and empirical investigation. The current study aims to address this gap in the research.

1.6 Conceptualisation of Identity/Self in cognitive theory and schema focussed theory

Despite numerous investigations in the domain of the self, a cognitive theory of identity problems has not yet been outlined in detail. This makes it difficult to know how best to formulate such experiences, and how to provide effective treatment in clinical practice. Butler (2004) highlighted the following difficulties faced in clinical practice when identity problems are apparent.

Absence of self:

Cognitive therapy is based on the assumption that individuals can access their own thoughts and emotions, but this is not fulfilled in individuals who do not know what they think or feel (Butler, 2002; Butler, 2004). Without a core sense of self or identity, the techniques that are used in Cognitive Therapy may not work effectively. Butler (2004)

suggests that treatment needs to focus on the discovery and construction of the individual's sense of self in such cases.

Experiential self:

Many of the experiences that are reported by individuals in clinical practice include experiential descriptions of emotional, relational and inner-felt sense experiences of the self. Butler (2004) suggests that it is difficult to know how best to understand, formulate, and treat this experience, that we currently lack a concrete conceptual framework for these experiences, and that traditional cognitive theory does not provide one.

Global self:

Distinctions are often made in the literature between global and domain-specific self-evaluations. Global evaluations refer to the global characteristics of an individual, and have often been termed self-esteem or self-concept (Harter, 1999). Domain-specific evaluations refer to an individuals' competence within particular domains (Harter, 1999). Cognitive therapy typically segments and operationalises global and domain-specific evaluations into specific areas of focus, for example exploring thoughts, feelings and behaviour, or self-directed attention in specific situations (Butler, 2002). However, it does not yet provide guidance on the breakdown of a global and all-encompassing construct of the whole individual, when there are problems in identifying its existence (Butler, 2002).

1.7 Psychodynamic and developmental theories

Modern psychodynamic theory suggests that psychological problems and 'self-difficulties' (identity problems) are closely related (Segal & Blatt, 1993). Psychodynamic theorists have primarily explored the self through phenomenological investigation, and

this has usually been closely linked to a developmental approach. In exploring the self, psychodynamic theorists focus on the ‘experience’ of the self and emphasize the formation of the self as a developmental process in a relational context (Segal & Blatt, 1993).

This approach provides a comprehensive theory, integrating developmental and interpersonal factors in the development of self. Studies within this field have been exploratory but they have identified similar issues to those noted by Butler (2004), including difficulties in a sense of agency; relatedness; ability to tolerate contradiction and difficulties with integration of the sense of self. Particular emphasis is given to an individual’s first three years of development and the need for appropriate experiences of emotional dialogue, communication, attachment and separation between the carer and child is highlighted. It is hypothesised that these may impact on the first two developmental stages of the self: the “rudimentary self”, from birth to 22 months, and the “introjected self”, from 30 months onwards (Blatt & Bers, 1993). The mature self does not develop until late adolescence when these two stages become integrated and increasingly complex.

Individuals with borderline personality disorder experience particularly severe identity problems, but what exactly leads to these identity problems and any borderline psychopathology (Linehan, 1987) remains a matter of considerable debate. Individuals who suffer from Borderline Personality Disorder have often suffered significant trauma and abuse (American Psychiatric Association, 1994). One possibility is that if a child has

suffered trauma at an early age, their identity formation may have been shattered and they have not been given the opportunity to develop healthily, with resultant identity problems.

1.8 Empirical support for the presence of identity problems in clinical populations

Padgett (2006) investigated experiences of the self and mental health difficulties, and focused specifically on depression. Twenty participants were recruited from clinical psychology departments, aged between 18 and 60 years. This exploratory study compared individuals with a primary diagnosis of clinical depression to a non-clinical control group of non-depressed individuals. The design was a between-subjects design using questionnaire measures, as well as a semi-structured interview. The findings suggested that individuals with depression experience difficulties with their sense of self or identity that are consistent with Butler's clinical observations (Butler, 2002; Butler, 2004). Therefore, preliminary empirical support for the existence of identity problems in a clinical population has been found (Padgett, 2006).

1.9 Relationship between Identity Problems and other psychological problems and symptoms

Identity problems and symptoms such as anxiety, depression, low self-esteem and borderline personality disorder are likely to be related. Borderline personality disorder symptomatology is of particular interest as a particularly significant example of identity problems (Fuchs, 2007; Bohus *et al.*, 2007), and will be investigated here.

1.9.1 Identity and Self-esteem

Self-esteem is regarded as one of the most important constructs for understanding individuals and a link has been made between self-esteem and a wide range of psychological difficulties, including anxiety and depression (Wittkowski, 2006). Low self-esteem is a vulnerability factor in the development of depression and psychosis, and an increase in the prevalence of mental illness in general has been associated with low self-esteem (Cater *et al.*, 2006). Wittkowski (2006) noted that there are over 200 published measures of self-esteem (Blascovich & Tomaka, 1991, *cited in* Wittkowski, 2006), yet they are mostly idiosyncratic and poorly validated. Although questions have been raised about whether the Rosenberg Self-Esteem Scale (RSE) accounts fully for the multi-dimensional and complex nature of self-esteem, it remains the most widely used measure. The term self-esteem signifies an intrapsychic cognition and has been described as “an attitude that evaluates the self” (Baumeister *et al.*, 1989, p.573). Self-concept and self-esteem are often used interchangeably within the literature and both refer to self-attributions (Greenwald *et al.*, 2002), linking to one’s identity. However, the nature of the theoretical relationship between identity (e.g. as defined here) and self-esteem is unclear (e.g. Marsh, 1987).

1.9.2 Identity and Borderline Personality Disorder

Pathology of self and identity is seen as an important aspect of borderline personality disorder (BPD) (Westen & Cohen, 1991, *cited in* Segal & Blatt, 1993). Several features characterise the identity of individuals with borderline personality disorder. One is a ‘split’ within the self or identity which often consists of contradictory representations

(Segal & Blatt, 1993), in Psychodynamic perspective. Other identity disturbances are apparent in the evaluative representations of borderline individuals, i.e. representations of the wished-for, feared, and ideal self that are compared with actual representations. One key aspect of these is their all-or-nothing nature. Discrepancies between representations are often enormous and may cause problems with identity or the self to escalate, which has parallels with a previous discussion on Dissociative Identity Disorder. Representations may also be confused, and poorly differentiated from actual representations, and highly transitory. The subjective sense of self is usually disrupted significantly in borderline individuals. “Identity diffusion”, as outlined below, frequently presents within the framework of a poorly developed sense of self or identity (Segal & Blatt, 1993). More generally, borderline individuals experience a diffusion of identity. The lack of consistently invested goals, values, ideals, and relationships over time – or the temporary hyperinvestment in totalistic value systems that offer black-and-white interpretations of events or idealized and hypercathected relationships – leads to a sense of emptiness and meaninglessness and to a lack of coherence to the way the person behaves” (Westen & Cohen, 1991, *cited in* Segal & Blatt, 1993, p.353). These difficulties may be related to impulsivity and affect dysregulation (Clarkin & Posner, 2005, *cited in* Fuchs, 2007), splitting (Kernberg, 1975, *cited in* Fuchs, 2007) and fragmented identity (Wilkinson-Ryan & Westen, 2000, *cited in* Fuchs, 2007) and result in lack of capacity to establish a coherent self-concept (Fuchs, 2007). Self-esteem of individuals with borderline personality disorder is also subject to extreme fluctuation, particularly in a negative direction.

1.10 Rationale for current study

The concept of identity is central to our understanding of psychological distress. It has been suggested that individuals with psychological problems have a poorly developed sense of their own identity (Butler, 2002; Butler, 2004). Preliminary empirical support has been found for the existence of such identity problems in a clinical population (Padgett, 2006), and it has been suggested that the self plays a central role in clinical depression. Padgett (2006) recommends that further research in the field of the self/identity is of potential benefit to future clinical practice. She suggests that future research should focus on the development of a self-report questionnaire measure, which would help identify individuals who experience identity problems and be useful in research designed to investigate the nature of the phenomena, and its links to psychological symptoms, as well as useful in theory development. The current study aimed to explore identity problems further based on Padgett's (2006) study, and more specifically in relation to borderline personality disorder symptomatology.

The focus of the current study is therefore to develop a self-report questionnaire measure (DeVellis, 2003; Rust & Golombok, 1999) in order to be able to assess identity problems systematically (Butler, 2004; Butler, 2002; Padgett, 2006). There is not currently a psychometrically sound self-report measure for assessing identity problems and this would be a valuable tool for clinical and research purposes. In clinical settings it could be used to help identify individuals with significant identity problems so that psychological interventions may be adapted for these clients, as recommended by Butler (2004). A measure could also be used as a research tool to help clarify relationships between

identity problems and related concepts (e.g. self-esteem, different schema domains and various psychological problems). This might aid the development of theory and treatment for a range of clinical problems, including borderline personality disorder. It has been suggested that borderline personality disorder is the most frequently diagnosed personality disorder in clinical settings (Widiger & Trull, 1993, *cited in* Trull *et al.*, 1997) and thus it is of great clinical concern.

It is believed that cognitive therapy is less effective for individuals who have a poorly developed sense of self (Butler, 2004), i.e. those who experience difficulties due to a poorly developed identity. It is anticipated that a questionnaire measure could be used in clinical settings to identify individuals with such difficulties. Cognitive Therapy, for instance, might then be adapted in the future on an individual basis for this client group as suggested by Butler (2004). Given the likely links between identity, self-esteem and borderline personality disorder the current study will examine their relationship, particularly the ability of any new measure to predict borderline personality disorder symptomatology.

1.11 Research Questions

- I. Can a reliable and valid self-report measure of identity problems be developed?
 - a) Do coherent/meaningful themes emerge from a factor analysis?
 - b) Do the subscales computed have good internal reliability/consistency?
 - c) Does the measure have good construct validity? Does it have convergent validity (i.e. does it correlate moderately with measures of anxiety, depression and self-esteem?) Does it have divergent validity (i.e. does it correlate weakly with age, years of education and social desirability?)
- II. What is the relationship between the new measure (and its subscales) and symptoms of borderline personality disorder?
- III. To what extent does the new measure predict identity problems in individuals who have high levels of borderline personality disorder symptoms?

1.12 Hypotheses

It is hypothesised that:

- I. A reliable and valid measure of identity problems will be developed in this study.
 - a) Coherent/meaningful themes will emerge from a factor analysis.
 - b) Subscales of the newly developed Identity Questionnaire will have good internal reliability/consistency.
 - c) The measure will have good construct validity.
- II. It is hypothesised that the Identity Questionnaire will predict a significant amount of the variance in borderline personality disorder symptoms when variance associated with demographic and general distress, including depressive symptoms, is controlled.
- III. It is hypothesised that those individuals with high levels (i.e. in the top decile of scores for BPD symptomatology) of borderline personality disorder symptoms will score more highly on the Identity Questionnaire than those with low levels (i.e. in the bottom decile of scores for BPD symptomatology).

2 Method

The design, methodology and procedure carried out in the study are detailed below. The study was an online questionnaire study.

2.1 Participants

The inclusion criteria for participation in the study were: male or female, aged 16 and older. A non-clinical sample was sought. Fluency in English was assumed if participants completed the online questionnaires. The majority of the participants were recruited from Oxford University and Oxford Brookes University. The remainder were friends, colleagues and other acquaintances of the researcher.

2.2 Study Design

The study was a cross-sectional questionnaire, within-subjects design with a between-subject component, in a non-clinical population (Barker *et al.*, 2002; Pedhazur & Schmelkin, 1991). Data was collected using internet-based questionnaires.

2.3 Measures

The following questionnaires were included on the website:

2.3.1 Hospital Anxiety and Depression Scale (HADS)

The Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983; Snaith & Zigmond, 1994) is a 14-item instrument that contains 7 statements related to anxiety and 7 related to depression. Each question has four possible responses, scored on a 0-3 scale. The score on each scale, out of a total of 21, provides a means of assessing the severity of recent anxiety and depressive symptoms. A higher score indicates a greater degree of symptom severity, with cut-offs for possible (8-10), probable (11-14) and severe clinical disorder (>15) indicated. The anxiety and depression sub-scales have been found to be independent measures and the HADS has good homogeneity and reliability (Spinhoven *et al.*, 1997). The HADS is a widely used and well-validated questionnaire measure of anxious and depressive symptoms in clinical and non-clinical samples (Mykletun *et al.*, 2001). A copy of the HADS can be found in Appendix 1.

2.3.2 New Identity Questionnaire

The measure being developed here was an identity self-report questionnaire. The questionnaire contained 96 items that had been selected prior to the current study, by Catherine Padgett as part of a doctoral dissertation University of Oxford (Padgett, 2006). A range of sources had been used to select these items, including clinical experience, statements identified in the literature as particularly associated with self-concept and borderline symptomatology, and qualitative data that had been routinely and systematically collected for previous research in this area. In the Padgett (2006) study, the author used the questionnaire items in a semi-structured interview to explore individuals' experiences of self. Padgett (2006) categorised a list of experiences according to main

themes, and reliability checks were completed in her study. In the current study items contained beliefs and attitudes towards the self. Each item was rated on a scale of 0 to 100 and participants were asked to rate each statement according to how they believe/feel most of the time. The rating instructions were: 0 (completely disagree, I do not usually believe this at all) to 100 (completely agree, I am usually completely convinced that this is true). Exploratory factor analysis was later conducted with the items, as discussed in a later section. A copy of the Identity Questionnaire can be found in Appendix 2.

2.3.3 Borderline Symptom List-23 (BSL-23)

The Borderline Symptom List-23 (BSL-23) (Bohus *et al.*, 2007) is a shortened version of the original Borderline Symptom List. It is a 23-item questionnaire checklist that assesses symptoms of Borderline Personality Disorder, specifically related to how an individual felt within the past week. Each question has five possible responses, scored on a 0-4 scale, ranging between “not at all” and “very strong”. Higher scores are associated with higher borderline symptomatology. The norms for the BSL (long version) and the BSL-23 (short version) are ongoing. The authors are in the process of studying a German-speaking sample, whose data will be compared to those concurrently gathered from a patient cohort in the USA (Bohus *et al.*, 2007). A copy of the BSL-23 can be found in Appendix 3.

2.3.4 Rosenberg's Self-Esteem Scale (RSE)

The Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965) is a widely used self-report instrument for evaluating individual self-esteem. The questionnaire consists of 10 items and each question has four possible responses, scored on a 0-3 scale. Items range between “strongly agree” and “strongly disagree” and items 2, 5, 6, 8 and 9 are reverse scored. A low score suggests high self-esteem (ranging between 0-30). The RSE has been found to have good reliability and validity (e.g. Blascovich & Tomaka, 1993). A copy of the RSE can be found in Appendix 4.

2.3.5 Socially Desirable Response Set (SDRS-5)

The Socially Desirable Response Set (SDRS-5) (Hays *et al.*, 1989) is a 5-item self-report instrument designed to measure socially desirable responses. Each question is scored on a five point Likert scale. Items range between “definitely true”, “mostly true”, “don’t know”, “mostly false” and “definitely false”. Only the most extreme response option for each item is considered indicative of socially desirable responses. An extreme response for an item is given a score of one, all other responses for that item are scored zero and the maximum score on this scale is five. Social desirability pressure, the perceived importance of projecting an image that one behaves in a socially approved manner or feels socially approved feelings (Hays *et al.*, 1989), is a major component of self-presentation. It can affect the validity of other self-report measures and was thus included in the current study, as a means to explore this here. Hayes and colleagues (1989) reported that the Socially Desirable Response Set has good internal consistency with

Cronbach alpha coefficients of 0.66 and 0.68. A copy of the SDRS-5 can be found in Appendix 5.

2.3.6 Other Information

Participants provided demographic information on gender, age, years in education and occupation, in order to describe the sample.

2.4 Procedure

2.4.1 Website design

The questionnaires were included on an online website that was hosted by the Oxford University Computing Services (OUCS) through the Weblearn service. The online website was created by the researcher and included participant information and useful resources for potential participants. The participant information sheet was located on a direct link on the website in order for potential participants to read and decide whether they wanted to continue the link to the questionnaires. Copies of the participant information sheet and useful resources can be found in Appendix 6 and Appendix 7 respectively. Data was stored automatically as participants completed the online study. This data was stored in a secure Excel spreadsheet that was linked to the Weblearn service. The questionnaires generally took between 15 and 30 minutes to complete. Completion of the online questionnaire study implied consent to taking part.

2.4.2 Recruitment

The researcher liaised with various presidents and administrators at the colleges from Oxford University and with Oxford Brookes University to discuss the study rationale. A link to the online website was emailed to Colleges and Departments at Oxford University and Oxford Brookes University and to acquaintances of the researcher. This email link was then distributed to individual students via their colleges. As an incentive to take part in the study, participants were given the opportunity to enter a free prize draw after completing the online questionnaires. Recipients were selected randomly and three prizes of £100, £100 and £50 were awarded to the participants.

2.1 Ethical Considerations

2.5.1 Ethical Approval

The study received ethical approval from the Central University Research Ethics Committee (CUREC), University of Oxford and managerial approval from the Oxfordshire and Buckinghamshire Research and Development Committee. Copies of approval letters can be found in Appendix 8 and Appendix 9.

2.5.2 Ethical Guidelines

The main ethical issues were the possibility that some participants might find some of the questions distressing and the potential to make participants aware of their own psychological difficulties. These risks were made explicit in the participant information sheet. The current study adhered to ethical principles, including protecting the rights,

dignity and welfare of participants as stipulated in the ethical guidelines of the British Psychological Society (2004). This included informed consent, minimization of harm and confidentiality. It was reiterated that participation in the study was voluntary and that participants were able to withdraw at any stage. The British Psychological Society (2007) has published guidelines on internet research and advises researchers to display their contact details on websites. The online website included useful resources with contact details of various support organisations for those with psychological difficulties, so that participants could contact these services if they wish. The information sheet also included a contact telephone number for the researcher, which participants could use for further queries or concerns. No participants contacted the researcher.

Participants who wished to enter the prize draw were asked to give their email addresses with the explicit message that no further correspondence would follow, unless they were one of the prize draw winners. These email addresses were recorded in a separate database to the questionnaire responses so it was not possible to identify individuals from their responses on the questionnaires. All responses from the questionnaire measures were automatically coded and stored securely. The website was password protected and access was restricted to only the researcher.

2.6 Pilot Study

A pilot study of the online questionnaires was conducted using five participants, whose data were not used in the subsequent analyses. This was done to check for ease of

completion and to ensure that it was working technically. Minor changes were made after the pilot study, including setting up a direct link to the online study.

3 Results

This section provides an overview of the procedure used for data analysis. Results of the exploratory factor analysis and other analyses conducted are then presented.

3.1 Data analysis

Data were analysed using the Statistical Package for Social Sciences, Version 14.0 (SPSS (UK) Ltd 1998).

The distribution of each variable was examined by inspecting skewness and kurtosis values (Kinnear & Gray, 2005). With the exception of the data on the Hospital Anxiety and Depression Scale (HADS), the data were not normally distributed. Kirkwood and Sterne (1988), however, suggest that when a sample is large ($N = 535$ for the current study), a normal distribution can be assumed for the sample mean. Parametric statistics were therefore used in the analysis.

A principal component method of factor extraction was used to examine the factor structure of the new Identity Questionnaire (Kinnear & Gray, 2005; Tabachnick & Fidell, 1996). The factors were subjected to the Oblimin rotation method with Kaiser Normalization. Oblimin rotation is a general form for obtaining oblique rotations used to transform vectors associated with principal component analysis. It includes an arbitrary constant which is used to obtain different rotational properties (Jackson, 2005). Internal consistency of the scale was examined using Cronbach's alpha coefficients, and Pearson correlation coefficients were used to assess convergent and divergent validity.

Linear regressions were then performed to test the ability of the new questionnaire subscales to predict borderline personality disorder symptoms.

Participants with high and low scores (top and bottom decile of scores) on borderline personality disorder symptomatology, as measured by the BSL-23, were compared in terms of their subscale scores on the Identity Questionnaire. A One-Sample Kolmogorov-Smirnov test revealed difficulties with normal distributions and thus a problem with the assumptions. This was checked with individual histograms for each subscale. The distributions suggested that T-tests were inappropriate and non-parametric statistics were therefore used.

All p-values reported are 2-tailed.

3.1.1 Missing data

A relatively small amount of data were missing for demographic variables (N =11 for age, N =11 for gender, N =15 for occupation and N =26 for years of education). In order to avoid losing data, pairwise deletion of missing data was used. Cases were therefore excluded from any calculations involving variables for which they had missing data.

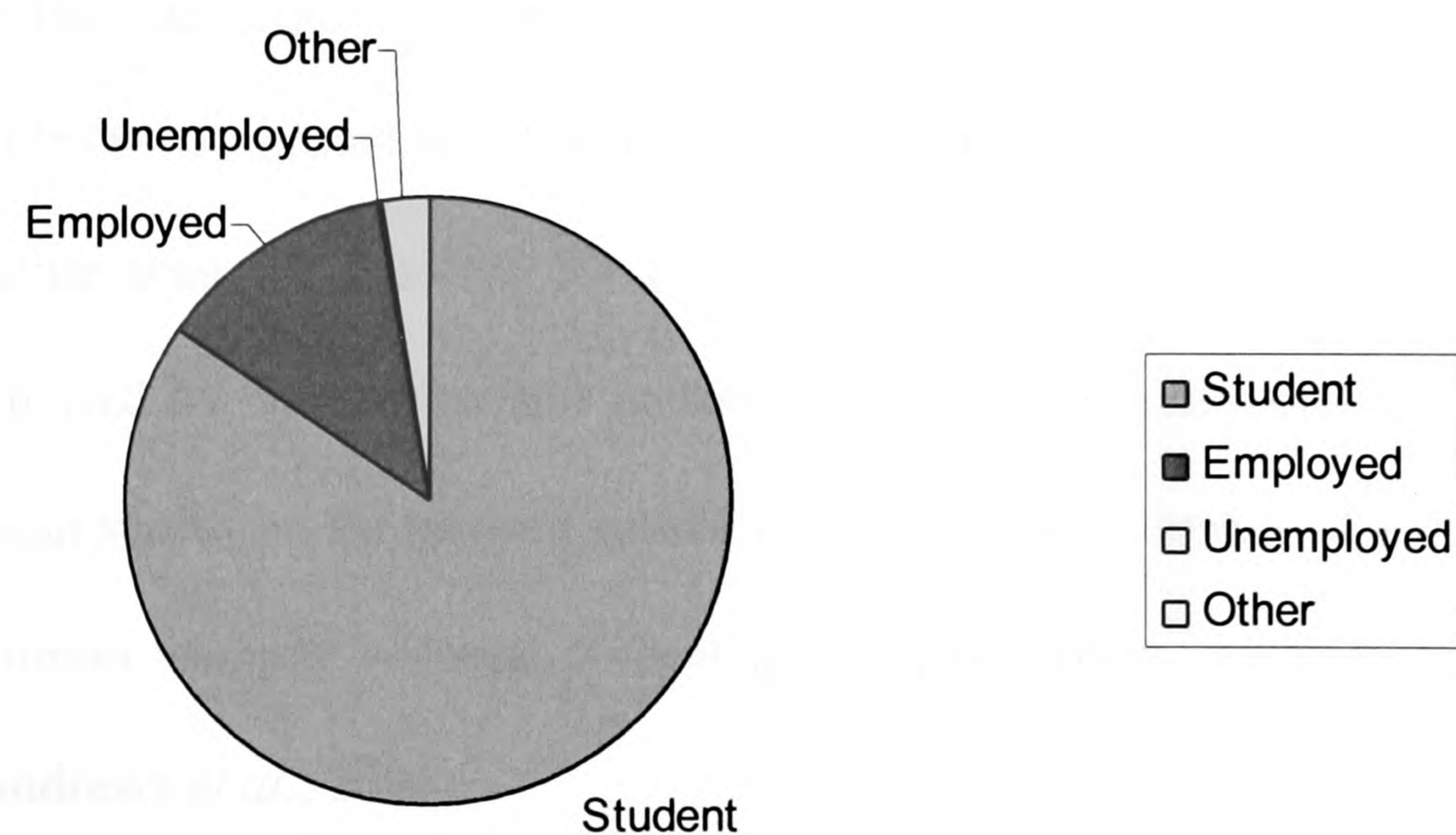
3.2 Description of the sample

3.2.1 Demographic characteristics

The total number of participants was 535. Of those participants who completed the demographic information, 39.4% were male (N =211) and 58.5% were female (N =313). The mean age was 24 years (SD =7.45), ranging between 17 and 62 years. The modal age was 20 years and 86.1% of participants were 29 years and under.

Figure 2 provides data on occupation categories of the sample. The majority of participants (82.1%) were students (N =439). The remainder were ‘employed’ (12.3%), ‘unemployed’ (0.4%) and ‘other’ (2.4%). The mean years of education was 15 years (SD =4.49).

Figure 2 Occupation of participants



3.2.2 Questionnaire measures

Table 1 provides mean scores for each of the measures administered.

Table 1 Participants' scores on questionnaire measures

	N	Mean	Range
HADS Anxiety	520	11.17 (2.32)	4 – 16
HADS Depression	519	8.75 (1.79)	3 – 15
BSL-23	491	17.82 (15.38)	0 – 83
RSE	498	19.69 (6.06)	0 – 30
SDRS-5	508	0.09 (0.25)	0 – 1

Standard deviations in parentheses

HADS Anxiety = Hospital Anxiety and Depression Scale – anxiety subscale; HADS Depression = Hospital Anxiety and Depression Scale – depression subscale; BSL-23 = Borderline Symptom List-23; RSE = Rosenberg's Self-Esteem Scale; SDRS-5 = Socially Desirable Response Set

Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983; Snaith & Zigmond, 1994)

The mean score on the HADS Anxiety scale was 11.17, ranging from 4 to 16. The mean score on the HADS Depression scale was 8.75, ranging from 3 to 15. A higher score on each subscale indicates a greater degree of anxiety and depression respectively with cut-offs for possible (8-10), probable (11-14) and severe clinical disorder (>15). These mean scores are higher than the reported 5.1 (SD =3.6) for anxiety and 3.4 (SD =3.3) for depression reported by Spinhoven and colleagues (1997) for a non-clinical population. The higher mean scores on the anxiety subscale can perhaps be explained by the fact that within the current sample a large percentage of participants were from a student population (Andrews *et al.*, 2006).

Borderline Symptom List-23 (BSL-23) (Bohus *et al.*, 2007)

The mean score on the BSL-23 was 17.82, ranging from 0 to 83. The norms for the BSL (long version) and the BSL-23 (short version) are ongoing. The authors are in the process of studying a German-speaking sample, whose data will be compared to those concurrently gathered from a patient cohort in the USA (Bohus *et al.*, 2007). The lowest 10% (decile of scores) and highest 10% (decile of scores) of participants who completed the BSL-23 were selected for later analysis in the current study, indicating (relatively) low and high borderline personality disorder symptomatology. Of those participants who completed the BSL-23 questionnaire, 8.8% scored in the low group (N =43), with scores ranging from 0 to 3. Of those participants who completed the BSL-23, 10.6% scored in the high group (N =52), with scores ranging from 40 to 83.

Rosenberg's Self-Esteem Scale (RSE) (Rosenberg, 1965; Rosenberg, 1989)

The mean score on the RSE scale was 19.69. This is slightly lower than the mean score reported by Rosenberg (1989), indicating relatively higher self-esteem within the current population. Comparison data for mean scores on the RSE are limited, but the mean for the current sample is comparable to those of control groups in clinical studies (e.g. Woolrich *et al.*, 2006).

Socially Desirable Response Set (SDRS-5) (Hays *et al.*, 1989)

The mean score on the SDRS-5 was 0.09 (SD =0.25), with scores ranging between zero and one. The maximum possible score on the Socially Desirable Response Set is five,

indicating high social desirability. The mean score and range of scores for the sample did not indicate high socially desirable responses.

3.2.3 Summary

Participants varied in terms of age and years of education and 77.5% of participants were 26 years and under. The modal age was 20 years and the mean age of participants was 24 years ($SD = 7.45$). The majority of participants were from a student population and thus on average highly educated, with the mean years in education being 15 years ($SD = 4.49$).

Participants in the current study scored rather higher on anxiety and depression symptomatology, as measured by the Hospital Anxiety and Depression Scale (HADS), than those reported elsewhere. The mean score for the anxiety subscale was in the “probable” clinical range and the mean score for the depression subscale was in the “possible” range. The norms for the Borderline Symptom List-23 (BSL-23) are ongoing and no comparison data were therefore available at the time of the current study. Participants in the current study scored relatively higher on self-esteem, as measured by the Rosenberg Self-Esteem Scale (RSE), and were comparable to other non-clinical groups.

3.3 Development of the new Identity Questionnaire

3.3.1 Factor Analysis

An exploratory factor analysis (Fabrigar *et al.*, 1999) was conducted on the 96 belief items of the new Identity questionnaire. A principal components method of factor extraction was used with the aim to reduce the data to a smaller set of components. On the basis of the Scree test (Cattell, 1978), four factors (components) were extracted and subjected to Kaiser Normalization using the Oblimin method. Following rotation, four components were found to have Eigenvalues over 3. The first four factors had Eigenvalues of: 24.74, 6.43, 4.33 and 3.30. Thereafter, the Eigenvalues for the next three components were 2.59, 2.32 and 2.13. The rotated loadings for the four factors are provided in Table 2. The total amount of variance explained by the four factors was 40.41% and was divided as follows: factor 1 = 25.77%; factor 2 = 6.70%; factor 3 = 4.51% and factor 4 = 3.43%.

Items that loaded most highly on each factor were then selected to create a shorter questionnaire. Items were included if they loaded at least 0.45 on the relevant factor and equal to or below 0.45 on any other factor. The items that loaded most highly on the relevant factors were selected to form four subscales. Subscale 1 consisted of 10 items; Subscale 2 consisted of 10 items; Subscale 3 consisted of 10 items and Subscale 4 consisted of 9 items. Therefore 57 items were excluded from the original Identity Questionnaire based on the factor analysis. Details of the 96-item Identity Questionnaire, with the items of subscales one to four indicated, are presented in Appendix 2.

Each of the four subscales were examined to determine themes that characterised the items contained within them. Factor 1 contained items that appeared to be related to absence of self, the sense of oneself as pretending, unreal and not existing, and was labelled the *no sense of self* subscale. High scores on this subscale were overall related to *no sense of self*. The items in factor 2 appeared to relate to being defined by social roles and context within society, and this factor/subscale was labelled the *defined by social roles/context* subscale. High scores on this subscale were related to a greater sense of identity being *defined by social roles/context*. Factor 3 contained items that reflected a sense of reflection, maturity and internal regulation. The label *internal regulation* was given to this subscale. High scores on this subscale were associated with greater ability to regulate the self internally, with *internal regulation* viewed as being positive. Factor 4 contained items related to feeling that one does not belong and is not connected. It was labelled the *lack of belonging/connectedness* subscale. High scores on this subscale were associated with *lack of belonging/connectedness*.

The mean scores of the Identity Questionnaire subscales were as follows: The mean score on subscale 1 *no sense of self* was 10.97, ranging from 0 to 85. The mean score on subscale 2 *defined by social roles/context* was 34.62, ranging from 0 to 92. The mean score on subscale 3 *internal regulation* was 76.44, ranging from 0 to 100. The mean score on subscale 4 *lack of belonging/connectedness* was 20.60, ranging from 0 to 86.

Table 2 Rotated loadings of the Identity Questionnaire for the four factors extracted

	Factor loadings			
	1	2	3	4
Subscale 1:				
No sense of self				
Absent	.78	.23	-.31	.37
Pretending	.77	.24	-.22	.29
Disguise	.73	.22	-.19	.31
No real 'you'	.71	.24	-.24	.35
Here/ not here	.70	.25	-.16	.36
Not person	.69	.23	-.27	.30
Unreal	.67	.18	-.21	.26
Don't know think	.64	.41	-.37	.40
Don't exist	.64	.08	-.07	.15
Object	.62	.21	-.20	.36
Subscale 2:				
Defined by social roles/ context				
Dependent/ Think	.17	.78	-.16	.19
Routine	.23	.75	-.13	.23
Dependent/ Value	.19	.74	-.16	.18
Dependent/ Do	.23	.74	-.14	.32
Dependent/ Feel	.29	.73	-.14	.25
Expectations	.22	.70	-.12	.28
Prescribed	.07	.69	.04	.10
Social roles	.21	.67	.04	.10
Conformist	.08	.65	-.02	.10
Interaction	.30	.63	.03	.20

Details on selected items are presented in Appendix 2

Table 2 Rotated loadings of the Identity Questionnaire for the four factors extracted (continued)

	Factor loadings			
	1	2	3	4
Subscale 3:				
Internal regulation				
Inner strength	-.38	-.17	.70	-.33
Treat yourself	-.32	-.10	.69	-.33
Able reflect	-.10	-.11	.68	-.06
Own wishes	-.31	-.03	.68	-.17
Learn mistakes	-.27	-.14	.65	-.23
Constancy/stability	-.45	-.11	.64	-.39
Choices/decisions	-.30	-.17	.61	-.26
Know/ feel	-.33	-.11	.61	-.24
Do reflect	-.02	-.05	.60	-.08
Self in future	-.31	-.09	.60	-.24
Subscale 4:				
Lack of belonging/connectedness				
Fit/ family	.22	.17	-.18	.74
Belonging/ family	.25	.11	-.18	.72
Family/ impose	.26	.18	-.18	.70
Connected/ family	.14	.11	-.18	.69
Connected/ friends	.40	.18	-.35	.63
Belonging/ strangers	.33	.18	-.17	.61
Connected/strangers	.25	.23	-.22	.55
Strangers impose	.44	.29	-.24	.51
No right needs met	.44	.17	-.11	.47

Details on selected items are presented in Appendix 2

3.3.2 Descriptive statistics for the Identity Questionnaire

Subscales 1, 2 and 3 contained 10 items each and subscale 4 contained 9 items. Mean scores for each subscale are provided in Table 3.

Table 3 Identity Questionnaire subscale scores for the sample

	N	Mean	Range
Subscale 1			
<i>No sense of self</i>	520	10.97 (15.68)	0 – 85
Subscale 2			
<i>Defined by social roles/context</i>	516	34.62 (20.58)	0 – 92
Subscale 3			
<i>Internal regulation</i>	520	76.44 (17.04)	0 – 100
Subscale 4			
<i>Lack of belonging/connectedness</i>	514	20.60 (17.77)	0 - 86

Standard deviations in parentheses

3.3.3 Internal consistency

Cronbach’s alpha coefficients (alpha if item deleted) were calculated for each of the four subscales of the Identity Questionnaire. These ranged between 0.83 and 0.90 and indicated high levels of internal consistency (Kazdin, 2003). Cronbach’s alpha coefficients for the four subscales are presented in Table 4.

Table 4 Cronbach's alpha coefficients for the Identity Questionnaire subscales

	Cronbach's α
Subscale 1	
<i>No sense of self</i>	.90
Subscale 2	
<i>Defined by social roles/context</i>	.90
Subscale 3	
<i>Internal regulation</i>	.88
Subscale 4	
<i>Lack of belonging/connectedness</i>	.83

Subscale inter-correlations

Pearson correlations were calculated to determine the level of association between subscales. All four subscales were significantly correlated with each other. Pearson correlations for the four subscales are presented in Table 5. Subscale 3 *Internal regulation* correlated in a negative association, as would be expected, as items loading on internal regulation loaded negatively.

Table 5 Pearson correlations for the Identity Questionnaire subscales

	Subscale 1	Subscale 2	Subscale 3	Subscale 4
Subscale 1				
<i>No sense of self</i>	-	.32**	-.46**	.49**
Subscale 2				
<i>Defined by social roles/context</i>	.32**	-	-.19**	.31**
Subscale 3				
<i>Internal regulation</i>	-.46**	-.19**	-	-.38**
Subscale 4				
<i>Lack of belonging/connectedness</i>	.49**	.31**	-.38**	-

** Correlation is significant at the 0.01 level (2-tailed)

3.3.4 Construct validity

Construct validity was assessed in terms of convergent validity and divergent validity (Kazdin, 2003).

Convergent validity

Convergent validity was assessed by correlating the Identity Questionnaire subscales with scores on the HADS anxiety scale, HADS depression scale, BSL-23 and the RSE. Pearson correlations between the Identity Questionnaire subscale scores and the other questionnaires are presented in Table 6.

Table 6 Pearson correlations between the Identity Questionnaire subscale scores and the HADS, BSL-23 and RSE

	HADS Anxiety	HADS Depression	BSL-23	RSE
Subscale 1 <i>No sense of self</i>	-.35**	.22**	.60**	-.56**
Subscale 2 <i>Defined by social roles/ context</i>	-.23**	.09*	.33**	-.38**
Subscale 3 <i>Internal regulation</i>	.29**	-.17**	-.52**	.54**
Subscale 4 <i>Lack of belonging/ connectedness</i>	-.24**	.17**	.57**	-.58**

** Correlation is significant at the 0.01 level (2-tailed)

HADS Anxiety = Hospital Anxiety and Depression Scale – anxiety subscale; HADS Depression = Hospital Anxiety and Depression Scale – depression subscale; BSL-23 = Borderline Symptom List-23; RSE = Rosenberg's Self-Esteem Scale

Subscales 1 to 4 of the Identity Questionnaire were all significantly correlated with scores on the HADS anxiety subscale. Subscales 1, 2 and 4 correlated in a negative direction with scores on the HADS anxiety subscale ($r = -.23$ – $r = -.35$, all p -values $< .01$). A

possible explanation could be that anxiety, in the current study, may be indicative of better outcome, i.e. the higher scores on anxiety subscale, the greater awareness, and thus sense of self. Anxiety, in this respect, may be indicative of functionality and not necessarily seen as pathology. This might be explained by the large proportion of student participants in the current study (Andrews *et al.*, 2006).

Subscales 1, 3 and 4 correlated with scores on the HADS depression subscale ($r = -.17 - r = .22$, all p -values $< .01$). Of these, subscale 3 correlated in a negative direction. All four subscales of the Identity Questionnaire correlated with the BSL-23 ($r = .33 - r = .60$, all p -values $< .01$), with subscale 3 correlated in a negative direction.

All of the subscales also correlated with the RSE ($r = -.38 - r = -.58$, all p -values $< .01$), with correlations in a negative direction for all scales apart from subscale 3. The results overall suggested good convergent validity, although it is important to note that the significant correlations with anxiety were negative, and greater anxiety was associated with fewer identity problems. Given that these correlations were relatively small and a large sample size was obtained, it is possible that these were chance associations.

Divergent validity

Divergent validity was assessed by correlating the Identity Questionnaire subscales with demographic data on age and years of education, and with scores on the SDRS-5. Pearson correlations between the Identity Questionnaire subscale scores and the other scores are presented in Table 7. Subscale 3 and subscale 1 of the Identity Questionnaire correlated significantly with age. This could potentially be ascribed to the content of subscale 3 “internal regulation”, i.e. to a sense of reflection, maturity and internal regulation which might plausibly be related to an individual’s age. Subscale 4 correlated significantly with years of education, but only weakly ($r = .10$). All four subscales of the Identity Questionnaire correlated significantly with the SDRS-5 in a negative direction, except

subscale 3 which correlated significantly in a positive direction. However, the absolute values of the correlations here are small and their significance is likely to be a result of the large sample size (N =535). Overall, the relative lack of correlations between the Identity Questionnaire subscales, age, years of education, and the identified weak correlations, suggests adequate divergent validity.

Table 7 Pearson correlations between the Identity Questionnaire subscale scores and age, years of education and scores on the SDRS-5.

	Age	Years of education	SDRS-5
Subscale 1 <i>No sense of self</i>	-.11*	.08	-.13**
Subscale 2 <i>Defined by social roles/ context</i>	-.04	.05	-.12**
Subscale 3 <i>Internal regulation</i>	.14**	-.07	.15**
Subscale 4 <i>Lack of belonging/ connectedness</i>	-.03	.10*	-.16**

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

SDRS-5 = Socially Desirable Response Set

3.3.5 Summary

Four coherent factors emerged from the exploratory factor analysis. This confirms Hypothesis a.) “That coherent/meaningful themes will emerge from a factor analysis”. These factors contained items relating to *no sense of self*, *self defined by social roles/context*, *internal regulation* and *lack of belonging/connectedness*, which became the four subscales of the Identity Questionnaire, as developed in this study. In each instance,

the items that loaded most highly on each factor were selected to create the four subscales.

Cronbach's alpha coefficients were high for all four subscales of the Identity Questionnaire (ranging from $\alpha = .83$ to $\alpha = .90$). This confirms Hypothesis b.) "That the subscales will have good internal reliability/consistency". All four subscales correlated significantly with each other using Pearson correlations (all p values $\leq .01$).

The results suggest overall good convergent validity and good divergent validity for the Identity Questionnaire. Overall, the findings largely confirm Hypothesis c.) "That the measure will have good construct validity".

3.4 Relationship with Borderline Personality Disorder symptomatology

As indicated above, all four subscales of the Identity Questionnaire correlated significantly with scores on the BSL-23. This suggests a positive relationship between negative scores related to one's sense of self and borderline personality disorder symptomatology, where difficulties with the self are seen as being at the core of the disorder (Linehan, 1987). These subscales did, however, also correlate with scores on the HADS anxiety scale, somewhat with scores on the HADS depression scale and with scores on the RSE. In order to investigate the possible effect of anxiety and depressive symptoms and self-esteem on the relationship between borderline personality disorder symptomatology and scores on the Identity Questionnaire (specifically to look at the relationship of the Identity Questionnaire with Borderline Personality Disorder

symptomatology, when common variance associated with current mood and self-esteem were controlled), partial correlations were computed between each subscale of the Identity Questionnaire and the BSL-23, whilst controlling for anxiety and depression scores on the HADS respectively and for RSE scores and then for HADS Anxiety, HADS Depression and RSE simultaneously. Partial correlations are presented in Table 8.

Table 8 Partial correlations between the Identity Questionnaire subscale scores and BSL-23, whilst controlling for HADS Anxiety, HADS depression and the RSE

	BSL-23 Total – controlling for HADS Anxiety	BSL-23 Total – controlling for HADS Depression	BSL-23 Total – controlling for RSE	BSL-23 Total – controlling for HADS Anxiety; HADS Depression and RSE
Subscale 1				
<i>No sense of self</i>	.52**	.58**	.34**	.29**
Subscale 2				
<i>Defined by social roles/ context</i>	.25**	.32**	.08	.04
Subscale 3				
<i>Internal regulation</i>	-.46**	-.51**	-.22**	-.20**
Subscale 4				
<i>Lack of belonging/ connectedness</i>	.55**	.56**	.26**	.28**

** Correlation is significant at the 0.01 level (2-tailed)

BSL-23 = Borderline Symptom List-23; HADS Anxiety = Hospital Anxiety and Depression Scale – anxiety subscale; HADS Depression = Hospital Anxiety and Depression Scale – depression subscale; RSE = Rosenberg’s Self-Esteem Scale

Table 8 above indicates that all correlations aside from two of those with subscale 2 *Defined by social roles/context* remained significant (both involving the RSE), suggesting that the Identity Questionnaire subscale scores are associated with borderline personality disorder symptomatology, independently from anxiety, depression and self-esteem. The

results indicate that correlations also remain significant for subscales 1 *no sense of self*, 3 *internal regulation* and 4 *lack of belonging/ connectedness* even after controlling for the HADS Anxiety, HADS Depression and the RSE Self-esteem factors simultaneously. Overall, subscale 2, *defined by social roles/context*, correlated rather less with the BSL-23 than the remaining three subscales when controlling for anxiety, depression and self-esteem. It is perhaps expected that self-esteem has significance in a social context, where an individual's identity is perhaps more dependent on and *defined by social roles/context*.

3.4.1 Ability of Identity Questionnaire to predict borderline personality disorder symptomatology

In a more rigorous test of the ability of the Identity Questionnaire subscales to predict borderline personality disorder symptomatology, linear regressions were performed.

The results of the initial regression analyses indicated that the assumptions for regression were not fully met. The residuals did not appear to be normally distributed and variance of residuals was not constant over a range of BSL-23 scores. In order to address this, transformations of BSL-23 scores were investigated. This included transformations of square root and logarithmic transformations. A transformation using square root of the BSL-23 data produced a regression that did meet the necessary assumptions. Hierarchical stepwise regressions were then performed. In order to control for variance associated with anxiety, depression, age and years of education, these variables were entered first, followed by the Identity Questionnaire subscales on the second step.

The HADS Anxiety, HADS Depression, age and education scores accounted for 36.6% of the variance in BSL-23 scores ($R^2 = .37$, $F = 68.38$, $p < .001$). An additional 17.8% was accounted for by scores on subscale 4 *lack of belonging/connectedness* ($R^2 = .54$, $F = 112.50$, $p < .001$), a further 4.3% by subscale 3 *internal regulation* ($R^2 = .59$, $F = 111.52$, $p < .001$), and a further 2.2% by subscale 1 *no sense of self* ($R^2 = .61$, $F = 104.67$, $p < .001$). Subscale 2 did not contribute significantly to the predictive value of the model.

Table 9 shows the relative contribution of each variable to the final model. The results indicate that anxiety as well as subscales 1, 3 and 4 contributed to the prediction of the variance in BSL-23 scores.

Table 9 Results of regression for age, education, HADS Anxiety, HADS Depression and Identity Questionnaire subscales as predictors of borderline personality symptomatology

Predictors	B (unstandardized coefficients)	Standard error	t	Significance (p)
(Constant)	7.30	0.48	15.38	.001
Age	-.01	.01	-1.04	.30
Education	.01	.01	.81	.42
HADS Anxiety	-.28	.02	-12.06	.001
HADS Depression	.03	.03	1.14	.26
Factor 1	.03	.003	9.05	.001
Factor 3	-.02	.003	-5.47	.001
Factor 4	.02	.004	5.18	.001

$p < 0.001$ level (2-tailed)

Age = age of participants; Education = years of education of participants; HADS Anxiety = Hospital Anxiety and Depression Scale – anxiety subscale; HADS Depression = Hospital Anxiety and Depression Scale – depression subscale; Factors 1,3,4 = subscales of Identity questionnaire

3.4.2 Comparing groups of low and high scores on borderline personality disorder symptomatology

Groups scoring low and high on borderline personality disorder symptomatology were created on the basis of scores on the BSL-23. For the purpose of this current study, the lowest 10% of scores and highest 10% of scores were selected to indicate low and high scores on borderline personality disorder symptomatology. Of those participants who completed the BSL-23 questionnaire, 8.8% scored in the low group (N =43), with scores ranging from 0 to 3. Of those participants who completed the BSL-23, 10.6% scored in the high group (N =52), with scores ranging from 40 to 83. This is represented in Table 10.

Table 10 Low and High score groups on the BSL-23

BSL-23 Groups	N (SD)	Minimum	Maximum
BSL-23 Low Group	43 (1.00)	.00	3.00
BSL-23 High Group	52 (11.16)	40.00	83.00

Standard deviations in parentheses

Table 11 shows the mean scores for Low score and High score groups on the BSL-23 in relation to the four subscales of the Identity Questionnaire.

Table 11 Mean Identity Questionnaire subscale scores for BSL-23 Low score and BSL-23 High score groups

	BSL-23 Low Group	BSL-23 High Group
Subscale 1	2.50 (4.00)	31.82 (26.46)
<i>No sense of self</i>		
Subscale 2	20.11 (18.74)	45.72 (21.53)
<i>Defined by social roles/ context</i>		
Subscale 3	83.79 (23.98)	57.98 (16.19)
<i>Internal regulation</i>		
Subscale 4	8.59 (9.08)	42.84 (18.70)
<i>Lack of belonging/ connectedness</i>		

Standard deviations in parentheses

BSL-23 Low Group = participants who scored low on Borderline Symptom List-23

BSL-23 high Group = participants who scored high on Borderline Symptom List-23

A One-Sample Kolmogorov-Smirnov test was performed on the four subscales for each of the low score and high scores BSL-23 groups. Two of the factors were found not to be normally distributed in the BSL-23 low score group and thus presented a problem for parametric analysis. Individual histograms were graphed for the subscales and lack of normal distribution for this group was confirmed. None of the four factor scores in the BSL-23 high score group showed any evidence of lack of normal distribution but, due to the problems in the low score BSL-23 group, the use of T-tests was not considered appropriate. Non-parametric statistics were therefore used and Mann-Whitney U-tests were performed for these comparisons. Table 12 shows that there were significant differences between the low score group and high score group on all four

factors/subscales of the Identity Questionnaire, with the high group scoring more highly on factors 1, 2 and 4 and lower on factor 3, than the low group.

Table 12 Mann-Whitney U Test between Low score group and High score group in relation to Identity Questionnaire subscale scores

	BSL-23 Low Group (Mean Rank)	BSL-23 High Group (Mean Rank)	Mann-Whitney U
Subscale 1 <i>No sense of self</i>	26.76	63.67	221.00**
Subscale 2 <i>Defined by social roles/ context</i>	31.32	60.57	412.50**
Subscale 3 <i>Internal regulation</i>	68.94	30.68	217.50**
Subscale 4 <i>Lack of belonging/ connectedness</i>	24.07	66.72	89.00**

** Correlation is significant at the 0.01 level (2-tailed)

BSL-23 Low Group = participants that scored low on Borderline Symptom List-23

BSL-23 high Group = participants that scored high on Borderline Symptom List-23

3.4.3 Summary

Overall, a positive relationship was found between levels of borderline personality disorder symptomatology and identity problems, as measured by the Identity Questionnaire. The relationship between these, i.e. between scores on the BSL-23 and scores on the Identity Questionnaire largely remained when demographic data, anxiety and depression scores were taken into account. Regression analysis indicated that subscales 1, 3 and 4 of the Identity Questionnaire predicted scores on the BSL-23, thereby confirming hypothesis II.) “That identity will predict unique variance in borderline personality disorder symptoms when demographic and general distress, including depressive symptoms, is controlled for”.

Participants were divided into a low score and a high score group on the Borderline Symptom List-23. Approximately the lowest 10% of scores and highest 10% of scores were selected for these groups. Participants who scored low on borderline personality symptomatology also scored low on *no sense of self, defined by social roles/context, lack of belonging/connectedness* but high on *internal regulation*. Equally, participants who scored high on borderline personality symptomatology scored high on *no sense of self, defined by social roles/context, lack of belonging/connectedness* but low on *internal regulation*, as predicted. This largely confirms Hypothesis III.) “That those individuals with high levels (e.g. top decile of scores) of borderline personality disorder symptoms will score more highly on the identity measure than those with low levels”. The overall results contained in this section largely confirms hypothesis I.) “That a reliable and valid measure of identity problems can be developed by this study”.

4 Discussion

The aim of this study was to develop an Identity Questionnaire for use among people with identity difficulties. A summary of the findings is presented in this section.

4.1 Overview of results

The study was an online questionnaire study and 535 participants completed the questionnaires. Of these participants, 211 were male and 313 were female. The questionnaires related to anxiety, depression, identity, borderline symptoms, self-esteem and social desirability.

4.1.1 Participants and questionnaire measures

Demographic data indicated that the majority of participants from the current non-clinical population (N =535) were relatively young, with 77.5% of participants aged 26 years and under. Participants were mainly recruited from the University of Oxford and Oxford Brookes University, as well as acquaintances of the researcher. The majority of participants appeared to be from a student population and thus on average highly educated, with the mean years in education being 15 years (SD =4.49).

Mean scores of anxiety and depression symptomatology were higher than those reported in other non-clinical population studies. The mean score for the anxiety subscale was in the “probable” range (Zigmond & Snaith, 1983; Snaith & Zigmond, 1994). These

findings may be due to the prevalence of high rates of mood psychopathology in a student population (Andrews *et al.*, 2006).

The mean score for the self-esteem scale was slightly lower than that reported by Rosenberg (1989), indicating relatively higher self-esteem for the participants in the current study. This may be due to a large percentage of participants being from a student population, with higher self-esteem related to academic achievement (Kapur *et al.*, 2006); with the mean from the current sample comparable to those of control groups in clinical studies (e.g. Woolrich *et al.*, 2006). There are frequent empirical observations that self-esteem for individuals in non-clinical populations is positive (Greenwald *et al.*, 2002). It is acknowledged that the exact relationship between self-esteem and overall identity however remains unclear, partly because these multiple constructs of self-concept are difficult to assess empirically (Campbell *et al.*, 1996; Marsh, 1986). They noted that “although high self-esteem people have positive, well-articulated beliefs about the self, the prototypic low self-esteem person does not, in contrast, have a well-defined negative view of the self” (Campbell *et al.*, 1996, p.142). Campbell and colleagues (1996) also reported that the assumption that self-esteem is a relatively stable trait currently remains unsupported. Despite limited consistency in the exact definition and utilisation of the construct of self-esteem, certain common threads are present and it remains an important area in clinical settings (Guindon, 2002).

Although no comparative norms are available yet for the Borderline Symptom List-23 (BSL-23), the lowest 10% of scores and highest 10% of scores of those who completed

the Identity Questionnaire were selected for a low score group and a high score group respectively. As predicted, participants who scored low on borderline personality disorder symptomatology also scored low on identity problems, as measured by the Identity Questionnaire. Equally, participants who scored high in borderline personality disorder symptomatology also scored high on identity problems, as predicted.

4.1.2 Development of the Identity Questionnaire

The Identity questionnaire consisted of 96 items that participants completed online, together with the other questionnaire measures. These items were pre-selected in a study by Padgett (2006). Items were selected based on clinical experience, statements identified in the literature as particularly associated with identity problems and qualitative data that had been routinely and systematically collected in previous research in this area (Padgett, 2006).

Four coherent factors emerged from the factor analysis. The themes related to 1.) *no sense of self*, 2.) *an identity defined by social roles/context*, 3.) *internal regulation* and 4.) *lack of belonging/connectedness*. The items that loaded most highly on each factor were selected for the four factors/subscales.

The results indicated that the new questionnaire had good internal consistency, good construct validity and good divergent validity with the possible exception of its relation with anxiety. High levels of anxiety were associated with lower levels of identity problems (and anxiety was also a negative predictor in the regression equation). It is

possible that these relationships are an artefact of the large sample size; it is also possible that, particularly in relation to Borderline Personality Disorder symptomatology, higher levels of anxiety are functional and reflect greater self awareness or insight, thus correlating significantly with psychopathology. This requires further examination.

Overall, the results suggested a predictive relationship between scores on the Identity Questionnaire and scores on Borderline Personality Disorder symptomatology (BSL-23).

4.2 Interpretation of findings

4.2.1 Identity Questionnaire and Subscales

The Identity Questionnaire subscales, with their respective items, are explored in further detail below. A copy of the questionnaire can be found in Appendix 2.

Subscale 1: No sense of self

The following items were contained in this subscale: “You are pretending to be a person”, “You are a human being but not a person”, “There is no real ‘you’; you are physically here but somehow the real ‘you’ doesn’t exist”, “you are unreal”, “You are both here and not here”, “You are wearing the disguise of a person”, “Your sense of self is absent, you have no sense of self”, “You don’t really know what you think”, “You don’t exist”, “You are an object rather than a person”.

The items contained in this subscale seem related to no sense of self or a negative sense of self and to the central concept of: “Who am I?” (Fuchs, 2007, p.380). This is especially

prevalent in borderline personality symptomatology, where the self is often fragmented (Fuchs, 2007) and marked by instability in multiple areas, such as identity disturbance (Giesen-Bloo *et al.*, 2006). Individuals also lack the capacity to establish a coherent self-concept (Fuchs, 2007), i.e. experience “a painful sense of incoherence” (Wilkinson-Ryan & Westen, 2000, p.540). These items regarding *no sense of self* appear to reflect an “absence of self” and validate Butler’s observations in clinical practice (Butler, 2002; Butler, 2004), i.e. a profound disturbance in the self.

The results of the regression analysis suggested that this subscale is related independently to anxiety, depression and self-esteem. It also distinguished between participants who scored low and high on borderline personality disorder symptomatology, i.e. predicted borderline personality disorder symptomatology. This prediction is consistent with the literature saying that these difficulties are common in borderline personality disorder (e.g. Fuchs, 2007).

Subscale 2: *Defined by social roles/context*

The following items were contained in this subscale: “Your sense of self is dependent on social interaction with other people”, “Your sense of self is dependent on social roles (i.e. work, family)”, “You find it difficult to stand back from your roles and social expectations to act autonomously”, “You act in accordance with a prescribed role and expected norms”, “You need background structure and routine to define your sense of self (i.e. to guide what you do, say, feel, value)”, “You are dependent on social roles or close persons/surroundings to guide what you THINK”, “You are dependent on social

roles or close persons/surroundings to guide what you DO”, “You are dependent on social roles or close persons/surroundings to guide what you FEEL”, “You are dependent on social roles or close persons/surroundings to guide what you VALUE”, “You have conformist attitudes”. The terms THINK, DO, FEEL and VALUE were capitalised to avoid confusion between these rather similar items.

The items in this subscale relate to social roles and the social context of individuals. It has been reported that self-concept is formed through personal experiences and interpretation of the environment (Ellis-Hill, 2000). Identity formation is viewed as a “reciprocal process between the psychological interior of the individual and her/his socio-cultural environment” (Erikson, 1968, *cited in* Adamson *et al.*, 1999, p.21) and the importance of “developing a defined ego within a social reality” (Erikson, 1959, *cited in* Adamson & Lyxell, 1996, p.570) has been emphasised. Identity disturbance in borderline personality disorder is characterised by “overidentification with groups or roles and, to a lesser extent, difficulties with commitment to jobs, values, and goals” (Wilkinson-Ryan & Westen, 2000, p.540).

This subscale did not predict borderline personality disorder symptomatology in the regression, i.e. no unique variance was predicted. This may be due to this subscale; self *defined by social roles/ context*, being a more generic self factor, i.e. it might be related to other symptomatology as well, and is not necessarily unique to borderline personality disorder symptomatology.

Subscale 3: *Internal regulation*

The following items were contained in this subscale: “You know what you feel”, “You have a sense of inner strength”, “You have your own wishes”, “You are able to make choices or decisions”, “You can learn from mistakes”, “You are ABLE to reflect on your ‘self’, that is ‘think’ about your own thoughts, feelings and/or behaviour”, “You DO reflect on your ‘self’, that is ‘think’ about your own thoughts, feelings and/or behaviour”, “You have a sense of constancy and stability”, “You are able to treat yourself”, “You are able to think about yourself in the future”.

The items in this subscale relate to internal regulation and an ability to reflect on the self. Individuals with a strong sense of internal regulation are less likely to experience identity problems. In relation to this subscale, individuals possess the capacity to integrate contradictory aspects into a coherent, overarching sense and view of themselves (Fuchs, 2007). Harter (1983, *cited in Adamson et al., 1999*) highlighted the importance of a sense of unity among one’s self-conceptions, a sense of continuity of these attributions over time, and a sense of mutuality between the individual’s conception of the self and the conception held by others.

This sense of internal regulation reflects ideas in psychodynamic literature on the “reflective function” (Segal & Blatt, 1993) and mirrors literature on the global vs. domain-specific aspects of the self (Harter, 1999).

Subscale 4: *Lack of belonging/connectedness*

The following items were contained in this subscale: “Your family impose themselves on you in a negative rather than positive manner”, “You don’t fit in with your family as required”, “You have no sense of belonging in your family”, “You have no sense of belonging with strangers”, “You have no sense of being connected to family”, “You have no sense of being connected to friends”, “You have no sense of being connected to strangers”, “Strangers impose themselves on you in a negative rather than positive manner”, “You don’t have any right to ask for your needs to be met by others”.

This subscale contained items related to a lack of belonging and to a lack of feeling connected, whether it is to family, friends or strangers. This is consistent with findings in borderline personality disorder in that individuals often have marked difficulties with interpersonal relationships (e.g. Bohus *et al.*, 2007). Wilkinson-Ryan and Westen (2000) reviewed empirical and theoretical literature on the self and identity and cited the importance of “some recognition of one’s place in the world by significant others” (Westen, 1992, *cited in* Wilkinson-Ryan & Westen, 2000, p.529).

The items in this subscale also linked with not being able to maintain boundaries and not being able to be assertive. This subscale is indicative of problems associated particularly with borderline personality disorder symptomatology, as the unique variance predicted.

4.2.2 Link with Borderline Personality Disorder Symptomatology and other symptomatology

The overall results of the current study indicated that there is indeed a relationship between identity problems and borderline personality disorder symptomatology. These findings correspond to the literature on identity and self-concept, in that higher levels of negative self-concept/identity problems are particularly prevalent in borderline personality disorder populations, when compared to individuals from non-clinical populations (e.g. Fuchs, 2007; Bohus *et al.*, 2007; Wilkinson-Ryan & Westen, 2000). Findings also indicate that borderline personality features are associated with poorer outcome for treatment success, even within non-clinical populations (Trull *et al.*, 1997).

In the same light, a study that examined self-concept amongst males from a non-clinical population and males with Gender Identity Disorder (American Psychiatric Association, 1994), where identity is a key concept, the results indicated significant differences in self-concept. Participants from the non-clinical population had more positive self-concepts (Taher, 2007), as predicted. Identity problems may also be prevalent in other disorders, such as Eating Disorders, Depression and other Personality Disorders.

4.3 Strengths and limitations of the study

The Identity Questionnaire in this study built on a previous study of Padgett (2006). The current study aimed to develop a questionnaire and focus on its validity in relation to borderline personality symptomatology. The main methodological consideration for the future would be to replicate this study and its factor structure in order to ascertain the

validity of the measure. Test-retest reliability has not been done and future studies should include this to ascertain reliability. Replication of this study might also usefully focus on confirmatory factor analysis, rather than exploratory analysis as used in the current study. Future studies could focus on: whether the Identity Questionnaire distinguishes individuals with Borderline Personality Disorder symptomatology from non-Borderline Personality Disorder symptomatology individuals; studies with other groups; and replication of the factor analysis in a clinical sample.

4.3.1 Participant and sample characteristics

The large sample size ($N = 535$) is a strength of the current study. Questionnaire development studies have typically included approximately 250 participants (e.g. Cooper *et al.*, 1997; Hinkin, 1995). This larger sample size made within group comparisons possible. There is, however, the increased possibility of a Type I error within a larger sample as the chance of comparisons between variables reaching significance is increased.

An important aspect of the current study was the relatively high ratio of male participants ($N \text{ male} = 211$; 39.4%; $N \text{ female} = 313$; 58.5%) as most studies examining borderline personality disorder or features predominantly focus on a female sample population (Trull *et al.*, 1997).

The sample population of participants in the current study should be considered in the interpretation of findings. The majority of participants were from a student population,

from Oxford University and Oxford Brookes University, and this should be taken into account when generalising from the findings. Participants were on average young, well-educated and not necessarily representative of the population as a whole. The exact breakdown of participants from the University of Oxford, Brookes University and acquaintances of the researcher could not be ascertained due to participant anonymity. It is acknowledged that the sample should perhaps have focused exclusively on participants from the student populations for more robust generalisability. Due to ethical issues, comparisons were not made between these participants in the study.

The exact reasons for participation in the current study are not known. The prize draws are likely to have been an incentive for potential participants. It is not known whether a particular interest in the area of identity and borderline personality symptomatology may have played a role in individual participation, as individuals who have a particular interest in this area may have been more likely to complete the online questionnaires. This, in turn, could have biased the participant population.

Bunce and colleagues (2005) cautioned against possible sampling bias of participants in research studies, in that individuals who may be suffering from personality disorder symptomatology, but who have not necessarily received a diagnosis, may be keener to volunteer to participate in research studies and clinical trials. In their study, a high prevalence for personality disorders was found amongst volunteers for a non-clinical population study (Bunce *et al.*, 2005). While the prevalence of those with Borderline Personality Disorder could not be determined the results of the current study, with a non-

clinical population, also suggested that some individuals had high scores on a Borderline Personality Disorder symptom measure. The current study, as an internet study, also meant that the researcher had limited control over who chose to participate in the study and that the exact reasons for participation remain unknown. It is, therefore, important to consider the possibility of participant bias.

A limitation of the current study was that no details regarding ethnicity, culture, nationality, religious affiliation or sexuality were asked in the demographic section. Issues surrounding individuals' ethnicity, culture, country of origin, religious beliefs or sexual orientation could potentially have a significant impact on their identity and self-concept. The sample population from the current study are likely not to have been very diverse.

These above omissions limit the comparisons that can be made and did not allow for cultural differences and beliefs regarding identity (Wilson & Constantine, 1999). These would be valuable factors to take into account in future research and a potentially valuable area for future psychological research. It should be noted that the sample from the current population were, on average, from a British population. Markus and Kitayama (1991, *cited in* Campbell *et al.*, 1996) argued that individuals from Western and Eastern cultures have strikingly different concepts of the self and thus, for example, of their internal regulation. The authors note that individuals in Western societies are more likely to view themselves as an independent, self-contained and autonomous entity (Campbell

et al., 1996) and discuss how individuals from Eastern societies are more likely to view themselves as an interdependent, interconnected entity (Campbell *et al.*, 1996).

4.3.2 Use of the Internet

The internet was a fast and reliable medium for the purpose of the current study. A strength of this website based study was that it was free of charge via the University of Oxford Webmail service and thus free to recruit participants. The data was automatically transferred and stored in a password protected spreadsheet as participants completed the online questionnaires. The online study also allowed for anonymity of participants as any identifiable data was stored separately from the database, and also password protected.

A potential limitation of the current study was the limited control over who received and completed the online questionnaires. Individual colleges were contacted, from the University of Oxford and Oxford Brookes University, as well as acquaintances of the researcher. The colleges distributed the study link via email to individual students and could have potentially forwarded the study link to other sources as well. In the spirit of recruiting a broad sample population, this might be a potential strength, but should nevertheless be taken into account when generalising from the findings.

A further potential limitation was the lack of human contact for participants as they did not meet with the researcher. This can be construed as both a potential strength and limitation. On the one hand, some participants may have liked to meet the researcher and discuss the area and be able to ask questions. On the other hand, some participants may

have preferred the relative ease of completing the questionnaires online in their own time. Different people may thus have participated in the study if it had a human element and they could meet with the researcher.

The uses of internet based studies are fairly new in psychological research (British Psychological Society, 2007) and further research is warranted to establish the validity of such online studies. Vallejo and colleagues (2007) have reported on the relative similarities between internet studies and paper-and-pencil studies, but the results are yet to be replicated to ascertain the validity of individual studies such as the current one.

4.3.3 Identity Questionnaire Items

The Identity Questionnaire consisted of 96 items and was based on the Padgett (2006) study. A strength was that the individual items were collated based on clinical experience, self-concept literature and qualitative data (Padgett, 2006) and thus included a broad array of items associated with identity. A potential limitation was that this questionnaire, together with the other questionnaires on the website, was somewhat lengthy for participants to complete. Based on the current study and the factor analysis, 39 items were selected for the four subscales/themes. These 39 items, as opposed to the original 96 items, could now be included in future studies for a shortened version of the original questionnaire. Some of the wording of certain items was quite psychological, and may not necessarily have been readily understood by participants less familiar with psychology terminology and concepts. The wording of the items “You are” instead of “I am”, as used in the other questionnaires, should also be taken into account and could

potentially have influenced responses. Fluency in English was assumed if participants completed the online questionnaires, but this can not be readily assumed.

4.4 Implications of the results

4.4.1 Clinical and research implications

Despite the above methodological considerations that should be taken into account, the results suggest that identity can be construed as consisting of four themes that are coherent and robust. In addition, the results of the current study suggest that the Identity Questionnaire may be a useful tool in the identification of identity problems, both clinically and for research purposes. Identification of these difficulties could be a valuable step towards addressing these in clinical practice. The presence of identity problems in some respondents, and relationship to psychopathology, albeit in a non-clinical population suggests that clinicians should be attuned to identity problems in their clinical practice. The results suggested a positive relationship between identity problems and borderline personality disorder, as an example of a more clinical severe identity difficulty (Fuchs, 2007; Bohus *et al.*, 2007). Individuals with more severe identity problems were thus also likely to score higher on borderline personality disorder symptomatology, and vice versa.

Individuals with identity problems may find it difficult to express their beliefs and feelings about themselves and a self-report questionnaire may be potentially useful to overcome this and could be used as a potential screening tool. The use of a questionnaire measure, such as the Identity Questionnaire in the current study, to identify potential

identity problems may also be seen as a less invasive manner to acquire clinical information in a clinical setting.

It has been suggested that some individuals with identity problems do not respond well to cognitive therapy (Butler, 2002; Butler, 2004). The literature furthermore identifies co-morbid personality disorders (e.g. Young, 1999; Beck & Freeman, 2004), such as borderline personality disorder, and low self-esteem (e.g. Robson, 1989) as potential predictors of poor outcome with standard cognitive therapy. It is envisaged that the identification of identity problems in a therapeutic setting could aid the formulation of such cases and focus and direct individual treatments tailored to address these core identity difficulties (Butler, 2002; Butler, 2004; Padgett, 2006). This, in turn, could aid clinical work when working with individuals with identity problems who do not necessarily respond well to traditional treatment regimes (Butler, 2002; Butler, 2004). It has been suggested that borderline personality disorder is the most frequently diagnosed personality disorder in clinical settings (Widiger & Trull, 1993, *cited in* Trull *et al.*, 1997) and thus of great clinical concern. The benefit of optimising treatment response (Roth & Fonagy, 2004) for this group is of obvious importance given the implications of well-being and quality of life for clients and limited resources in the National Health Service.

Specific treatment strategies, tailored to address identity problems in clinical settings, have not been discussed in the current study. Future research could address treatment shortfalls where individuals with identity problems do not necessarily respond well to, for example, cognitive therapy (Butler, 2002; Butler, 2004), highlighting the need to develop treatments that might target identity problems. The identification of these identity

problems in therapy, such as screened for by the Identity Questionnaire from the current study, could potentially be a valuable first step to address these discrepancies within clinical settings.

4.4.2 Theoretical implications

The overall results confirmed the predicted positive relationship between borderline personality disorder symptomatology and identity problems. Given the potential psychological distress experienced by individuals with identity problems (e.g. Fuchs, 2007; Butler, 2002; Butler, 2004), this is an important area for future theoretical and empirical research. It is envisaged that use of the Identity Questionnaire to help identify these problems will be particularly helpful in facilitating conceptualisation and adequate treatment of these difficulties. The majority of studies investigating borderline personality disorder has been with clinical populations, yet from this study symptoms appear to be relatively prevalent in non-clinical populations too (Zimmerman & Coryell, 1989, *cited in* Trull *et al.*, 1997). This supports the ‘continuum’ idea of identity problems; that these are not just seen in those individuals with severe and complex problems. From a cognitive perspective, the current study has identified four themes that need to be considered when focusing on identity and its conceptualisation. This can be construed as a first step in understanding the relevant complexities of this area and validates several theoretical views of the self.

4.5 Directions for future research

It is recommended that the factor structure be replicated in order to confirm the validity and reliability of the Identity Questionnaire. Identity and the *self* are multifaceted and multi-dimensional (e.g. Marsh, 1987), and the exact relationship between various psychological constructs, such as identity, self-concept and self-esteem still remains uncertain and may be a useful direction for continued future research. The relationship between self-esteem and the Identity Questionnaire was not explored in detail here and future studies might usefully focus on this.

It would also be useful to replicate this study with a clinical population in relation to identity problems and borderline personality disorder symptomatology. Future research could focus on certain specific constructs, such as shame and guilt-proneness that are associated with identity problems and often prominent in borderline personality disorder (Rusch *et al.*, 2007). This, in turn, could help develop the theory base for borderline personality disorder.

Furthermore, it would be interesting to conduct a qualitative study to gain more detailed understanding of individuals' experiences of the *self*. Identity has a strong qualitative aspect as "a feeling is always tied to the concept" (Adamson & Lyxell, 1996, p.570). The scope of the current study was limited to data obtained from Padgett's (2006) study. A qualitative study could reveal themes beyond the analyses of the current study and consequently unearth potential rich descriptions which might be useful both clinically and for research purposes.

The current study did not address the potential origin of identity problems. It is well known from psychological literature that significant trauma and abuse in childhood, such as sexual abuse, can result in difficulties related to the self (e.g. Pfafflin & Adshead, 2004; Welldon & Van Velsen, 1999; Gerhardt, 2004). Similarities between these difficulties and identity problems would be an important and clinically relevant area for future research. The relationship between adoption and identity formation would be a further interesting area for focus (Brodzinsky, 1993). Future research on the development of identity formation in children would be interesting to ascertain their emerging sense of selves as they develop (Smiley & Johnson, 2006). Knowledge of the contributing factors may be particularly important, in order to enhance clinical understanding, enhance individual formulations and to facilitate tailored clinical interventions when working with those with identity problems.

Further future research could focus on the relationship between identity problems and other psychological disorders and co-morbid factors; explore identity problems and issues related to the *self* in different ethnic and cultural populations; research experiences of the *self* between males and females, as well as for various specific age groups; and the development of clinically relevant and effective treatment models.

Changes in identity and the *self* in a health related context, for instance following a stroke (Ellis-Hill, 2000) would be a further interesting area for research. Other areas for focus could be the relationship between identity/self-concept and Gender Identity Disorder

(Taher, 2007) or the relationship between identity and eating disorder symptomatology (e.g. Cooper *et al.*, 1997).

4.6 Conclusion

The concept of identity has been researched using a wide array of terminology, including ‘self-concept’, ‘self-esteem’ and ‘self-difficulties’. It has been suggested that current cognitive theory and therapy is not always effective to adequately identify, conceptualise and treat these identity problems (Butler, 2002; Butler, 2004; Padgett, 2006).

The current study described the development of a self-report Identity Questionnaire to assess identity problems. The current study also examined the relationship between identity problems, as measured by the Identity Questionnaire, and Borderline Personality Disorder symptomatology, as an example of a disorder characterised by severe identity problems.

The factor structure of the Identity Questionnaire suggested promising results and found links between identity problems and borderline personality symptomatology. Replication of the factor analysis is advised in order to confirm the psychometric properties of the scale and the generalisability to other populations, for instance to different clinical as well as non-clinical populations.

It is hoped that the Identity Questionnaire developed in the current study will be a useful first step and provide a clinical and research tool to help assess identity problems in order that they can be conceptualised and treated effectively in the future.

References

Adamson, L., Hartman, S.G. & Lyxell, B. (1999). Adolescent identity – a qualitative approach: Self-concept, existential questions and adult contacts. *Scandinavian Journal of Psychology*, 40, 21-31.

Adamson, L. & Lyxell, B. (1996). Self-concept and questions of life: identity development during late adolescence. *Journal of Adolescence*, 19, 569-582.

Alford, B.A. & Beck, A.T. (1997). *Cognitive Therapy: An Integration of Contemporary Theory and Therapy*. Guildford: Guildford Publications.

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edn). Washington, DC: American Psychiatric Association.

Andrews, B., Hejdenberg, J. & Wilding, J. (2006). Student anxiety and depression: Comparison of questionnaire and interview assessments. *Journal of Affective Disorders*, 95, 29-34.

Arntz, A., Klokman, J. & Sieswerda, S. (2005). An experimental test of the schema mode model of borderline personality disorder. *Journal of Behaviour Therapy and Experimental Psychiatry*, 36 (3), 226-239.

Bandura, A., Adams, N.E. & Beyer, J. (1977). Cognitive processes mediating behavioural change. *Journal of Personality and Social Psychology*, 35 (3), 125-139.

Barker, C., Pistrang, N. & Elliott, R. (2002). *Research Methods in Clinical Psychology: An Introduction for Students and Practitioners* 2nd Ed. John Wiley & Sons: Chichester.

Baumeister, R.F., Tice, D.M. & Hutton, D.G. (1989). Self-Presentational Motivations and Personality Differences in Self-Esteem. *Journal of Personality*, 57 (3), 547-579.

Beck, A.T., Epstein, N., Brown, G. & Steer, R.A. (1988). An Inventory for Measuring Clinical Anxiety: Psychometric Properties. *Journal of Consulting and Clinical Psychology*, 56 (6), 893-897.

Beck, A.T. (1991). *Cognitive Therapy and the Emotional Disorders*. London: Penguin Books Ltd.

Beck, A.T., Brown, G. & Steer, R.A. (1996). *Beck Depression Inventory II manual*. San Antonio, TX: The Psychological Corporation.

Beck, A.T., Freeman, A. & Davis, D. (2004). *Cognitive Therapy of Personality Disorders* (2nd edn.). New York & London: Guildford Press.

Blascovich, J. & Tomaka, J. (1993). Measures of self-esteem. In J.P. Robinson, P.R. Shaver & L.S. Wrightsman (Eds.). *Measures of personality and social psychological attitudes* (3rd edn.). Ann Arbor: Institute for Social Research.

Blatt, S.J. & Bers, S.A. (1993). The Sense of Self in Depression: A Psychodynamic Perspective. In Z.V. Segal & S.J. Blatt (Eds.). *The Self in Emotional Distress, Cognitive and Psychodynamic Perspectives* (pp.171-210). New York: Guildford Press.

Bohus, M., Limberger, M.F., Frank, U., Chapman, A.L., Kuhler, T. & Stieglitz, R. (2007). Psychometric Properties of the Borderline Symptom List (BSL). *Psychopathology*, 40, 126-132.

Brewin, C.R. (1996). Theoretical Foundations of Cognitive-Behavior Therapy for Anxiety and Depression. *Annual Review of Psychology*, 47, 33-57.

British Psychological Society (2004). *Ethical Guidelines: Guidelines for minimum standards of ethical approval in psychological research*.

British Psychological Society (2007). *Report of the Working Party of Conducting Research on the Internet: Guidelines for ethical practice in psychological research online*.

Brodzinsky, D.M. (1993). A Stress and Coping Model of Adoption Adjustment. In D.M. Brodzinsky & M.D. Schechter (Eds.). *The Psychology of Adoption* (pp. 3-24). Oxford: Oxford University Press.

Bunce, S.C., Noblett, K.L., McCloskey, M.S. & Coccaro, E.F. (2005). High prevalence of personality disorders among healthy volunteers for research: implications for control group bias. *Journal of Psychiatric Research*, 39, 421-430.

Burr, V. (1995). *An Introduction to Social Constructionism*. New York: Routledge

Butler, G. (2002). A Model for Progress? *Keynote address for New Zealand College of Clinical Psychologists Annual Conference*. Auckland, New Zealand.

Butler, G. (2004). Clinical difficulties to revisit. In J. Yiend (Ed.). *Cognition, Emotion and Psychopathology, Theoretical, Empirical and Clinical Directions* (pp. 290-305). Cambridge: Cambridge University Press.

Campbell, J.D., Trapnell, P.D., Heine, S.J., Katz, I.M., Lavalley, L.F. & Lehman, D.R. (1996). Self-Concept Clarity: Measurement, Personality Correlates, and Cultural Boundaries. *Journal of Personality and Social Psychology*, 70 (1), 141-156.

Cater, J., Barrowclough, C. & Tarrier, N. (2006). *Self-Esteem and Schizophrenia*. DCP Conference: 15 December 2006.

Cattell, R.B. (1978). *The scientific use of factor analysis*. New York: Plenum.

Clark, D.M. & Fairburn, C.G. (1997). *Science and Practice of Cognitive Behaviour Therapy*. Oxford: Oxford University Press.

Cooper, M.J., Cohen-Tovee, E., Todd, G., Wells, A. & Tovee, M. (1997). The eating disorder belief questionnaire: preliminary development. *Behavioural Research and Therapy*, 4, 381-388.

DeVellis, R.F. (2003). *Scale Development Theory and Applications* (2nd ed.). Sage Publications: London.

Elkin, I., Shea, M.T., Watkins, J.T., Imber, S.T., Scotsky, S.M & Collins, J.F. (1989). National Institute of Mental Health Treatment of Depression Collaborative Research Program: general effectiveness of treatments. *Archives of General Psychiatry*, 46, 971-982.

Elkin, I., Parloff, M.B., Hadley, S.W. & Autry, J.H. (1985). National Institute of Mental Health Treatment of Depression Collaborative Research Program: background and research plan. *Archives of General Psychiatry*, 42, 305-316.

Ellis-Hill, C.S. & Horn, S. (2000). Change in identity and self-concept: a new theoretical approach to recovery following a stroke. *Clinical Rehabilitation*, 14, 279-287.

Fabrigar, L.R., Wegener, D.T., MacCallum, R.C., & Strahan, E.J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4, 272-299.

Fuchs, T. (2007). Fragmented Selves: Temporality and Identity in Borderline Personality Disorder. *Psychopathology*, 40, 379-387.

Gerhardt, S. (2004). *Why love matters: How affection shapes a baby's brain*. Hove: Brunner-Routledge.

Giesen-Bloo, J., van Dyck, R., Spinhoven, P., van Tilburg, W., Dirksen, C., van Asselt, T., Kremers, I., Nadort, M. & Arniz, A. (2006). Outpatient Psychotherapy for Borderline Personality Disorder: Randomized Trial of Schema-Focused Therapy vs. Transference-Focused Psychotherapy. *Archives of General Psychiatry*, 63, 649-1008.

Greenwald, A.G., Banaji, M.R., Rudman, L.A., Farnham, S.D., Nosek, B.A. & Mellott, D.S. (2002). A Unified Theory of Implicit Attitudes, Stereotypes, Self-Esteem, and Self-Concept. *Psychological Review*, 109 (1), 3-25.

Guindon, M.H. (2002). Toward Accountability in the Use of the Self-Esteem Construct. *Journal of Counseling and Development*, 80 (2), 204-214.

Harter, S. (1999). *The Construction of the Self: A Developmental Perspective*. The Guildford Press: New York.

Hays, R.D., Hayashi, T. & Stewart, A.L. (1989). A five-item measure of socially desirable response set. *Educational and Psychological Measurement*, 49, 629-636.

Hinkin, T.R. (1995). A Review of Scale Development Practices in the Study of Organizations. *Journal of Management*, 21 (5), 967-988.

Hoyle, R.H., Kernis, M. H., Leary, M. R. & Baldwin, M.W. (1998). *Selfhood, Identity, Esteem, Regulation*. Colorado & Oxford: Westview Press.

Jackson, J.E. (2005). Oblimin Rotation. *Encyclopedia of Biostatistics*, 10, 1002-1047.

Kapur, A., Wittkowski, A. & Kinderman, P. (2006). *The Relationship between instability of self-esteem and self-concept in a non-clinical population*. DCP Conference: 15 December 2006.

Kazdin, A.E. (2003). *Research Design in Clinical Psychology* 4th Ed. Allyn & Bacon: Boston.

Kellogg, S.H. & Young, J.E. (2006). Schema therapy for borderline personality disorder. *Journal of Clinical Psychology*, 62, (4), 445-458.

Kinnear, P.R. & Gray, C.D. (2005). *SPSS 12 Made Simple*. Psychology Press: Hove and New York.

Kirkwood, B. & Sterne, J. (1988). *Essentials of medical statistics*. Blackwell Science Ltd.: Oxford.

Linehan, M. (1987). Dialectical behaviour therapy and borderline personality disorder: Theory and method. *Bulletin of the Menninger Clinic*, 51, 261-276.

Marsh, H.W. (1986). Global Self-Esteem: Its Relation to Specific Facets of Self-Concept and Their Importance. *Journal of Personality and Social Psychology*, 51 (6), 1224-1236.

Marsh, H.W. (1987). The Hierarchical Structure of Self-Concept and the Application of Hierarchical Confirmatory Factor Analysis. *Journal of Educational Measurement*, 24 (1), 17-39.

Mykletun, A., Stordal, E., & Dahl, A.A. (2001). Hospital Anxiety and Depression (HAD) scale: factor structure, item analyses and internal consistency in a large population. *British Journal of Psychiatry*, 179, 540-544.

Nordahl, H.M. & Nysaeter, T.E. (2005). Schema therapy for patients with borderline personality disorder: a single case series. *Journal of behaviour therapy and experimental psychiatry*, 36, (3), 254-264.

Onorato, R.S. & Turner, J.C. (2004). Fluidity in the self-concept: the shift from personal to social identity. *European Journal of Social Psychology*, 34, 257-278.

Padgett, C. (2006). *Experience of Self in Depression: A Preliminary Investigation*. Oxford Doctoral Course in Clinical Psychology.

Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach*. Hillsdale, NJ: Erlbaum.

Pfafflin, F. & Adshead, G. (2004). *A Matter of Security: The Application of Attachment Theory to Forensic Psychiatry and Psychotherapy*. London: Jessica Kingsley Publishers.

Robson, P. (1989). Development of a new self-report questionnaire to measure self-esteem. *Psychological Medicine*, 19, 513-518.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rosenberg, M. (1989). *Society and the adolescent self-image*. Middleton, CT: Wesleyan University Press.

Roth, A.D. & Fonagy, P. (2004). *What works for whom? A critical review of psychotherapy research* (2nd Ed.). New York: Guildford Press.

Rusch, N., Lieb, K., Gottler, I., Hermann, C., Schramm, E., Richter, H., Jacob, G.A., Corrigan, P.W. & Bohus, M. (2007). Shame and Implicit Self-Concept in Women With Borderline Personality Disorder. *American Journal of Psychiatry*, 164 (3), 500-508.

Rust, J. & Golombok, S. (1999). *Modern Psychometrics: The Science of Psychological Assessment* (2nd ed.). Routledge: London.

Sanderson, W.C., Beck, A.T. & McGinn, L.K. (1994). Cognitive therapy for generalised anxiety disorder: significance of comorbid personality disorders. *Journal of Cognitive Psychotherapy*, 8, 13-18.

Segal, Z.V. & Blatt, S.J. (1993). *The Self in Emotional Distress: Cognitive and Psychodynamic Perspectives*. The Guildford Press: New York.

Shafran, R. & Mansell, W. (2001). Perfectionism and Psychopathology: A Review of Research and Treatment. *Clinical Psychology Review*, 21 (6), 879-906.

Smiley, P.A. & Johnson, R.S. (2006). Self-referring terms, event transitivity and development of self. *Cognitive Development*, 21, 266-284.

Snaith, R.P. & Zigmond, A.S. (1994). *The Hospital Anxiety and Depression Scale Manual*. Windsor: NFER:Nelson.

Spinhoven, P., Ormel, J., Sloekers, P.P., Kempen, G.I., Speckens, A.E. & Hemert, A.M. (1997). A validation study of the Hospital Anxiety and Depression Scale (HADS) in different groups of Dutch subjects. *Psychological Medicine*, 27, 363-370.

Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: Harper Collins. Wilkinson, L., & Task Force on Statistical Inference, APA Board of Scientific Affairs. (1999). Statistical methods in psychology journals: Guidelines and explanations. *American Psychologist*, 54, 594-604.

Taher, N.S. (2007). Self-Concept and Masculinity/Femininity among Normal Male Individuals and Males with Gender Identity Disorder. *Social Behavior and Personality*, 35 (4), 469-478.

Teasdale, J.D. (1995). The relationship between cognition and emotion: the mind-in-place in mood disorders. In D.M. Clark & C.G. Fairburn (Eds.). *Science and Practice of Cognitive Behaviour Therapy* (pp.67-93). Oxford: Oxford University Press.

Trull, T.J., Ueda, J.D., Conforti, K. & Doan, B. (1997). Borderline Personality Disorder Features in Nonclinical Young Adults 2. Two-Year Outcome. *Journal of Abnormal Psychology*, 106 (2), 307-314.

Vallejo, M.A., Jordan, C.M., Diaz, M.I., Comeche, M.I. & Ortega, J. (2007). Psychological Assessment via the Internet: A Reliability and Validity Study of Online (vs. Paper-and-Pencil) Versions of the General Health Questionnaire-28 (GHQ-28) and the Symptoms Check-List-90-Revised (SCL-90-R). *Journal of Medical Internet Research*, 9 (1), e2.

Wallace-Brosious, A., Serafica, F.C. & Osipow, S.H. (1994). Adolescent Career Development: Relationships to Self-Concept and Identity Status. *Journal of Research on Adolescence*, 4 (1), 127-149.

Welldon, E.V. & Van Velsen, C. (1999). *A Practical Guide to Forensic Psychotherapy*. London: Jessica Kingsley Publishers.

Westbrook, D. & Kirk, J. (2005). The clinical effectiveness of cognitive behaviour therapy: outcome for a large sample of adults treated in routine practice. *Behaviour Research and Therapy*, 43, 1243-1261.

Wilkinson-Ryan, T. & Westen, D. (2000). Identity Disturbance in Borderline Personality Disorder: An Empirical Investigation. *American Journal of Psychiatry*, 157 (4), 528-541.

Wilson, J.W. & Constantine, M.G. (1999). Racial Identity Attitudes, Self-Concept, and Perceived Family Cohesion in Black College Students. *Journal of Black Studies*, 29 (3), 354-366.

Wittkowski, A. (2006). *Why and how to examine self-esteem?* DCP Conference: 15 December 2006.

Woolrich, R.A., Cooper, M.J. & Turner, H.M. (2006). A Preliminary Study of Negative Self-Beliefs in Anorexia Nervosa: A Detailed Exploration of Their Content, Origins and Functional Links to “Not Eating Enough” and Other Characteristic Behaviors. *Cognitive Therapy Research*, 30, 735-748.

Young, J.E. (1999). *Cognitive Therapy for Personality Disorders: A Schema-Focused Approach*, 3rd Ed. Professional Resource Press: Sarasota.

Young, J.E., Klosko, J.S. & Weishaar, M.E. (2003). *Schema Therapy: A Practitioner's Guide*. The Guildford Press: New York.

Zigmond, A.S. & Snaith, R.P. (1983). The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica*, 67, 361-370.

Appendices

Appendix 1	Hospital Anxiety and Depression Scale (HADS)
Appendix 2	New Identity Questionnaire
Appendix 3	Borderline Symptom List-23 (BSL-23)
Appendix 4	Rosenberg's Self-Esteem Scale (RSE)
Appendix 5	Socially Desirable Response Set (SDRS-5)
Appendix 6	Information Sheet
Appendix 7	Useful Resources
Appendix 8	University of Oxford Ethical Approval
Appendix 9	Oxfordshire & Buckinghamshire NHS Trust Research & Development Approval

Appendix 1

Hospital Anxiety and Depression Scale (HADS)



Name: _____ Date: _____

Clinicians are aware that emotions play an important part in most illnesses. If your clinician knows about these feelings he or she will be able to help you more.

This questionnaire is designed to help your clinician to know how you feel. Read each item below and underline the reply which comes closest to how you have been feeling in the past week. Ignore the numbers printed at the edge of the questionnaire.

Don't take too long over your replies, your immediate reaction to each item will probably be more accurate than a long, thought-out response.

A	D			A	D
3 2 1 0		I feel tense or 'wound up'			
		Most of the time		I feel as if I am slowed down	3
		A lot of the time		Nearly all the time	2
		From time to time, occasionally		Very often	1
	Not at all		Sometimes	0	
			Not at all		
0 1 2 3		I still enjoy the things I used to enjoy		I get a sort of frightened feeling like	
		Definitely as much		'butterflies' in the stomach	0
		Not quite so much		Not at all	1
		Only a little		Occasionally	2
	Hardly at all		Quite often	3	
			Very often		
3 2 1 0		I get a sort of frightened feeling as if something awful is about to happen		I have lost interest in my appearance	3
		Very definitely and quite badly		Definitely	2
		Yes, but not too badly		I don't take as much care as I should	1
		A little, but it doesn't worry me		I may not take quite as much care	0
	Not at all		I take just as much care as ever		
0 1 2 3		I can laugh and see the funny side of things		I feel restless as if I have to be on	
		As much as I always could		the move	3
		Not quite so much now		Very much indeed	2
		Definitely not so much now		Quite a lot	1
	Not at all		Not very much	0	
3 2 1 0		Worrying thoughts go through my mind		I look forward with enjoyment to things	
		A great deal of the time		As much as I ever did	0
		A lot of the time		Rather less than I used to	1
		Not too often		Definitely less than I used to	2
	Very little		Hardly at all	3	
3 2 1 0		I feel cheerful		I get sudden feelings of panic	
		Never		Very often indeed	3
		Not often		Quite often	2
		Sometimes		Not very often	1
	Most of the time		Not at all	0	
3 2 1 0		I can sit at ease and feel relaxed		I can enjoy a good book or radio or	
		Definitely		television programme	0
		Usually		Often	1
		Not often		Sometimes	2
	Not at all		Not often	3	
			Very seldom		

Now check that you have answered all the questions

A	D

TOTAL

Appendix 2

Listed below are different ATTITUDES and BELIEFS which people sometimes hold. Please read each statement carefully and decide how much you AGREE or DISAGREE with the statement. Base your answer on what you emotionally believe or feel, not on what you rationally believe to be true.

After each statement enter a rating ranging between 0 (COMPLETELY DISAGREE – I do not usually believe this at all) to 100 (COMPLETELY AGREE – I am usually completely convinced that this is true).

1. You are not a person
2. You are pretending to be a person¹
3. You are a human being but not a person¹
4. There is no real 'you'; you are physically here but somehow the real 'you' doesn't exist¹
5. You are unreal¹
6. You don't exist¹
7. You are both here and not here¹
8. You are an object rather than a person¹
9. You are wearing the disguise of a person¹
10. Your sense of self is absent, you have no sense of self¹
11. You can't use the term 'I'
12. You have no feelings
13. You don't really know what you think¹
14. You know what you feel³
15. You have a sense of inner strength³
16. You don't know what you want
17. You don't have any ambitions or aspirations
18. You are improvising
19. You don't know what you need
20. You are aware of the kind of person you want to be
21. You have your own wishes³
22. You are unable to tell a story about yourself
23. You are unable to relate the meaning and significance of your experiences in life to your self
24. You don't know what it means to be you
25. You don't know how to be you
26. You are able to make choices or decisions³
27. You are able to think about yourself in the future, for example in relation to your goals, qualities/experiences you would like to obtain (even if you don't do this very much – you are still 'able' to)³
28. You can learn from mistakes³

1 – Items from Subscale 1

2 – Items from Subscale 2

3 – Items from Subscale 3

4 – Items from Subscale 4

29. You are unable to develop your own opinions
30. You do not know what you value
31. You are ABLE to reflect on your 'self', that is 'think' about your own thoughts, feelings and/or behaviour³
32. You DO reflect on your 'self', that is 'think' about your own thoughts, feelings and/or behaviour³
33. You have lots of different 'selves'
34. Your sense of self is connected/blended, that it all links or is integrated together
35. You have no sense of continuity
36. You have a fluid sense of self
37. You have no sense of inner harmony
38. Your self is fragmented
39. You want to disappear
40. You have a sense of constancy and stability³
41. Your sense of self is flexible
42. You are able to HAVE inconsistent views and act in inconsistent ways
43. You are able to TOLERATE contradictory and opposing aspects of the self
44. You find it difficult to INTEGRATE contradictory expectations, for example to be a housewife, mother, partner, working professional
45. You find it difficult to integrate opposing THOUGHTS about another person, for example to recognise negative traits in another admired person
46. You find it difficult to integrate opposing FEELINGS about another person, for example to love and hate the same person; be angry at someone you admire
47. You are disgusting
48. You are repellent
49. You are too noticeable
50. You take up too much space
51. There is no space for you
52. You have intrinsic value as a human being
53. You are able to treat yourself³
54. You deserve to be punished
55. You don't deserve to have your needs met by your self, i.e. you do not care about your needs
56. You should harm/hurt yourself
57. You don't care about what happens to you so you take unnecessary risks
58. You are not entitled to make a claim on others
59. You are valued by other people
60. You don't deserve love, attention, respect, notice or care from others
61. You are equal in worth to every other person on this planet
62. You don't have any right to ask for your needs to be met by others⁴
63. Others can make use of you for whatever purpose they want
64. You are obliged to remove yourself from others

1 – Items from Subscale 1
 2 – Items from Subscale 2
 3 – Items from Subscale 3
 4 – Items from Subscale 4

65. You are something that can be acted upon by others
66. Contact with you is harmful to others
67. Your family impose themselves on you in a negative rather than positive manner⁴
68. Your friends impose themselves on you in a negative manner rather than positive manner
69. Strangers impose themselves on you in a negative rather than positive manner⁴
70. You don't fit in with your family as required⁴
71. You don't fit in with your friends as required
72. You don't fit in with strangers as required
73. You tend to blend in with your family
74. You have no sense of belonging in your family⁴
75. You have no sense of belonging with strangers⁴
76. You have no sense of belonging in the world generally
77. You tend to blend in/lose yourself with your friends
78. You tend to blend in/lose yourself with your family
79. You tend to blend in with strangers
80. You have no sense of being connected to family⁴
81. You have no sense of being connected to friends⁴
82. You have no sense of being connected to strangers⁴
83. You are able to connect with the world generally
84. You base your sense of self/identity on another person or other people
85. You want to become another person/other people and take on their identity
86. Your sense of self is dependent on social interaction with other people²
87. Your sense of self is dependent on social roles (i.e. work, family)²
88. You are the sum of your roles
89. You find it difficult to stand back from your roles and social expectations to act autonomously²
90. You act in accordance with a prescribed role and expected norms²
91. You need background structure and routine to define your sense of self (i.e. to guide what you do, say, feel, value)²
92. You are dependent on social roles or close persons/surroundings to guide what you THINK²
93. You are dependent on social roles or close persons/surroundings to guide what you DO²
94. You are dependent on social roles or close persons/surroundings to guide what you FEEL²
95. You are dependent on social roles or close persons/surroundings to guide what you VALUE²
96. You have conformist attitudes²

1 – Items from Subscale 1
 2 – Items from Subscale 2
 3 – Items from Subscale 3
 4 – Items from Subscale 4

Appendix 3

Borderline Symptom List 23 (BSL-23)

Code: _____

Date: _____

Please follow these instructions when answering the questionnaire: In the following table you will find a set of difficulties and problems which possibly describe you. Please work through the questionnaire and decide how much you suffered from each problem in the course of the last week. In case you have no feelings at all at the present moment, please answer according to how you *think you might have felt*. Please answer honestly. **All questions refer to the last week. If you felt different ways at different times in the week, give a rating for how things were for you on average.**

Please be sure to answer each question.

In the course of last week...		not at all	a little	rather	much	very strong
1	It was hard for me to concentrate	0	1	2	3	4
2	I felt helpless	0	1	2	3	4
3	I was absent-minded and unable to remember what I was actually doing	0	1	2	3	4
4	I felt disgust	0	1	2	3	4
5	I thought of hurting myself	0	1	2	3	4
6	I didn't trust other people	0	1	2	3	4
7	I didn't believe in my right to live	0	1	2	3	4
8	I was lonely	0	1	2	3	4
9	I experienced stressful inner tension	0	1	2	3	4
10	I had images that I was very much afraid of	0	1	2	3	4
11	I hated myself	0	1	2	3	4
12	I wanted to punish myself	0	1	2	3	4
13	I suffered from shame	0	1	2	3	4
14	My mood rapidly cycled in terms of anxiety, anger, and depression	0	1	2	3	4
15	I suffered from voices and noises from inside or outside my head	0	1	2	3	4
16	Criticism had a devastating effect on me	0	1	2	3	4
17	I felt vulnerable	0	1	2	3	4
18	The idea of death had a certain fascination for me	0	1	2	3	4
19	Everything seemed senseless to me	0	1	2	3	4
20	I was afraid of losing control	0	1	2	3	4
21	I felt disgusted by myself	0	1	2	3	4
22	I felt as if I was far away from myself	0	1	2	3	4
23	I felt worthless	0	1	2	3	4

Appendix 4

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.*	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.*	I feel I do not have much to be proud of.	SA	A	D	SD
6.*	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.*	I wish I could have more respect for myself.	SA	A	D	SD
9.*	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.

The scale may be used without explicit permission. The author's family, however, would like to be kept informed of its use:

The Morris Rosenberg Foundation
c/o Department of Sociology
University of Maryland
2112 Art/Soc Building
College Park, MD 20742-1315

References

References with further characteristics of the scale:

Crandal, R. (1973). The measurement of self-esteem and related constructs, Pp. 80-82 in J.P. Robinson & P.R. Shaver (Eds), **Measures of social psychological attitudes. Revised edition**. Ann Arbor: ISR.

Appendix 5

Socially Desirable Response Set – 5-item (SDRS-5) (Hays et al., 1989)

The Socially Desirable Response Set is a five-item, self-report instrument that was designed to measure social desirability. Social desirability pressure, the perceived importance of projecting an image that one behaves in a socially approved manner or feels socially approved feelings, is a major component of self-presentation. It can affect the validity of self-report measures and this questionnaire measure will be included in the current study, to account for this.

Questionnaire Items:

Listed below are a few statements about your relationship with others. How much is *each* statement TRUE or FALSE for you?

	Definitely True	Mostly True	Don't Know	Mostly False	Definitely False
1. I am always courteous even to people who are disagreeable	1	2	3	4	5
2. There have been occasions when I took advantage of someone	1	2	3	4	5
3. I sometimes try to get even rather than forgive and forget	1	2	3	4	5
4. I sometimes feel resentful when I don't get my way	1	2	3	4	5
5. No matter who I'm talking to, I'm always a good listener	1	2	3	4	5

Appendix 6

Information Sheet

Oxford Doctoral Course in Clinical Psychology

an NHS Course validated by the University of Oxford

Isis Education Centre, Warneford Hospital, Headington, Oxford, OX3 7JX

Tel: +44 (0) 1865 226365

Website: www.hmc.ox.ac.uk/clinicalpsychology

Participant Information Sheet

“For Better or for Worse”: Identity and its relationship with psychological distress. The development of an Identity Questionnaire.

You are being invited to take part in an online research study. Before you decide whether to take part or not it is important for you to understand why the research is being done and what it will involve.

What is the purpose of the study?

This study aims to explore Identity or the nature of the self. By completing the online questionnaires, you will help us develop a new questionnaire. It is hoped that this measure will be a helpful research tool, useful in the development of theory and treatment of psychological problems. This study is being conducted as part of the researcher's doctorate in clinical psychology, University of Oxford.

Who can participate?

Both male and female participants, aged 16 and older, can participate in this online study. One of our aims is to investigate the relationship between identity and psychological distress. We are interested in the views of all adults; however they see or define their identity and self, and whether or not you are experiencing any psychological distress.

Do I have to take part in the study?

Participation is voluntary. Potential participants have the right to withdraw during the online study, by not completing the online questionnaire measures.

What will the study involve for me?

The study involves completing online questionnaire measures. No further participation or follow-up will follow after completing this.

What are the possible disadvantages and risks of taking part?

It is highly unlikely that there will be risks associated with taking part in the study.

However, if you should find that any of the questions are upsetting, you may stop the online questionnaires at any time. Contact details are given for various organizations and for the principal researcher, should you wish to contact them.

How does the prize-draw work?

A prize draw will be done after completion of the online questionnaire study. This will consist of various cash prizes, up to £100 each. If you would like to be entered for this prize draw, your email address will be asked for, in order for us to contact you if you have won. This information is for the sole purpose of the draw and no further correspondence will be held with participants.

Will my taking part in the study be kept confidential?

Yes. All the online questionnaire measures will be kept confidential and individual participants will remain anonymous.

Who is organising and funding the research?

The research is being organised and funded by the Oxford Doctoral Course in Clinical Psychology.

Who has reviewed the study?

This study has been approved by the Central University Research Ethics Committee (CUREC), University of Oxford. This is in order to protect your safety, rights, well-being and dignity. The study has also been reviewed by the Research Sub-Committee of the Oxford Doctoral Course in Clinical Psychology.

Thank you for taking the time to read this information and considering taking part in the study.

Contact Details

If you require further information or have concerns about the study please do not hesitate to contact me using the details below.

Principal Researcher:

Mari Cairns
Oxford Doctoral Course in Clinical Psychology
Isis Education Centre
Roosevelt Drive
Oxford
OX3 7JX

Tel: 01865 226365 (Please leave a message and your call will be returned as soon as

Appendix 7

possible).

Useful Addresses

British Association of Behavioural and Cognitive Psychotherapies Executive Officer

P.O. Box 9

Accrington

BB5 2GD

UK

Tel/Fax: 01254 875277

Email: babcp.org.uk

(They have a list of cognitive behavioural therapists accredited by the organization)

British Psychological Society

Division of Clinical Psychology

St Andrews's House

48 Princess Road East

Leicester

LE1 7DR

UK

Tel: 0116 254 9568

Fax: 0116 247 0787

Email: mail@bps.org.uk

(They hold a directory of chartered clinical psychologists accredited by the organization)

British Association for Counselling

1 Regent Place

Rugby

Warwickshire

CV21 2PJ

UK

Tel: 01788 550899

MIND: The National Association for Mental Health
Granta House
15-19 Broadway
Stratford
London
E15 4BQ
UK
Tel: 0181 519 2122

If you, a friend, or relative are experiencing mental health problems for the first time and need emergency treatment, you should contact your GP. This would be your doctor that you would normally go to see if you are ill or concerned about your health.

Voluntary Organisations

National MIND: 0845 766 0163

The MIND info line offers confidential help, on a range of mental health issues. They can be contacted nationally, for the price of a local call. Monday to Friday, 9.15am to 5.15pm.

Local MIND – Oxfordshire MIND
125 Walton Street
Oxford
Oxfordshire
OX2 6AH

Tel: 01865 511702
Email: info@oxfordshire-mind.org.uk
Web: www.oxfordshire-mind.org.uk

SAMARITANS National Helpline: 0845 790 9090

The SAMARITANS provide a confidential, caring and sympathetic listening service for individuals in distress, who are in need of help or someone to talk to. They are available by telephone 24 hours a day.

Local Samaritans – 60 Magdalen Road
Oxford
OX4 1RD

Tel: 01865 722122

The centre is open to visitors daily from 8am to 10pm

Web: www.samaritans.org.uk

CRISIS LINE OXFORD: 01865 251152

Crisis Line is an out-of-hours helpline for those with mental health problems or in distress. The unit is staffed by volunteers who have had training in general listening skills and mental health issues. The telephone lines are staffed throughout the weekend from Fridays 19h00pm to Mondays 7am & Monday, Tuesday, Wednesday and Thursday evenings from 19h00pm to 1am.

STUDENT NIGHTLINE: 01865 270270

Student Nightline is a helpline that is run by the University. Lines are open 8pm to 8am.

Appendix 8

Appendix 9

