Obesity surgery: Factors affecting success in the longer term and impact on emotional eating behaviour.

Sally Field

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Department of Psychology
School of Human Sciences
University of Surrey

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## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>5</td>
</tr>
<tr>
<td><strong>Academic Section</strong></td>
<td></td>
</tr>
<tr>
<td>Approaches to Distress Essay</td>
<td>6</td>
</tr>
<tr>
<td>Professional Issues Essay</td>
<td>26</td>
</tr>
<tr>
<td><strong>Problem Based Learning Reflective Accounts:</strong></td>
<td></td>
</tr>
<tr>
<td>Exercise 1: The Relationship to Change</td>
<td>48</td>
</tr>
<tr>
<td>Exercise 2: Child Protection, Domestic Violence, Parenting and Learning Disabilities</td>
<td>57</td>
</tr>
<tr>
<td>Exercise 3: Working with Older People</td>
<td>65</td>
</tr>
<tr>
<td><strong>Summaries of Case Discussion Group Reflective Accounts:</strong></td>
<td></td>
</tr>
<tr>
<td>Year 1: Reflection on the CDG process in year one</td>
<td>74</td>
</tr>
<tr>
<td>Year 2: Reflection on the CDG process in year two</td>
<td>75</td>
</tr>
<tr>
<td><strong>Clinical Section</strong></td>
<td></td>
</tr>
<tr>
<td>Clinical Placement Summaries</td>
<td>76</td>
</tr>
<tr>
<td><strong>Clinical Case Report Summaries:</strong></td>
<td></td>
</tr>
<tr>
<td>Adult Mental Health 1</td>
<td>80</td>
</tr>
<tr>
<td>Cognitive behavioural intervention with a 22 year old woman presenting with bulimia nervosa.</td>
<td></td>
</tr>
</tbody>
</table>
Adult Mental Health 2
A neuropsychological assessment of a 25 year old man presenting with symptoms of adult attention deficit hyperactivity disorder (ADHD).

Child, Adolescent & Family
An Integrative intervention with a 10 year old boy presenting with aggressive anger outbursts.

Learning Disabilities
Short term psychodynamic therapy with a 54 year old man with a learning disability experiencing emotional difficulties.

Older People
Cognitive Behaviour Therapy with an 83 year old lady experiencing anxiety and depressed mood.

Research Section

Service Related Research Project
Access to Psychology: Wait lists and their management within 5 Community Mental Health Teams (CMHTs) in the NHS.

Qualitative Research Project Abstract
An Interpretive Phenomenological Analysis Study of the Lay Person's View of Psychologists working in Clinical Settings

Major Research Project
Obesity surgery: Factors affecting success in the longer term and impact on emotional eating behaviour.
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"The therapeutic skills needed to engage a client in therapy are the same no matter which theoretical model the clinician works within" Discuss with reference to CBT and psychodynamic approaches to working with adult clients who present with problems related to childhood sexual abuse.

Year 1

December 2005
Historically there has been much debate regarding the efficacy of various psychological models and their ability to help clients deal with emotional distress. Within this broader debate there has been considerable exploration of the nature and importance of the role of the therapeutic relationship or alliance within therapy. The notion of the process of engaging the client within therapy is difficult to define, complex and covers a multitude of factors.

I chose this essay title as I am currently trying to develop a deeper understanding of various therapeutic approaches. I am hoping that I will be able to apply increased understanding in my work with current clients and be more aware of my role and the style in which I relate to clients to engage them and form a stronger therapeutic relationship.

Adult clients who have experienced childhood sexual abuse (CSA) will present in individualised ways. However, some common themes of issues faced by adult survivors of child sexual abuse have been identified by research so these will be highlighted. I shall consider the individualised needs of this client group when linking theory of different approaches to the process of engagement and treatment. Gender and cultural considerations when working with this client group will also be touched upon.

I will explore how CBT and psychodynamic approaches aim to engage the client. This involves how each approach socialises clients to their model and the various processes and techniques involved. Kahn (1991) suggests practically all schools of therapy agree an understanding of the relationship is needed however there is disagreement over the nature of the relationship and how it should be used by the therapist. Contemporary thinking indicates increasing synthesis between the different model approaches rather than the divergence that we have typically witnessed in the past.

Finally, I will explore what clients think about the therapeutic relationship and what is important for them within therapy. Are clients concerned about the model, techniques applied and the differing approaches to engagement? Or, are they more concerned about
the elements of the therapeutic relationship which can be common across different models? I shall also draw on my own experiences of therapy, as both therapist and client, and how these experiences have influenced my perspective on the processes of engagement and the importance of the relationship within therapy.

What does ‘engaging’ the client actually mean?

The Oxford English Dictionary defines ‘engage’ as “to attract or involve someone’s interest or attention” and ‘engagement’ as “the state of being involved in something”. ‘Engagement’ is a term frequently used in reference to therapy however is a word with “inherent ambiguity and elusive definition” (Griffiths, 2003). My understanding of ‘engagement’ is how to actively involve and retain clients in therapy and the techniques and processes which influence this, so for the purposes of this essay I will be using this as my definition.

Working with Clients who have experienced CSA

Each person’s experience of CSA differs and an individual’s response will be determined by their personal and social resources resulting in varied long term effects (Browne and Lynch, 1996). CSA is not associated with a unique pattern of symptoms therefore there is no ‘treatment of choice’ necessitating assessment and treatment to be sensitive and based on the needs of the individual (Finkelhor, 1990). Finkelhor (1990) summarised the presenting issues of adult survivors of CSA as including anxiety, depression, sexual difficulties, somatic concerns, interpersonal difficulties, substance abuse and self mutilation. Most adult clients will present in therapy as a result of a precipitating factor, for example, experiencing difficulties with increased involvement in a close relationship (Jehu, 1992, cited in Llewelyn, 1997). The process of therapy is likely to be very painful for individuals who have experienced CSA with exploration of their experiences and associated emotions of self-blame, anger, revenge, hostility, hurt and betrayal (Jehu, 1992, cited in Llewelyn, 1997).
**CSA, other considerations; Gender and Culture**

There has been some debate regarding gender of the therapist in working with adults with issues related to experiencing CSA. Armsworth (1989) studied clients with issues related to CSA and found that they rated male helpers as less effective than female helpers and spent longer in therapy. Llewelyn (1997) noted that clients often express the desire to have a female therapist and this should be respected. The sex of the therapist may influence the development of the therapeutic relationship, particularly if the client’s abuser was male. Care also needs to be taken if the abuser was male and the therapist is male as clients may ‘perform’ for men or abdicate their power to them (Llewelyn, 1997). There is a possibility that the client may seek to sexualise the relationship with the therapist and whilst this may happen with both male and female therapists, Llewelyn (1993) argues it is significantly less common when the therapist is female. I think regardless of the sex of the therapist and the client, therapy can be valuable to the client as long as the therapist is sensitive to transference issues (to be discussed later on).

Much of the research on adult issues related to CSA concerns females. Jehu (1991, cited in Llewelyn, 1997) researched the experiences of male clients who experienced CSA and concluded that their presenting problems are similar to those experienced by women. He points out however that in treatment there may need to be an increased emphasis on issues concerning sexual orientation of the client if this is of concern the client.

Different cultures have very different expectations of the therapy process in dealing with personal distress. Llewelyn (1997) notes that in some ethnic cultures talking about a family issue may be unacceptable without a senior family member present (which is usually male) which would undoubtedly influence the therapeutic process. There may be different cultural expectations regarding what is acceptable in terms of violence and abuse. I think it is important to gain a good understanding of the client’s cultural expectations and not impose my own English values, beliefs and expectations onto the
client. It is concerning to find there is evidence that therapy is less likely to be offered to ethnic minority or working-class sex abuse survivors (Llewelyn, 1997).

**Working within a Psychodynamic Framework**

The original discussion of the 'therapeutic working alliance' originates from psychoanalytic psychotherapy (Cottone and Feller, 2003). Psychodynamic approaches are derived from psychoanalytic psychotherapy and maintain central concepts though they have diverged from some Freudian constructs (full discussion of the similarities and differences is beyond the scope of this essay). The primary aim of therapy is to explore the client’s affective experience, encouraging the expression of emotion. Therapeutic methods are used to uncover unconscious material and childhood/past experiences are explored and analysed, this ‘probing’ into the past aims to develop self-awareness and insight assumed necessary for therapeutic change (Corey, 2001). A major psychoanalytic therapy tool is interpretation; whilst carefully listening to the client’s story the therapist pays particular attention to any themes and inconsistencies and makes inferences as to their meaning. These inferences are fed back to the client through interpretations of the client’s experience to increase insight. Insightful interpretations are seen as necessary but not sufficient on their own to act as major leverage for therapeutic change (Corey, 2001). Contemporary psychodynamic approaches view a good alliance between therapist and client as encouraging trust and security within the relationship but it is also the subject of interpretation, the therapeutic relationship becomes a vehicle of change in itself (Horvath, 2000).
Psychoanalysis and Transference

Psychodynamic approaches have always advocated the pivotal role of the therapeutic relationship and early psychoanalytic approaches had strong ideas as to the nature of this relationship. Freud, the originator of psychoanalysis, suggested that clients “transfer” thoughts, feelings and fears from their past relationships onto the therapist. He recognised the relationship was playing a crucial role within therapy and was just as important as what is actually done in terms of techniques being implemented. Freud worked with these issues of ‘transference’ and eventually concluded that understanding the transference process holds the key to major therapeutic change. Clarkson (2003, pg 11) provides us with a useful definition of the transference/counter-transference relationship as “the experience of ‘distortion’ of the working alliance by wishes and fears and experiences from the past transferred (carried over) onto or into the therapeutic partnership”. These ‘transferred’ feelings may be positive or negative. Counter-transference involves the therapists transferred feelings. A major task in psychodynamic therapy is to interpret all of the transference, both positive and negative.

When working with adults who have experienced childhood sexual abuse this transference process may result in the clients perception being distorted, viewing the therapist as “symbolic manifestations” of the psychologically important figures from the past (Sanderson, 1990). As a result, feelings, thoughts and behaviours with regards to original figures may start to be directed at the therapist. The therapist aims to detach themselves from being the target of these feelings and objectively explore the feelings with the client. The transference process is seen as providing crucial insights into the client’s current issues and ways of relating within interpersonal relationships. The therapeutic relationship allows the clients to release these feelings in a safe environment facilitating resolution of issues relating to the abuse.
In my experience the transference process can be very powerful, in personal therapy with a male therapist I experienced a range of intense emotions which were not generated by the therapeutic interaction itself but a surge of past feelings that were given permission to surface. Working with these feelings within the sessions was exhausting but retrospectively these were the times I was most fully engaged, completely submersed in the therapeutic process. I also experienced very strong counter-transference feelings of wanting to look after/nurture a young female client, maintaining professional boundaries created an inner conflict for me as I wanted to give her more time and attention.

Early analysts, following Freud’s writings, typically aimed to be a ‘blank screen’ for the transference relationship to be projected onto. They would remain silent, stay out of sight and adopt a detached or ‘neutral’ approach to allow transference to show itself clearly (Kahn, 2000). So as not to be threatening for the client this approach needed to be delivered with compassion and a kindly and accepting disposition so as to encourage positive transference i.e. the therapist would remind the client of accepting/supportive figures from their past (Horvath, 2000). I would struggle to maintain such neutrality as I see myself in an active role working with the client and as a client I would find a detached approach threatening rather than supportive.

Later in the development of psychotherapy there was a move away from the detached/neutral demeanour advocated by Freud. Kohut, 1977 (cited in Cottone and Feller, 2003) introduced the theory of ‘self-psychology’ in which he stated that an empathic response to clients experience was of more importance to the client than therapist interpretation of their behaviour. Non responsiveness has been increasingly criticised and many contemporary psychoanalysts find it counter therapeutic and ethically/humanely unacceptable (Kahn, 1991). Fewer psychodynamic therapists believe in a cool, non-responsive position. Strupp (1992, cited in Corey, 2001) reviewed more recent trends in psychodynamic theory and practice. He notes that ‘collaborative working’ is increasingly being viewed as a key factor within therapy associated with successful therapeutic outcomes (Corey, 2001). Corey, 2001, summarised the skills that
are frequently used by contemporary psychodynamically oriented therapists as "more frequent use of supportive interventions, such as reassurance, expressions of empathy and support, and suggestions and more self-disclosure by the therapist" (pg142). Lemma, 2003, argues interpretations are more easily accepted in the context of a good working alliance, and may be experienced as more helpful and less attacking. This warmer, more active role of the therapist sits more comfortably with my ideas about the nature of the therapy relationship as it seems more human and less threatening. I also remember talking with a client with depression who had experienced psychotherapy whereby the therapist was inactive, she commented she felt 'stuck' and 'couldn't move' because of the lack of direction and participation by the therapist.

**Contemporary psychodynamic approaches**

Lemma (2003) writes that in contemporary psychodynamic therapy communicating understanding and empathy is essential to create an atmosphere of collaboration and rapport. The therapist is responsive to the client and fluid in their use of technique to match the client's needs, therapist and client become 'participants' in shared activity. Lemma (2003) does not believe that the transference process is polluted by the therapist adopting a warm disposition or using humour within sessions stating "if transference is the ubiquitous phenomenon we believe it to be, it will unfold wherever we see patients and whether we are warm or aloof towards them" (p130, Lemma, 2003).

The initial assessment is a crucial component of the therapy process, the client is given time to tell their story with gentle encouragement if needed whilst the therapist listens carefully to the narrative. Throughout therapy the therapist actively listens to the client trying to make sense of what is being overtly stated and what might be subtly implied, the therapist attempts to strike a balance between being empathic but also remaining detached enough to make observations of the transference process (Lemma 2003).
Typically an assessment of a client being considered for psychodynamic therapy will include a ‘trial’ interpretation, as such the client is beginning to be socialised to the model at a very early stage. This trial interpretation can indicate to the therapist the ability of the client to observe their own thought processes and to understand and make use of interpretations (Lemma, 2003). Whilst the initial assessment is not intending to begin treatment it should “stimulate the patient to examine himself” (p165, Lemma, 2003) thus engaging them in the therapeutic process. In my experience as a client in psychodynamic counselling, hearing another person’s perspective on the patterns/links in my behaviour, thoughts and feelings led to me feeling very involved in the process. Interpretation of my experience acted as a ‘hook’ keeping me stimulated and wanting to find out more/gain new insights.

The style of the initial assessment gives the client a ‘flavour’ of what may follow if the client is considered suitable for psychodynamic therapy. Lemma (2003) advocates flexibility in terms of the level of direction given to the client based on individual need. During the initial assessment the practitioner uses the opportunity to give practical and experiential information so the client is able to give informed consent should they choose to continue in therapy. Clarkson (2003) advocates the therapist show as much humour, challenge, empathy, interpretation and listening as is appropriate, the client should leave with a good sense of the therapist and what the therapy may involve. Traditional psychoanalysis was quite mysterious to the client with little overt explanation of what was involved in the therapy process, however, modern psychodynamic approaches acknowledge the research indicating the strengthening of the therapeutic alliance through mutually agreed goals and sharing information (Clarkson, 2003). I prefer this more collaborative stance with the therapist open and honest about rationale and methods as it seems to move towards a more equal balance of power in the relationship.

Psychodynamic approaches view it as crucial that the therapist is sensitive and empathic to feelings of vulnerability and only proceed at a pace which the client is comfortable with (Sanderson, 1990). Price et al (2004) used short term psychotherapy with adults
presenting with issues related to childhood sexual abuse. They applied psychodynamic
techniques with a focus on affect and expression of emotion, identifying patterns in
actions, thoughts, feelings, experience and relationships. Within the sessions they
emphasised the therapeutic relationship and focused on the client’s interpersonal
experiences. They compared this client group to a group of clients not reporting
childhood sexual abuse and found no difference in the group’s ability to form a positive
therapeutic alliance. It is encouraging that a positive alliance can be formed, despite the
client struggling with interpersonal relationships as a consequence of their past
experiences.

Engaging the client when working within a Cognitive Behavioural Framework

What is Cognitive Behaviour Therapy (CBT)?

For the purposes of this essay I shall be referring to Cognitive Therapy (CT) as developed
by Aaron Beck et al, 1979, as I understand it to be the foundation from which
contemporary CBT has evolved. CT explores all aspects of the client’s affect, behaviour
and cognitions to understand how the individual is functioning. The techniques employed
aim to effect cognitive, behavioural and affective change (Weishar, 1993). The model
focuses on the client’s internal world and assumes that the person’s cognitions are
accessible and therefore can be directly approached through the use of questioning. The
techniques employed aim to facilitate cognitive change to reduce negative affect and
change behaviours to ones which are healthy and adaptive for the individual. A
reciprocal relationship is assumed between cognitive and behavioural change with each
influencing the other.
How does CBT view the therapeutic relationship?

A major criticism of CBT is that it values cognitive and behavioural changes rather than the interpersonal aspects of therapy (e.g. Corrie, 2003). Initially, when researching this essay, I found it difficult to find CBT materials dealing specifically with engaging the client and relationship factors. I was aware that Beck et al (1979) emphasised a ‘collaborative’ approach within therapy, however, it seemed very little is written in current CBT texts regarding how such a collaborative approach is created and maintained. It is not surprising that there is a common misconception that CBT ignores relationship factors fuelling criticism of being overly concerned with technique at the expense of the therapeutic relationship.

Prior to writing this essay, I believed CBT to be too technique driven. I worked in a psychiatric inpatient setting running groups with a psychoeducational and CBT focus. Presenting CBT materials felt very didactic. I did not feel particularly comfortable in this role, as I felt an imbalance of power with myself being cast in the role of teacher/expert. I felt uncomfortable with what I experienced as force-feeding techniques onto others. I now realise that my understanding of the model was very superficial, I did not have an understanding of the nature of the therapeutic relationship. It is unsurprising that I felt uncomfortable applying it, I had no understanding of the rationale behind it, influencing my motivations and feelings towards its practice.

Beck’s Cognitive Therapy

Beck et al (1979) consider successful cognitive therapy as using the therapeutic relationship as the foundation for its application, specifically highlighting warmth, accurate empathy and genuineness as having crucial importance, their application develops “the milieu in which the specific cognitive change techniques can be applied most efficiently” (p46, Beck et al, 1979). Beck et al emphasise ‘collaborative
empiricism', meaning the client is viewed as their own ‘personal scientist’ working alongside the therapist to explore their internal mental experiences. The client is encouraged to actively participate in the therapy, aided by specific assignments/tasks, ultimately aiming to increase commitment to the therapy. Beck warns specifically against the use of technique without development of a good alliance the result of which may be experienced by the client as “gimmick-oriented” (Beck et al, 1979). In running CBT groups I noticed a difference in client’s willingness to explore their thinking processes based on whether or not I had a good relationship with them. If I had a chance to get to know clients one-to-one outside the group they were more receptive to different techniques. Occasionally I would run a group on a different unit to cover sick leave, it was noticeably harder to engage the clients in the group process and techniques when I did not have a relationship with them.

Beck et al (1979) describes how expressions of warmth may need to be more overt early in treatment. Warmth is conveyed through the therapist’s tone of voice, his/her manner whilst with the client and careful phrasing of his/her contributions so the client feels accepted by the therapist. Development of accurate empathy, the ability to see the world from the client’s perspective and the communication of this understanding, also aids therapeutic collaboration. The therapist listens attentively, conveying interest in the client’s experience. In my experience allowing the client time to tell their story and validate their experience is crucial before applying any techniques. Once a relationship is built the client feels supported and is then not defensive/threatened when the models techniques are introduced.

Beck et al (1979) also stress the importance of being genuine, open and honest with both him/herself and the client and being able to sensitively communicate this. Engaging the client and establishing a collaborative working relationship is viewed as dependant on establishment of trust, rapport and collaboration (Beck et al, 1979). The therapist develops trust through providing a careful balance between allowing the client to be autonomous and active in planning treatment and providing structure and being more
directive, which may be more important early in therapy. Early on the therapist may need to be “more responsive and more involved” in the client’s presenting issues but as therapy progresses the client would be encouraged to take an increasingly active role in agenda setting and homework tasks (Beck et al, 1979).

Rapport is considered important in the development of a collaborative relationship and crucial when working with depressed clients. Beck et al (1979, pg51) defines this as the “harmonious accord between two people”. Rapport refers to both client and therapist feeling comfortable with each other hopefully leading the client to feel understood and accepted therefore feeling more free to communicate his/her more intimate thoughts and feelings. I believe establishing trust and rapport is crucial early on before the use of specific techniques to challenge thinking. I experienced a therapy session with a counsellor who challenged my cognitions in the first session regarding being mugged and assaulted 5 days earlier. I experienced the counsellor’s challenge as attacking, no therapeutic relationship had been established, this shut down my openness to communicate and I did not return for a second session!

**How is the client socialised to the CBT model?**

CBT is very explicit with information given to the client about the model being used to conceptualise the presenting issues, the rationale behind the treatment approach and various strategies used giving the client a greater sense of control. In the initial stages of therapy the client is informed what to expect in terms of length and number of sessions and frequency. The goals and objectives of treatment are clearly defined. This helps with building trust and rapport, there is no hidden agenda, the client is fully informed and this socialises the client to the model (Beck et al, 1979).

At all times the client is a collaborator in establishing agendas, behavioural experiments and homework tasks, the greater the participation the more motivated they will be to follow through giving the client a sense of control. The success of techniques is directly
related to the manner in which they are presented by the therapist and co-created by the client. At each stage, collaboration is strengthened by being transparent regarding the aims and rationale of the techniques. I am aware of times where I have influenced the choice of homework task too strongly with a client, usually manifesting as the client seeming unsure about the task (and usually resulting in it not being completed!).

Together, therapist and client explore the client’s thoughts, assumptions and beliefs and test their ‘validity’ using various techniques. Whilst the therapist and the client necessarily adopt differing roles these are seen to complement each other as they engage in the process of ‘shared discovery’. The model adopts a phenomenological stance, where the client is the expert of their own inner world, the therapist is simply the person working collaboratively with the client to identify and explore this inner world (Beck et al, 1979).

Jehu (1991, cited in Llewelyn, 1997) has developed cognitive behavioural approaches for the treatment of adults presenting with issues related to CSA. Using this approach the therapist and client work together towards recognising and analysing distorted cognitions, for example, “I must be to blame since I let the abuse happen for so long” substituting these for more accurate and realistic beliefs. In addition to this process of cognitive restructuring the client and therapist will engage in social skills training in various areas such as anger and stress management. Jehu (1988) stresses that application of these techniques must be within an environment of empathic understanding. The client may experience deep feelings of shame and fear when disclosing the abuse. Jehu (1991, cited in Llewelyn, 1997) advocates complete acceptance and support by the therapist, he states “a therapist who is respectful, non-judgemental, and immune to shock or embarrassment offers a non-threatening, safe, and trusting relationship in which the victim is free to explore her experiences without restraint or restriction that enhances her self-esteem” (p152).

How do the approaches compare?
Horvath (2000), examined research regarding the nature of characteristics of the alliance with reference to specific models. Whilst it is generally accepted that the relationship is an important factor, there appears to be no evidence supporting separate and distinguishable characteristics that build the relationship between the models. Whilst each model claims a different understanding and application of the relationship this is not currently evidenced by research, so it appears there may actually be more similarity than difference in the way models aim to build a therapeutic relationship to engage the client.

Psychodynamic approaches emphasise the therapeutic relationship in their model as effecting change through the processes of transference and its interpretation. CBT emphasises the relationship as an essential foundation on which techniques can be applied. It seems in contemporary practice both models advocate a collaborative partnership between the therapist and client. Whilst the techniques used within therapy are different both approaches also socialise the client to the model in the early stages of therapy; psychodynamic approaches using interpretation in the initial assessment and CBT approaches openly giving information about the model being used to conceptualise the client’s presenting issues. As we have seen both psychodynamic and CBT approaches value empathy, rapport, and listening in their treatment. Research for this essay has given me far greater understanding of how both approaches engage the client and their attitude towards the therapeutic relationship. My opinion of CBT and its application has shifted considerably and I now have greater respect for the model understanding that it is a collaborative approach and does not ignore what I consider to be essential relationship factors.

There have been changes in the emphasis on the relationship within models over time, however it seems whilst the models may once have argued about their differences there is increasing synthesis of ideas. Traditional psychoanalysis was very hierarchical with the therapist in a position of power and the process mysterious to the client. However, contemporary approaches increasingly encourage the client to be an active participant in the therapy process, similar to that prescribed by Beck et al (1979). CBT has always
advocated collaboration, rather than relationship factors effecting therapeutic change in themselves, however in CBT texts there is now discussion of the Freudian concepts of transference.

Outcomes research, what do the clients think is important?

Eysenck, 1952, (cited in Horvath, 2000) claimed that therapy may be no more effective than a placebo initiating outcomes research to test and compare the efficacy of the different models. By the 1970's there was a growing body of research suggesting that different models could claim therapeutic success, however there was no research suggesting superiority of one model over another (Horvath, 2000). It became generally accepted that a good therapeutic relationship contributes significantly to therapeutic success.

Ross and O’Carroll (2004) reviewed key papers reviewing psychological treatments for childhood sexual abuse and found a ‘strong emphasis’ on the therapeutic relationship regardless of theoretical model. The literature identified characteristics such as being non-judgemental and empathy as of prime importance. This research fits with my experience of what clients tell me is useful, it is not the techniques being applied that is of prime importance, more the therapeutic relationship and having someone listen and be non-judgemental, this is what engages them in the therapeutic process.

Sanderson (1990) suggests that whilst the role of the therapist is always important, when working with adults who have experienced childhood sexual abuse the therapist must be even more sensitive to the client’s needs, irrespective of theoretical orientation. Sanderson argues an equal relationship based on empathy, validation and empowering the client is more successful than traditional hierarchical approaches. Sanderson also notes that establishing clear boundaries is essential so that the client feels safe and can explore distressing feelings without feeling violated.
Frank (1990, cited in Llewelyn, 1997) identified that the most important factor in therapy is that the therapist is trusted, allows the client time to explore and ventilate, provides encouragement and facilitates action to help difficulties. Whatever theoretical approach is used it must be based on a sound therapeutic alliance. Llewelyn (1997) argues the initial disclosure of abuse itself can be therapeutic and cathartic and believes we need a model dependant on client need not dependence on one model. The therapist reaction to disclosure is crucial, expressing shock, disbelief or anger will undermine the therapeutic relationship (Llewelyn, 1997).

Pearson (1994, pg33) summarises “the importance of the client-counsellor relationship cannot be overemphasised when working with adult survivors of childhood sexual abuse” Regardless of specific techniques, the counselling experience should involve the therapist in a caring, non-exploitative, reliable role. The therapeutic environment should foster self-awareness, self-acceptance and independence.

Conclusion

As we have seen there are shared characteristics between the models in the skills they use to engage clients. I believe therapists cannot operate a uniform approach regardless of the client’s presenting issues and discretion must be used regardless of models in assessing the client’s needs. Inevitably the unique needs of this client group and the extreme violation of their trust during childhood would warrant sensitivity in adjusting any model that I would be working within. I believe how we interact with the client should not be determined by the model we attempt to work within or are most personally aligned with but on a clinical judgement of the issues being brought into the room and the characteristics and emotional needs of our clients. This is not to suggest that we should not be trained to work within models just that it can be dangerous to fall in love with a model and apply it rigidly and methodically regardless of the individual needs of the client.
References


Essay 2

Using illustrative examples, discuss the advantages and disadvantages of formulation to clinical psychology practice.

Statement of confidentiality/anonymity: All names within this essay are fictitious, some personal details have been changed to preserve the identity of the client.

Year 2

December 2006
'Formulation' is a term I have become familiar with hearing regularly used both in clinical practice and academic teaching. Despite its wide use and my experience of writing formulations for my own clients I remained unclear as to its origins and role within clinical psychology, in addition to wondering about the 'right' way to go about formulating a client case. I chose this essay title as I hoped it would demystify the formulation process to me, help me to understand important considerations when formulating a client's case and make sense of how formulation fits within psychology practice. What I had not anticipated was how divided the literature would be on the topic. It seemed that my own confusion mirrored the literature with widespread disagreement and ambiguity surrounding the meaning, content and role of formulation. This paper is my attempt to weave my way through core questions and issues to aid my understanding of the formulation process and its benefits and difficulties to clinical psychology practice.

What is 'formulation'???

The main difficulty in defining formulation is that whilst it is a commonly used term it can have different meanings (Harper, 2003). Even within one psychological model/approach the term formulation lacks agreed definition and varies greatly in its scope from an explanation of a momentary emotional reaction to an attempt to explain a lifetime of emotional/relational difficulties (Schacht, 1991). No single definition of formulation fits comfortably with all therapeutic modalities. However, Eells et al (2005) postulate;

"case formulation can be defined as a set of hypotheses about the causes, precipitants, and maintaining influences of a person’s psychological, interpersonal, and behavioural problems. It is a succinct, flexible, and appropriately comprehensive account of a patient’s psychological problems that includes a treatment plan closely linked to that account".

(p580).
Whereas Butler (2006) summarises;

"formulation is the tool that clinicians use to apply theory to practice...Formulations can be best understood as hypotheses to be tested"

(p9).

The Division of Clinical Psychology of the British Psychological Society (BPS) considers formulation one of four ‘core competencies’ of clinical psychologists and a ‘unique’ skill that clinical psychologists use to offer a psychological perspective in understanding difficulties. They define formulation as;

"the summation and integration of the knowledge that is acquired by the assessment process (which may involve a number of different procedures). This will draw on psychological theory and data to provide a framework for describing a problem, how it developed and is being maintained...(it) may comprise a number of provisional hypotheses"

(p3, BPS, 2001).

Where did the concept come from?

Whilst agreement on the role of formulation is not universal it has become broadly accepted as a ‘central process’ in the role of the scientific practitioner by psychologists and psychiatrists alike (Johnstone & Dallos, 2006). Crellin (1998) comprehensively reviewed the development of the role of formulation within the clinical psychology profession and notes reference to formulation in clinical psychology texts began in the 1950's. Crellin (1998) outlined the pivotal role formulation played in defining clinical psychology at a time when it was seeking to identify itself as a separate discipline from psychiatry;
Crellin (1998) is not alone in arguing that clinical psychology's claim over formulation as a 'unique' skill of the profession may have developed to meet the profession's political needs and aspirations, a debate which cannot be given full justice within this paper.

**What does formulation mean for different therapeutic models?**

The meaning of the formulation process varies widely according to the theoretical model that the practitioner is working within. I shall overview the formulation process within three theoretical approaches.

*Cognitive Behavioural Formulation*

Cognitive behaviour therapy (CBT) is concordant with the scientist-practitioner model, arguably the current dominant model in clinical psychology practice (Bieling & Kuyken, 2003). The concept of formulation is particularly accepted by practitioners of a cognitive behavioural orientation often being considered the 'cornerstone' of evidence based CBT practice;

"to the scientist-practitioner cognitive therapist, individualised case formulation is the heart of evidence based practice. It occupies a fundamental place in clinical psychology, like the role of diagnosis in psychiatry"

(p 53, Bieling & Kuyken, 2003).

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1 I chose to review the concept of formulation within CBT, psychodynamic and systemic frameworks as these are the models most represented on Surrey PsychD Clinical Psychology training. A comprehensive discussion of the varied use of the formulation process within and between different theoretical models is beyond the scope of the current paper. For a full description and discussion of the formulation process within different frameworks see Johnstone & Dallos, 2006.

Different cognitive – theory based individualised case formulation systems emphasise different structural elements to the content and also process of formulating (Bieling & Kuyken, 2003). I shall briefly outline one CBT case formulation scheme as proposed by Dudley & Kuyken (2006). They suggest a formulation framework in terms of the ‘Five Ps’: presenting issues, precipitating, perpetuating, predisposing and protective factors. Each factor is a blend of descriptive and inferential elements. Dudley & Kuyken (2006) describe CBT based formulation as drawing on cognitive and behavioural theory to understand client’s issues within an environment of ‘collaborative empiricism’. They highlight the focus of CBT formulations is current problems with a goal/action orientation. Overall they propose that CBT formulation is consistent with and complementary to psychiatric diagnosis.

Psychodynamic Formulation

As with cognitive therapy there is no single psychodynamic formulation approach which is agreed upon, different schools of psychodynamic thought understand the nature of psychological conflict differently (Smith, 2003, cited in Ivey, 2006). Ivey (2006) summarises ‘minimum requirements’ for a psychodynamic formulation;

“it (would) conceptualise a person’s psychological functioning developmentally in terms of a) conflicting wishes, needs or motives; b) the anxiety or distress caused by this conflict; and c) the unconscious strategies to which a person resorts in order to avoid awareness of the conflict and minimise the ensuing discomfort”.

(p324)

Schacht et al (1984) highlight the need for a psychodynamic formulation to identify what they term the “dynamic focus” for a client, a repeated pattern of interpersonal behaviours which is central to their presenting issue (cited in Bergner, 1998). Leiper (2006)
maintains the psychodynamic formulation is intended to facilitate the change process for the client whilst supporting the therapist in their role. In addition, the formulation may inform choice of therapeutic strategy to meet specific aims whilst also identifying potential risks that may be encountered in the course of therapy. In psychodynamic therapy the therapists overall formulation may not be shared with the client as it is viewed by some practitioners as a barrier to the client’s self exploration and discovery (Leiper, 2006).

Systemic Formulation

Systemic approaches have increasingly regarded all aspects of therapy as an ‘interactive’ process and emphasised a collaborative approach to formulation;

“Formulation is not seen as something that the therapist does to the family but as something that they do with the family. The process of formulation is seen not as an objective process, but as a perturbation which starts to change the family system....The way in which this process of formulation is undertaken starts to shape the relationship with the family. Thus, there is less of a distinction between the stages of assessment — formulation — intervention than in many therapies.”

(p73, Dallos & Steadman, 2006)

Recent advances in systemic thinking have emphasised the importance of language and how it influences family members understanding of one another (Dallos & Johnstone, 2006). In this way systemic thinking is absorbing ideas from a social constructionist perspective, ideas which shall be discussed later.
How does formulation fit with psychiatric 'diagnosis'?

Medical diagnosis is generally thought of as a summary label of a person's presenting symptoms (Mace & Binyon, 2005). Ideally this is a 'multi-axial' summary of symptoms, personality, non psychiatric illness, social and situational factors. However, in practice this 'multi-axial' diagnosis is limited by descriptors which must be chosen from standardised menus;

"all diagnosis therefore remains fundamentally an exercise in naming what this patient has in common with others"

(p417, Mace & Binyon, 2005).

Psychiatric diagnoses do not refer to a presumed cause/aetiology and avoid theoretical connotations. Generally, accurate medical diagnosis is expected to carry with it implications for treatment, however, with a lack of aetiology implied in the psychiatric classification system its predictive utility is arguably relatively weak (Mace & Binyon, 2005).

Some argue that the psychiatric diagnostic system and psychological formulation are complementary;

"formulation provides a pragmatic tool to supplement and apply a diagnosis to the specifics of an individual's life. It also serves as a vehicle for converting a diagnosis to a plan for treatment"

(p580, Eells et al, 1997)

However, others maintain that the two systems are theoretically opposed and using the two systems together provides incompatible explanations of the client's experience (Johnstone, 2006). The formulation suggests an understandable emotional reaction to life
circumstances, whereas diagnosis suggests a medical ‘mental illness’ with biological aetiology (Johnstone, 2006). This incompatibility provides the foundation for proposing formulation as an alternative to the psychiatric diagnostic system (e.g. Boyle, cited in Johnstone, 2006).

**How is formulation useful to clinical psychology practice?**

Bieling & Kuyken (2003) summarised the main benefits which have been associated with a case formulation approach to practice. These include; the provision of a ‘systematic framework’ for hypothesising, individualised treatment protocols, improvements in description and understanding of presenting issues, improved therapeutic relationship and ‘focused’ therapeutic outcomes (Bieling & Kuyken, 2003). I shall elaborate more fully on key issues.

A primary advantage of the formulation process is its function in organising and integrating large and sometimes complex amounts of ‘data’ or information about a person. It allows the salient features of a case to be summarised ‘in a nutshell’ (Sim et al, 2005). This ‘way of making sense’ is very flexible and can be applied to individuals, couples, families and entire systems in distress (Gardner, 2005); ultimately it may provide a sense of relief and direction (Johnstone & Dallos, 2006). Whilst working with adults within a Community Mental Health Team setting (CMHT) I experienced feeling overwhelmed by the amount of information gathered during assessment, particularly if a client had a long or complex history of emotional difficulties. For example, in my work with ‘Sonya’, a 46 year old lady, she described feelings of anxiety, low mood, relationship and eating difficulties since she was nine years old. Constructing a coherent formulation assisted in making sense of the situation and increasing a feeling of ‘manageability’ of what was being presented.

Formulation relies on theoretical principles rather than lists of interventions from standardised treatment protocols (Persons, 2006). It is argued that descriptive
classification systems, such as the DSM-IV, do not provide a full assessment of a person’s presenting issues (e.g. Sim et al., 2005) due to their reductionistic nature (Mace & Binyon, 2005). As such diagnosis alone is a poor way of selecting appropriate treatment (Mace & Binyon, 2005). Indeed, my client ‘Sonya’ had a psychiatric diagnosis of ‘depression’. This gave me very little information about what her presenting issues and certainly did not illuminate the multi-faceted nature of her difficulties. Individuals greatly vary in responsiveness to different interventions, leaving it to formulation to identify and explain the ‘uniqueness’ of each individual and highlight which therapeutic intervention may be most appropriate (Sim et al., 2005). Indeed;

“a hallmark of the formulation driven approach to treatment is a tighter linking of assessment and intervention”

(p169, Persons, 2006).

Butler (2006) describes formulation as the ‘core process’ linking theory to practice, it stimulates informative questions and as such is ‘essential’ to good practice. Formulation increases accountability as decision making regarding intervention is based on theory and the knowledge base rather than intuition or because the therapist is well practiced in one style of intervention. Butler (2006) proposes that it is formulation which removes therapy from a system of ‘trial and error’, the formulation directs predictions regarding what may or may not be helpful for a particular client and as such;

“the formulation... serves both as a map for therapy and a guide to which map to choose”

(p202, Aveline, 1999).

In my work with ‘Peter’ a 22 year old man diagnosed with social phobia a formulation approach increased our understanding of the core processes maintaining his distress. Peter’s avoidance behaviours, his thinking processes and feeling unable to be assertive
were central themes leaving him feeling "trapped". The formulation directed selection of
the intervention which focused on exposure, thought challenging and assertiveness
techniques. Undoubtedly, thought challenging and exposure would have been covered
within a manualised approach to treating Social Phobia. However, the intervention was
tailored to suit the central features of Peter's distress at a pace which with which he was
comfortable. In addition, this individualised approach enabled time to be given to
exploring systemic issues, particularly Peter's relationship with his father where there
were issues Peter wanted to explore to understand the origins of his distress.

Formulation helps to give an accurate understanding of the mechanisms underlying a
client's presenting issues (Needleman, 1999) and increases the flexibility of the
practitioner (Persons, 2006). It allows them to make individual intervention decisions
based on psychological theory and continuous assessment rather than following
prescribed interventions from empirically supported treatment 'protocols'. Clinicians
can adapt evidence based nomothetic therapies to individual treatment plans (Persons,
2006). In my work with 'Susanna', a 21 year old diagnosed with Bulimia Nervosa
(B.N.), a formulation approach enabled me to select interventions which addressed her
specific needs. Susanna described difficulties managing strong emotions and it emerged
invariably there was a link between experiencing these emotions and her bingeing. The
manualised approach to treating B.N. does not focus heavily on managing feelings but
provides a very useful adaptation of cognitive behavioural techniques. Formulation of
Susanna's difficulties highlighted that a CBT approach needed to be supplemented with
other strategies resulting in an intervention combining distress management techniques
derived from Dialectical Behaviour Therapy approaches with CBT.

Formulation requires rich information to be gathered about the person. In addition, the
therapist may reflect on their own thoughts and feelings in response to being with the
person. Eells (1997) asserts that good case formulation enhances therapist empathy for
the client by increasing understanding of the presenting issues. Therapy can be a
difficult and demanding process for the therapist as well as the client and formulation can
help contain some of the uncertainty and anxieties of the therapist (Leiper, 2006). In turn this may increase the therapist's confidence in working with the client (Eells, 1997).

During my time at the CMHT I worked with two clients with whom I had not assessed personally and for whom there was no formulation, just a summary of issues. I found the uncertainty generated by working without a formulation anxiety provoking and at times the therapy felt directionless and left me questioning the purpose of our sessions. This contrasts with my experience of formulating collaboratively with clients which has contributed to a feeling of shared understanding and 'being on the same page'.

Butler (2006) outlines other more subtle advantages of the case formulation approach. With the process of formulation a 'meta-message' is given to the client. The essence of this message is one of validation;

"what you are telling me makes sense. It is not incomprehensible, or nonsense.....the ways in which you have come to see the world make sense in terms of what has happened to you"

(p10, Butler, 2006)

It can relieve a sense of being trapped and can help people to see that they were not 'born that way' and therefore change is possible (Butler, 2006). In a review of therapy with one of my adult clients, Caroline, she specifically highlighted how helpful she found the formulation commenting “it all makes sense”. She felt that it had contributed to a shift in her thinking from blaming herself for her difficulties, believing herself to be 'flawed', to understanding her difficulties as an understandable consequence of the relationships/context in which they arose. Working together to create a joint formulation helped her to feel both understood and accepted. Bergner (1998) suggests that sharing formulation with a client may help 'free' the person from 'enmeshment' in their own personal formulation of the problem which may be laden with conflicting thoughts/emotions. Indeed, research has shown that when formulations are shared some
clients reported it increased their understanding of their issues, they felt ‘listened to’ and it gave the therapy direction (e.g. Evans & Parry, 1996, cited in Kuyken, 2004).

**What’s not useful about the formulation process?**

Several writers argue that if formulation is to be used as part of an empirically driven, ‘scientist – practitioner’ position then the process itself needs to withstand scientific scrutiny (e.g. Kuyken, 2004). The flexible nature of a case formulation approach that makes it so valuable also makes it liable to becoming nonevidence-based (Persons, 2006). If formulations are to be used then they should demonstrate reliability, validity and should contribute to successful outcome of treatment (Persons, 2006). Bieling & Kuyken (2003) reviewed the research which evaluates the claimed benefits of the case formulation approach and concluded;

"**current evidence for the reliability of the cognitive case formulation is modest, at best…. (and) there is a striking paucity of research examining the validity of cognitive case formulations or the impact of cognitive case formulation on therapy outcome.**"

(p63).

It seems the suggested benefits of formulation are not supported by current research (Kuyken, 2004). Furthermore, there is also little evidence comparing individualised with standardised/ manualised treatments (Schact, 1991).

The process of making judgements and inferences regarding the psychological mechanisms underlying client’s presenting issues is extremely complex and multidetermined (Bieling & Kuyken, 2003). Kahneman (2003) highlights a range of factors influencing decision making including; practitioner’s values, decision-making style, cognitive complexity, risk and emotiveness of the case (cited in Kuyken, 2004).
Kuyken (2004) summarises research indicating that when making complex decisions people take 'cognitive shortcuts' to maximise efficient decision making. Several categories of these 'heuristics' affect reasoning processes such as formulation. For example, therapist's decision-making may be subject to 'availability bias'. This is a tendency to use the most readily available information in decision-making; information that is considered to be 'salient' may simply be the information that most readily comes to mind.3

Whilst systematic and formalised approaches to formulation exist its likely that in 'real-world' practice clinicians take a personalised approach to formulation (Kuyken, 2004). This raises several questions regarding the inevitable idiosyncrasy of the formulation process. Gardner (2005) poses interesting questions regarding what guides the therapist in selecting salient information in assessment. The therapist's theoretical orientation will undoubtedly affect the questions asked of the client and personal characteristics of the therapist will affect their preferred theoretical orientation. Therapists differ in their age, culture, gender and life circumstances etc and therefore will inevitably approach formulation and therapy in different ways (Butler, 2006). Thus it seems unlikely that formulation could be proven 'reliable'. Paradoxically, a strategy intended by some to support the 'scientist-practitioner' model by its very nature makes therapy less amenable to standardised research. Kuyken (2004) notes that it may be too simplistic to expect research to demonstrate a direct link between formulation and outcome as formulation may improve outcome more indirectly, for example, through the choice of more appropriate interventions or increased therapist confidence. However, in a clinical psychology climate dominated by the 'scientist-practitioner' model it is surprising the formulation approach has garnered such support, without evidence, as to be considered a central defining characteristic of clinical psychology practice (Harper, 2003).

In a counter argument to this critique Butler (2006) argues that the use of formulation should continue on the basis of 'known good practice' and the assumptions that

3 See Kuyken (2004) for a full description of heuristics including halo effects, illusory correlations, framing biases, recency effects, confirmatory and representative bias and failure to consider normative standards.
formulations should be reliable and contribute to outcome must be challenged. Butler (2006) views the formulation as a hypothesis, a suggestion of how theory may apply in a particular case. It is the starting point for exploration with the client as to whether the formulation 'fits' for them and is a dynamic and changeable process. She argues it is possible to formulate material in more than one way and we should drop the notion of 'correctness' regarding formulation. Evaluation of formulation should be on the basis of 'usefulness' rather than 'truth'. Other writers agree, formulation does not need to be seen as 'objective' but as a process of ongoing 'collaborative sense making' (Harper, 2003). Denman (1994) writes;

"The science of formulations must be combined with art. Something vital is lost if the formulation does not capture the essence of the case".

(p292, cited in Sim et al, 2005).

The formulation process, if not created collaboratively may disempower the client (Johnstone & Dallos, 2006). Rogers (1951) viewed formulation as 'psychological diagnosis' and expressed concern that with power conferred to the 'expert' therapist, clients may relinquish responsibility for making changes in their lives (cited in Eells, 1995). There is the risk of the professional imposing their viewpoint on the client (Johnstone & Dallos, 2006). Clients may feel unable to disagree with what they feel to be an inaccurate formulation of their presenting issues. In my work with 'David', a 33 year African-British man, he reported feeling offended by repeated suggestions by a counsellor that he was abandoned by his parents when they left him in the care of other adults in his African community as a child. He explained that it is culturally 'normal' for children to be cared for by other community members and this was not a sign of 'bad parenting' as he felt was being suggested. He felt unable to correct the counsellor, instead, terminating therapy early. Indeed, Westcombe (2005) noted within practice of Cognitive Analytic Therapy, in which clients are given letters including a formulation, that clients rarely corrected even factual mistakes (cited in Johnstone & Dallos, 2006).
Rosenbaum (1996) highlights the risk of the formulation process falling into fitting something to a ‘known’ formula (cited in Johnstone & Dallos, 2006). Clinicians can fall into a trap of using ‘tried and tested’ formulations and they can become ‘formulaic’. If this trap is fallen into the formulation process is worthy of the same criticism of reductionism that is often levelled at the psychiatric diagnostic process. Formulations may disadvantage the client if they are stated as proclamations of ‘truth’ or ‘fact’ and can be perceived as irreversible or damning judgements of the person (Johnstone & Dallos, 2006). Insensitive delivery of a formulation derived primarily by the therapist may be truly damaging. Inaccurate formulations may at best invalidate the client’s experience and at its worst actually deny the client’s ‘truth’ leaving a feeling of not being believed or understood (Johnstone & Dallos, 2006). Gardner (2005) highlights a concern;

"people are feeling missed or somehow objectified by their therapists' formulation of their experience and that this arises from an over reliance on a formula and insufficient attention to individual narrative"

(p12).

Johnstone & Dallos (2006) highlight the dangers of unhelpful formulations not being revised or abandoned. There may be a temptation on the therapist’s part to become attached to their formulation in the light of conflicting evidence or to ‘marry one’s hypotheses’ as it has become known in systemic practice.

As previously mentioned, whilst some clients reported the formulation process as helpful to them others reported feeling overwhelmed and frightened by formulations being shared with them (Chadwick et al, 2003). Bieling & Kuyken (2003) offer a useful analogy;
"a navigator who shares the whole road map with the driver may hinder rather than help the driver to keep on track, because the driver is given information not directly relevant to the current task and the amount of information may be overwhelming"

(p61)

I shared a GP letter with a client Peter including my own formulation to ascertain whether he felt it was accurate and to explore his thoughts and feelings about it before sending it to the GP. It was a detailed formulation following an extended assessment. It was evident that Peter did feel overwhelmed reading it and he commented it was 'a lot to take in... all written down in black & white'. Whilst Peter felt the formulation was accurate, on reflection, gradual sharing of my ideas and collaborative formulation writing may have been experienced as less threatening.

Not all therapeutic modalities have adopted the concept of formulation. Social constructionist and social inequalities approaches reject typically understood formulation processes due to concern it can be 'individualising' (Johnstone, 2006). Harper (2003) argues formulations are commonly 'individual' when we know that psychological difficulties arise in a social context. Smail (1993, cited in Johnstone & Dallos, 2006) asks whether it's possible to isolate individual's psychological state from the social and political context they are occurring within. He argues formulating social and political issues as individual psychological distress ignores its true origins. Johnstone (2006) proposes that by individualising psychological distress we may be in danger of replicating damage that the psychiatric diagnostic process has been accused of doing. Particular therapeutic modalities do attempt to avoid such individualisation (Johnstone, 2006). For example, systemic approaches attempt to take account of the broader context that the individual is operating within including their position within relationships, family, social systems and wider culture.

Crellin (1998) challenges whether the concept of formulating a client's issues before treatment is compatible with therapies which are underpinned by phenomenological
rather than empirical assumptions. Formulation secured its position as a 'core skill' within clinical psychology on the basis of its seeming compatibility with scientific hypothesis testing approach. However, many psychologists practice humanistic and phenomenological approaches which are not consistent with the 'scientist-practitioner' model. Such approaches assume client's issues gradually 'unfold' throughout the course of therapy and as such formulation may only truly be possible at the end of the course of therapy (Crellin, 1998). Crellin reports experiences of feeling pressured to 'encapsulate' client's issues before they have fully talked through them, to which I can relate. In clinical practice I have been encouraged to write initial formulations on the basis of one or two-hour assessment sessions and certainly experienced pressure to be able to formulate a client's issues without feeling the client has had the opportunity to fully tell their story.

If we accept formulation facilitates good clinical practice how do we avoid the pitfalls and dangers outlined above?

Various writers offer suggestions on how to ensure the formulation process is useful and valuable for both the therapist and client. Denman (1994) maintains that a good formulation includes the presence of a theoretical basis but also demonstrates sensitivity to the person and most importantly captures the essence of a case (cited in Sim et al, 2005). Therapists need to maintain a balance between their formulations and being able to 'suspend' their ideas to remain truly open in listening to what the client is bringing to the session (Johnstone & Dallos, 2006). Systemic thinking offers a useful concept in suggesting a shift from the term 'formulation' to 'formulating'. Formulation is continual and fluid process, not a 'one-off' judgement (Vetere, 2006). It is akin to 'progressive hypothesising';

"a dynamic ongoing process for which there is no ultimate end point"

(p177, Johnstone & Dallos, 2006).
Practitioners need to be aware of the need to continually ‘reformulate’ as more information is gathered (Johnstone, 2006) and developed within an environment fostering collaboration (Vetere, 2006). Kuyken (2004) suggests this collaborative stance creates a balance between practitioners’ ‘intuitive’ and ‘rational’ decision-making. ‘Checking out’ the hypotheses with the client or jointly creating it effectively tests its accuracy. He maintains that an awareness of how decision-making is impacted by time pressures, complexity of a case and the various forms of bias can limit their negative impact on the formulation process. Harper (2003) encourages practitioners to give up the ‘illusion’ of being scientific and ‘objectively’ formulating client’s experiences. By adopting a collaborative stance sharing of expertise becomes a two-way process, the client being the expert on their own life (Harper, 2003) protecting people from formulations that do not ‘fit’ for them (Vetere, 2006).

Harper (2003) highlights the importance of therapists being aware of their own ‘blind spots’. Through personal reflection practitioners can examine the influences on their practice and ‘own’ their position within the therapeutic relationship and their formulations. Good use of clinical supervision can also help guard against becoming stuck in one way of seeing things and facilitate keeping an open mind when listening to clients (Butler, 2006). Being aware of how class, gender, age, and culture may be influencing the therapeutic relationship and formulation process with clients is essential to good practice (Johnstone & Dallos, 2006). Therapists must take account of a client’s social and cultural context to ensure that formulations ‘fit’ the client and generate a feeling of being understood (Sim et al, 2005). Placing formulations within a social context also goes some way to prevent them ‘individualising’ the client’s issues (Harper, 2003).
Reflections

I have found researching and writing this essay has given me a far greater understanding of the nature and role of formulation within clinical psychology. I will take this new awareness of formulation as the link between assessment and intervention into my clinical work and be far clearer on my aims for formulating client's experiences. I believe sensitive and collaborative formulation is very useful to the therapy process, both to therapist and client. However, I am also now aware of the damage that can be caused by insensitive or non collaborative formulation. I hope to be able to reflect more on my own position within the therapeutic relationship through greater self awareness that I am developing in personal therapy and through discussion in supervision. I am reminded to attempt to 'step back' within therapy and to keep an open mind so as to clearly hear client's stories. As ever, I am also reminded that there is no 'one size fits all' approach in the therapy process and what suits one client simply may not be helpful to another. I particularly liked Leiper (2006) writings on formulation and will strive to achieve the balance he eloquently describes;

"formulation must find its place not as a refuge from the agonies of uncertainty but as an aid to tolerating the experience of not understanding, managing the sense of risk in relating therapeutically, promoting rather than stifling curiosity... something that we hold on to for security and that helps us think - but which can be discarded as wider fields of mutual understanding open up".

(p70, Leiper, 2006).
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Problem Based Learning Reflective Account

The Relationship to Change

Year 1

March 2006
Problem Based Learning – ‘The relationship to change’

This is my written account of my experiences of our problem based learning exercise ‘The relationship to change’. I shall be reflecting on both personal and group learning and how this applies to my work with clients at placement.

The ‘ambiguous’ task

Our CDG consisted of six members, we were aware that we would be joined by a seventh group member who was starting the course late. Our facilitator was present for three of the six sessions assigned to work on the task.

Initially our facilitator was directive and asked us all to share personal experiences of change in our lives. This was necessary as the group was not autonomous at this stage and we needed guidance. Several group members reflected on aspects of moving country or culture. Our facilitator felt this was an interesting and broad interpretation of the topic. At this stage the group was very open to suggestion so this guidance heavily influenced the direction of our future discussions.

Early on there was more focus on organisational issues, these were ‘safe’ topics and did not require personally disclosing too much. The remaining sessions were spent discussing various ideas surrounding culture change. Several themes emerged; ideas around acceptance of change, how we had coped with it and how this may relate to client’s experiences. Other themes included the presence of support systems and levels of self efficacy. There was a lot of discussion surrounding ‘fitting in’ with a new group and personal resistance to change.

We decided to personalise our presentation basing it on sharing these experiences. It became apparent early on that our experiences of culture change were very different. Initially there was some wrangling, trying to fit our different stories in to one nice neat
model. The wrangling was fruitless, no matter how we tried to mould our stories they just wouldn’t fit into one model. It clearly emerged that our stories, just like the people who owned them, were too diverse. In trying to fit our square shaped pegs into circle shaped holes we were losing the very essence of our stories, the differences were the source of their richness. This realisation turned the direction of our discussions and we concluded that our different experiences should be celebrated. We decided we would only use models and theories that mapped onto our experiences, not map our experiences onto models. This approach sits comfortably with narrative therapy concepts of accepting and respecting a client’s story and focusing on strengths (Nightingale & Cromby, 1999).

Group members could choose if they felt comfortable sharing personal experience for the presentation, if not this was respected and a different role was chosen e.g. narration or reflecting on the process of the group. This worked well, everyone felt they had a valuable role to play which was within their comfort zone. Group members sharing personal experiences worked on their narrative account whilst other group members looked up theories and models to map on, this approach didn’t work! It felt uncomfortable and intrusive for others to fit the story’s and models together and we changed to working collaboratively.

Initially we were keen to ‘jazz up’ our presentation using humour and props. We compared our groups work to other groups and were concerned our presentation would seem too boring or serious. Over time we realised gimmicks were not necessary, our personal accounts varied and diverse and did not need decorating. We felt pleased with what we finally delivered, it was professional and we had fully brought ourselves and our experiences into the project.
Who am I in the group?

Initially I felt quite anxious and vulnerable in the group, sharing my personal experiences with people I did not know. I questioned whether I was too quiet, or talking too much. I found the ambiguous nature of the task and the lack of structure and clarity anxiety provoking. I wondered “what are they looking for?” and “if there is no right answer, how do I make sure that I’m getting it right?”. I found myself censoring my story of my experiences, there was no safety. I feared being belittled or of confidences being broken. I was very aware of how I was presenting myself and what others were thinking of me. I have not been so aware before of my personal need to fit in with a new group of people.

I found it confronting really looking at my experience of moving countries and reflecting on my loneliness and isolation. I learnt that in trying to ‘get on with things’ I hadn’t recognised and sought out support that I needed. My beliefs surrounding my own level of independence and ‘not needing anyone else’ were challenged. I hadn’t fully acknowledged the difficulties I went through, nor accepted that I was quite unhappy for a time. My experience of stress throughout this change period can be understood in terms of the ‘Buffering Model’ proposed by Cohen and Wills (1985). This model proposes that social support increases stability and self-esteem during times of stress. My lack of social support having just moved to a new country perhaps resulted in greater vulnerability to stress throughout this change period. I now recognise that it is strength to be able to ask for help when needed and this will need to be applied in my work as a trainee.

As time progressed the group felt increasingly safe and I censored myself less making more verbal contributions to discussion. The group was good at giving positive and warm feedback and empathising with the experience I shared. This feedback and support made me braver and I felt increasingly comfortable and able to be myself. Discussing
confidentiality of experiences shared within the group was also important in maintaining safety.

I found the final presentation anxiety provoking, I feel nervous about public speaking and was apprehensive talking about my personal experience, again fearing negative evaluation from others. I was scared of others noticing my nervousness and my vulnerability being on display. Afterwards, I felt pleased with my contribution (as well as relieved). I had been nervous and shaky, people probably did notice, but I had survived! I felt that I had taken a personal risk and stretched myself.

I enjoyed the focus on getting to know each other and working well together rather than creating the ‘perfect’ presentation. This attitude fostered a warm working relationship between us rather than a competitive atmosphere. I started to enjoy my time learning with my CDG. The support within my CDG has continued and I feel able to take issues from placement into the group for input and support.

Who are THEY in the group?

Our first session felt quite stilted, with everyone on their guard. Afterwards I felt disappointed, other groups were talking about how much fun their group had been, spent the whole time laughing and ‘got on like a house on fire’. I was suffering from CDG Envy! I wondered why my group wasn’t so much fun and so easy to talk to. Slowly, I realised the reason the first group had felt so stilted was because every member of my group was being respectful, carefully listening to others contributions and thinking before sharing their own experiences and reflections. This respect for other group members was maintained throughout the task and the connection and safety in the group increased.

Relationships between group members strengthened based on the shared understanding that our priority was to get on well with each other and be respectful of our differences and comfort zones. Discussions flowed increasingly smoothly and the group interacted
well together with an atmosphere of 'bouncing ideas' off of one another. The arrival of our seventh group member during the fourth session was not unsettling, as a group we tried to create options for how the new member could contribute to the presentation at a level they felt comfortable with. This approach seemed to ease the transition and there was no sense of there being an ‘intruder’ in the group.

The group dynamic changed with the presence or absence of the group facilitator. Initially their presence in the first two sessions helped to contain the group’s anxiety, though it felt quite directive. Sessions without the facilitator felt more relaxed, people spoke more freely and openly without fear of evaluation from a course team member. We were happy with our ideas and became more cohesive as a group. When the facilitator rejoined us their presence was felt strongly, the group felt formal again. We were hoping for positive feedback on our ideas, this was not forthcoming! The group felt quite disgruntled that our ideas were challenged. We reverted back to not talking as openly and were annoyed that we could not share as much about ourselves as we feared criticism, we became defensive of our ideas and each other.

What on earth has this got to do with clients???

My previous experiences of the processes of change and initial feelings of being an outsider were repeated when I started my placement. My anxieties surrounding wanting to be liked/accepted were present with other members of the multidisciplinary team and my supervisors.

I consider a lot of the thoughts and feelings that I experienced as part of the exercise to be very relevant to the experiences of adult clients that I have now worked with. In initial sessions building safety and an atmosphere of trust and confidentiality has been very important. Clients present as anxious coming to sessions, not sure what to expect. Some have overtly expressed concerns about what I might think of them, fearing judgement or ridicule and whether I think they are ‘crazy’. It’s possible they view me in a position of
power, in the same way that I relate to our group facilitator and my supervisors. Slowly, as sessions progress, clients become more open, feel less vulnerable and are able to share more intimate details about themselves and their experiences.

A client centred approach utilising basic counselling skills of active listening, reflection and empathy is considered crucial in building a safe therapeutic environment (Corey, 2001). This same approach was naturally assumed by people within my CDG which allowed me to disclose my thoughts and feelings. I am using this approach with clients to help create an atmosphere of safety and trust. Being clear with clients about confidentiality of material disclosed also helps them to be open with me in the same way that confidentiality within our CDG is important for me.

Our group experience of not being able to fit everyone’s story into one model has been mirrored in my experience with clients. At placement I am predominantly using a Cognitive Behavioural Approach. I have found some client’s presenting issues fit very neatly into this model. However, for other clients the only way to ‘fit’ their experience to the model would be to try to mould their experience, interfering with it rather than just accepting it. I look forward to gaining the skills to work using an integrated approach so that I can choose the approach most suited to the client, rather than trying to make the client suit my approach. The sense of working collaboratively within the CDG transfers well to adopting a collaborative approach when working with clients, an integral part of the Cognitive Behavioural Model (Padesky, 1995).

This exercise has led me to think about the meaning and processes of change for clients. For me, adapting and coping with change has sometimes been very quick, at other times it has been excruciatingly slow. I have noticed myself becoming anxious and wondering where I am going wrong if clients do not appear to be making progress. Looking at my own experience has allowed me to accept that for some clients change may be slow. Progress does not necessarily follow a smooth path, often there are barriers and pitfalls,
just as I have experienced in my own life (and does not necessarily mean I am a 'bad' or unskilled therapist!).
References


Problem Based Learning Reflective Account

Child Protection, Domestic Violence, Parenting, and Learning Disabilities

Year 2

February 2007
This is my reflective account of a Problem Based Learning (PBL) exercise undertaken by my Case Discussion Group (CDG) at the beginning of my second year of clinical psychology training. I shall outline the task presented to the group and how our group handled the exercise. I shall then reflect more fully on my own contributions to the group, group processes and the relationship between my reflections and learning in this task and the practice of clinical psychology.

THE TASK

The PBL exercise consisted of a written vignette regarding the care of twin, three-year-old girls whose mother and father were described as having learning disabilities. 6 CDG sessions were timetabled for discussion of the case, three of which were facilitated by our new CDG facilitator (a regional psychologist previously unknown to us). The group task was to complete a 20 minute presentation to reflect group processes, decision making and content of our discussions regarding the vignette.

It became apparent early on that group members had differing opinions regarding the care of the children and it seemed unlikely that we would reach a group consensus. Initially it was suggested we explore just one aspect of the case in detail, for example, focusing on the impact of domestic violence on the children, to allow more in depth exploration. However, it was felt this missed grappling with the breadth and complexity of the issues involved. A suggestion was made that in our presentation we reflected arguments both for and against the children being adopted without reaching a firm conclusion, thus reflecting divergence of opinion within the group. At the end of the presentation we would ask the ‘audience’ to decide whether the children should stay in care or be returned to their parents. We made this decision very quickly and were task focused for reasons I

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4 An assumption of this written account is that the reader has read the detailed clinical vignette regarding the care of two children whose parents have learning disabilities. This vignette formed the basis of the PBL exercise, due to limited word count I shall not attempt to summarise all details.
shall explore below. We settled on the idea of presenting the arguments 'for and against' the children being adopted based on a news program debate. The final presentation consisted of video footage of a reporter (me!) interviewing a social worker, the children's guardian and the parents advocate separately. Each person interviewed had different opinions on the children's care, not necessarily reflecting the individual's personal opinion. This footage was shown within a hosted 'live' news program debate between two clinical psychologist's presenting arguments based on clinical evidence 'for' and 'against' the children being placed in adoptive care. At the end of the TV debate the 'audience' were asked to vote 'yes' the children should stay with their parents or 'no' they should go into adoptive care by either standing up or staying seated.

THE GROUP

Throughout the task group dynamics heavily influenced our group decision making and impacted the final presentation. For a number of reasons the PBL exercise was the source of considerable conflict for our CDG.

In the first session our new group facilitator did not introduce herself and took a very directive stance. This felt intrusive to our group who knew each other well and operated without a designated 'leader'. The facilitator's approach heavily impacted the atmosphere and group dynamics. Research has shown that compared to people-oriented leadership task oriented leadership produces lower morale in teams (Baron & Kerr, 2006). Without the facilitator present, our CDG quickly made a decision about how we would approach the task so that we could 'inform' the facilitator of our chosen course of action. I think this was intended to reclaim power from the facilitator, to demonstrate that it was 'our' group and that we did not need a 'leader'. On reflection, perhaps our facilitator's directive stance and lack of introduction may have been due to anxiety about joining an already formed group. The transition from 'expert' and a didactic teaching style to 'facilitator' within a PBL context can be difficult to adjust to (Bowman & Hughes, 2005). It may have been appropriate for us to address concerns with our facilitator, rather than
allowing it to cloud the remaining sessions. Unfortunately we did not, instead rushing to a quick decision about the content of our presentation, without full exploration of all the issues.

The content of the PBL vignette generated complex ethical debate. Our decision to base our presentation on exploration of both sides of the debate, with no conclusion was initially felt to be recognising the complexity of the situation and reflecting difference of opinion. However, I now think our CDG side-stepped these issues due to our unwillingness to face conflict. We were not willing to fully explore the issues and allow our discussions to evolve over time and to reach agreement on how to reflect our difference. As quickly as it became apparent that we did not agree on issues we embraced an idea for the presentation that allowed our group to remain conflict free. Groups create 'norms', rules for how members should behave in the group that form the basis of mutual expectations (Tindale, 1998). Our CDG prides itself on 'getting along well' together as a group. Effectively we have created a group 'norm' that we remain conflict free. The group does not feel strong enough or safe enough to allow conflict to unfold naturally and to be resolved. At the slightest hint of disagreement, we shut down communication and trundled down a path which guaranteed us no collisions. Our approach retained overall group cohesion but prevented us from truly exploring our personal and professional opinions in a valuable way. We succumbed to the temptation to avoid committing to decision making which was viable within this exercise. However, in our work as clinical psychologists it is not going to be enough to reflect that we understand the complexity of a situation, we will be expected to give an opinion, no matter how complex or difficult the situation.

Whilst I think our group’s task-focused approach served a primary function in the avoidance of conflict other members felt that our task focused approach was more due to lack of time, or served to wrestle power back from the facilitator. It is well documented that in larger groups, a smaller percentage of individuals contribute to the group discussion (Baron & Kerr, 2006). CDG members have commented on feeling far 'safer'
within our CDG to express opinions, thoughts and feelings than within the larger group of 28 trainees. I think this supportive space has become so valuable that effectively it is more desirable to gloss over conflict than to destabilise our ‘secure base’. Clearly there is no ‘right’ position to adopt in such a complex area but we attempted to find a balanced and settled, politically correct position. It would be valuable if our CDG could become a forum in which to practise disagreeing with one another, a space to fully thrash out issues and opinions in contentious areas. We missed the opportunity to create learning that could have been taken into our clinical work where we cannot avoid complex ethical decision making. Within an MDT there are always parallel pressures to conform, to ‘fit’ with our colleagues and be a ‘team player’. However, we are in danger of valuing the interests of the ‘team’ remaining settled and safe to the detriment of acting to serve the best interests of the client.

Having bonded as a group against our facilitator some conflict did still arise between trainees. The vignette described a very emotive and complex situation and group members expressed a split between their personal and professional opinion. We had regularly held academic discussions with varying opinions in the group before. However, there was a shift in the atmosphere of our group discussions. Difference of opinion became perceived as a more personal attack. During one discussion I felt another group member had been verbally aggressive towards me leaving me feeling angry and upset. In private discussion with her she explained that she had felt attacked by the group, alone in her opinions and in retaliation she had snapped at me. Interestingly, when reflecting on the group process some members perceived no conflict at all whereas others reflected that they felt there had been conflict but this had been effectively worked through. I expressed my thoughts that our group had tried to avoid the conflict that inevitably arose in such a complex and emotive topic area. However, even during this discussion the conversation repeatedly went ‘off track’ with the group not focusing on discussing our differences! Social identity theory postulates self-esteem and self-image are dependant on the groups we identify with and group membership maintains a satisfactory sense of self (Tajfel & Turner, 1986). I think that when conflict started to appear, it was brushed aside, too.
threatening to our group and individual identity to allow it to be fully explored and addressed.

ME

Writing this account I became aware of the difficulty of mentally ‘stepping outside’ of the group process when submerged in it. At the start of the PBL exercise I did not challenge our lack of reflection, quick decision making or task focused approach. I was not a leader in the ‘lets decide really quickly what we’re doing’ approach though I certainly found myself carried by the momentum generated. Our group chose a path of low resistance to the intrinsic challenges of the task and I chose a path of low resistance to the group. I was easily swayed by the other members of the CDG. This may be because I have not taken the time to think through and reach my own conclusions, therefore I happily adopt popular or group consensus. At other times it may represent my desire to be accepted as part of the group and maintain popularity. I hope to develop my reflective skills in CDG and within placement to notice my position, role in the group and group processes whilst they are occurring, rather than reflect on them afterwards when they are immune to influence.

Writing this account has also led me to explore how I handle conflict within groups, particularly my response to another group member ‘snapping’ at me. The situation was resolved as the person involved is a friend therefore I felt able to talk it through with her. However, a situation occurred within my placement whereby a senior member of the MDT was verbally aggressive and rude towards me. I felt very upset and intimidated by this event. In response I have avoided the member of staff for the remainder of my placement. In my position as a trainee I find it difficult to disagree with or challenge the opinion of senior clinicians, the power imbalance combined with my dislike of conflict, silences me. I realise that I need to work on how I respond to conflict with others in a professional context as inevitably I will face it in my clinical work. The role of the
clinical psychologist confers privilege and power to speak on behalf of clients, for example, in MDT meetings. I need to be aware to push myself to express my opinion in situations where naturally I would fall silent so as not to waste the opportunity to represent my opinions and client’s best interests. I would like to create a balance between being a team player and sharing my opinion regardless of whether or not it conforms to the group ‘norms’ that are established. I hope to use future CDG sessions to stretch my wings and practice these skills to transfer into my work within MDT’s.

Final thoughts

Overall I think our group did not manage to take advantage of the various learning that was offered by this PBL exercise. We prioritised getting along well together over the task itself. I hope to be able to share some of my reflections with my CDG and encourage others to share theirs. Hopefully sharing these thoughts will contribute towards us working together in a more reflective way and encourage us to take a few risks with each other on our journey through training together.
References


Problem Based Learning Reflective Account
Working with Older People

Year 3

February 2008
Problem Based Learning

Over the course of clinical psychology training within the 'reflective scientist practitioner' model, our Case Discussion Groups (CDGs) have completed three problem based learning (PBL) exercises. Each exercise culminated in a presentation of our learning to our year group and course team members. This is my account of our final PBL exercise. I shall consider the PBL task itself, processes within our group, personal learning and links to clinical practice.

The Task

The task involved a vignette regarding the care of a widowed Pakistani man, Mr Khan, who resided in the UK. Mr Khan had two adult daughters. His eldest daughter lived in Pakistan with her family. His youngest daughter lived in the UK with her English husband and had been disowned by Mr Khan for her choice of marriage partner. Mr Khan was showing some signs of forgetfulness and disorganisation and his youngest daughter had contacted social services for support.

Initially our group set about familiarising ourselves with the complex structure of the Khan family tree outlined in the vignette whilst simultaneously talking through possible perspectives regarding Mr Khan’s care. Our discussion identified several gaps in our knowledge particularly regarding cultural attitudes to ageing and the provision of care. CDG members chose areas to explore and read about including Pakistani culture and religion, loss in older age, attitudes towards depression, dementia, grief and ageing in different cultures.
I found it interesting to read about ‘care’ in other cultures whereby older people are cared for by family members rather than by services. This philosophy of care appealed to me and my values regarding family support. However, I was simultaneously aware that taking on this responsibility is potentially overwhelming and something I am unsure as to whether I would commit to doing within my own family. We learnt that in Pakistani culture if an older person is experiencing difficulties then it is considered this is due to the person not receiving enough support (Cohen, 1995). In this sense, the person’s difficulties are viewed systemically by society and the medical profession, rather than an individualistic view of the person’s situation. I considered how individualised interventions, common in UK services, may be experienced as ‘blaming’ by an individual and ultimately be ineffectual in the event of the person’s support system not also being addressed.

Following the reading and sharing of information in the CDG we discussed how views within the family regarding Mr Khan’s care were likely to vary widely. Some family members identified themselves as Pakistani and other family members as ‘western’. We wondered how we might represent the likely diversity of views within the family. We were interested in trying to represent this diversity of views within the final presentation. One CDG member had attended a workshop, which had presented the therapeutic technique of ‘sculpting’. Sculpting was developed by Gestalt therapists and is a method of showing relationships and positions within relationships by physically adopting a position relative to another individual (e.g. Hearn & Lawrence, 1981). The physical distance between individuals can symbolise emotional closeness or distance in relationships. The method is very flexible and can be used in different ways. Once an individual has adopted a position they can be invited to talk through their thoughts and feelings regarding where they have been positioned. We decided that this technique may be a useful way to represent the diversity of views and relationships within the Khan family and overall within the wider ‘system’ they were operating within.
We then considered ways to make our presentation more interactive and less didactic. All members of our CDG are white, British and we discussed how ‘white, British’ is often considered to be the ‘norm’ or ‘benchmark’ against which we measure other cultures i.e. how they are different to us. This assumption means that we less often consider what it means to be ‘white, British’ and to identify aspects of our own culture. We decided to ask our audience to talk to their neighbour and consider what they would want a therapist from a different culture to know about their culture to encourage exploration of this idea.

During our discussions regarding culture we considered diversity issues within cultures. As a group of white, British people we would be offended by a presumption that we all shared an identical belief system on the basis of our cultural identity. We did not want to stereotype the Khan family members belief systems on the basis of the limited information provided. CDG members decided that, within the sculpt, we would make it clear that we were hypothesising regarding what a family member’s position may be with regards to Mr Khan’s care, rather than assuming certain positions based on stereotype.

I noticed in our discussions surrounding other cultures there was considerable anxiety regarding doing or saying the ‘wrong’ thing. This anxiety appeared to be primarily driven by a fear of unintentionally causing offence. I considered how our fear of not wanting to appear ignorant or cause offence may result in important areas of difference being left untouched. Within therapy, cultural issues may need to be addressed to fully understand the person’s value and belief system that they are operating within.

Our group’s final presentation consisted of an introduction, followed by the interactive exercise, and the demonstration of the sculpting technique. The presentation ran smoothly and we received positive feedback. As a group, we paid significant attention to exploring the diversity of positions regarding the care of Mr Khan from the perspective of family members and services. This perhaps is a reflection of our stage of clinical training being more comfortable with uncertainty. We did not need a neat ‘answer’ in response to the vignette. Perhaps it is also a reflection of the emphasis on diversity and service user
involvement within the Surrey training course, an approach which highlights the need for people to be treated as individuals.

**Group context & process**

When considering the process of our working together as a group, and my role within the group, it is necessary to place the PBL exercise in the context of changes within the CDGs and events within the year group as a whole.

At the start of the third year I swapped places with another trainee and moved into a new CDG. I was apprehensive about joining the new group, which had been working together for two years and this was therefore a transition period for both the group and me. The change occurred at a time of general unrest for our year group. Following allegations of bullying behaviours between trainees there was an atmosphere of anxiety and tension. Overall, I think the PBL task seemed less important than in previous years as the confusion and anxiety regarding the year group dynamics absorbed people's attention and created difficulty focusing on a 'task'. Our CDG meetings were often quite confused regarding what we were trying to achieve and how to achieve it. I think this confusion was mirroring the general confusion and uncertainty within the year group at that time.

Initially in the new group I noticed myself monitoring my contributions to the discussion wanting to appear willing to engage without over-contributing. I was relieved to find my new group welcoming and considerate to my 'new' status and I quickly started to feel comfortable in the group. I felt increasingly relaxed and able to contribute in a more spontaneous way and the CDG felt like an easy and relaxed group of people to get along with. They reflected on the loss of the trainee that had left their group and how this had changed the dynamic of the group. As a result of this state of 'flux' there was no concrete way of being in the group that I needed to adhere to and there was a sense of a 'new beginning'.
Our group was comfortable using the knowledge and opinions we had already acquired throughout training to address the PBL exercise rather than feeling the need to rely on excessive research culminating in a didactic presentation. This shift towards greater reliance on trainees' own knowledge was reflected in the year group as a whole. For me personally, thinking about the family scenario in the vignette was more meaningful than gathering large numbers of articles to 'present' to others. This focus on 'being' with the information provided and fully exploring it was different to the 'doing' emphasis in previous PBL tasks. The conflict between 'thinking' and 'being' with versus 'doing' appears to arise frequently in clinical practice. There often feels a pressure to be 'doing' something with a client rather than an emphasis on 'being' with the person, supporting them and being available to explore issues with them. I've noticed this pressure arising within me, driven by anxiety to be helpful to my clients. However, this pressure also originates from other members of a multi-disciplinary team (MDT), a common question being "but what are you actually doing?".

The approach our group took allowed us to stay cohesive as a group as it explored diversity without us having to reach a definite position or 'answer' regarding the vignette. In this sense it was a very safe way of working together perhaps dissipating anxiety regarding changes in the CDGs and the difficult atmosphere in the year group. Our group's feedback included that we could have brought in more theory and evidence, which I agree with and would have consolidated our approach if time constraints had allowed.

Me

At the time of the PBL exercise I had just commenced working in an Older Adult Community Mental Health Team (CMHT) and therefore had been reflecting on issues related to ageing and dementia. I was struck by reports from older people regarding others treating them as 'stupid' due to their memory difficulties. I felt a sense of sadness that individuals I was working with did not experience being valued as an older person.
within their family, social networks and wider society. Within western cultures youth and the associated ability to be productive are valued over the wealth of experience an older person may have (e.g. Feldman, 1999). I became aware of my own prejudices towards older people and realised I had underestimated an older person’s capacity to engage in intellectual and philosophical discussion regarding their life circumstances irrespective of their age or a diagnosis of dementia.

The PBL vignette raised important ethical issues that need to be addressed within clinical practice. In particular, how do we as professionals protect a person’s right to autonomy and independence in older age whilst also ensuring their needs for support are adequately met? Mr Khan’s situation was similar to two people attending a support group that I was running. Both people reported confusion and disagreement within their families and services involved in their care regarding how best to support them. There was a sense that the individual had ‘lost their voice’ regarding the decisions being made about them.

Kitwood (1997) writes eloquently regarding a philosophy of care for older adults. He argues that a true notion of care is person centred and designed to meet the specific needs of the individual. All services, including the CMHT I work within, are constantly challenged by limited resources. These service limitations inevitably impact what is available to be offered to the client thus ‘care’ becomes compromised by service needs. In this sense, the system may be paying lip service to person centred care philosophy as part of the Care Programme Approach (CPA) when in reality it is an unrealistic ideal. Within the service I work in decisions are necessarily based on what is locally available, taking budgeting constraints into consideration. Inevitably, this approach falls short of Kitwood’s depiction of respectful care for older adults and discussions within the MDT regarding the lack of a suitable range of services to offer individuals are common place. Clinical psychologists may have an important role to play in highlighting the principles of person centred care in the development of future services.
References


Case Discussion Group (CDG)
Reflective Account Summaries

Year 1: September 2006

Year 2: July 2007
Summary of Year 1 CDG Reflective Account

In my first ‘reflective account’ of the process in our case discussion groups I focused on our formation as a group, roles within the group in general and also my own personal role. I reflected on changes throughout the first year of training and also thoughts with regards to how the group may change in the future.

I described the group membership and the dynamics between group members and our course team facilitator. I reflected on the Problem Based Learning (PBL) exercise that we completed together and how this allowed individuals to get to know one another and become a cohesive working group. I considered the power balance within the group between the course team facilitator and group members and also between trainees who were more or less dominant in the group discussions.

At the start of the year our group was very task focused in addressing the PBL exercise, I reflected on how this task focus had continued throughout the remainder of the first year with us continuing with a structured case presentation format each week. I thought about our stage in training and how perhaps this structure provided a secure and supportive space in which to manage our early anxieties about our clinical work.

I reflected on my own role in the group and my feelings regarding wanting to ‘fit in’ and be accepted. I noticed how over time group members became more comfortable in expressing differing opinions. However, I also reflected on how the rigid structure, which had become the group ‘norm’, may have prevented us from building closer relationships with each other through sharing more broadly our thoughts/feelings about our clinical work and our progress in general. Finally, I considered other group ‘norms’ which had developed throughout our first year together, some of which I considered helpful and others less so and the ways in which I hoped to play a role in shaping the group throughout the second year of training.
Summary of Year 2 CDG Reflective Account

In this reflective account I focused on the shift in dynamics in the group as we entered into our second year of training, which I thought were influenced by a change in facilitator but also trainees exerting more influence regarding the nature and direction of the group. The group's discussions became much broader and focused on ethical and professional issues in addition to clinical work. Discussions were more fluid and a sense of broader learning emerged which perhaps reflected our greater levels of confidence in our clinical work compared to the first year of training.

In the remainder of the account I explored some of the difficult group dynamics which emerged within our group regarding how trainees responded to each other when cases were bought for discussion. I explored the debate that group members engaged in regarding the nature and purpose of the group and also the task-focused rather than process-focused culture that had developed. I reflected on group dynamics in general and periods of negotiation that members work through together. I also reflected on the diversity within our group and how this influenced people's expectations and ideas regarding the nature of the group. Finally, I considered how the structure which had been imposed in the first year of training provided greater containment and safety in the group and how the broader focus had left uncertainty regarding what different group members were seeking from the group. With regards to the different group dynamics I considered how these play out within multi-disciplinary teams and the impact on individuals and groups as a whole.
Summary of Experience Gained on Clinical Placements
# Adult Mental Health, Year 1

**Dates**
2/10/05-22/9/06

**Title of Placement**
12 Month Adult Mental Health (core)

**Settings**
Community Mental Health Team & Psychological Therapies Outpatient Unit

**Theoretical Models**
CBT, Psychodynamic, Systemic.

**Presenting Difficulties**
Depression, psychosis, eating disorders; bulimia and anorexia, anxiety, ADHD, aspergers, chronic pain and chronic fatigue

**Range of Experience**
Direct 1:1 work with 10 adults aged 18-60, co-facilitated CBT group 'mind over mood' for anxiety and depression, co-facilitated group for managing chronic pain and chronic fatigue, psychometric assessment and neuropsychological assessment, service related audit, presentations to the psychology team, visits to other services including acute inpatient units and observation of family therapy team, teaching/training CBT skills to graduate mental health workers, group supervision in psychodynamic model, attendance at trainee seminar programme and personality disorder discussion group.

# Child and Family, Year 2

**Dates**
11/10/06 – 23/03/07

**Title of Placement**
6 Month Child & Family Placement (core)

**Settings**
Child and Adolescent Mental Health Service – Outpatient Clinic. Assessment clinic at general hospital.

**Theoretical Models**
CBT, Behavioural, Integrative.

**Presenting Difficulties**
Night terrors, difficulties associated with aspergers, OCD, anger management, bullying, anxiety, school difficulties, difficult family relationships, chronic physical problems, separation anxiety, difficulties associated with parent's separation/divorce.

**Range of Experience**
Direct 1:1 work with 12 clients aged 4 to 16 years old, involvement in family therapy (reflecting team), joint assessment work in ADHD clinic, psychometric assessments, structured observations, liaison with EWO and teachers, systemic work with children and parents, consultation to SHO re CBT for anxiety management, case presentation to team, child protection training.
### Learning Disabilities Placement, Year 2

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<td>6 Month Learning Disability Placement (core)</td>
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<tr>
<td>Settings</td>
<td>Community Team for people with learning disabilities (outpatients, residential, clients homes, day centre, GP surgery)</td>
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<td>Theoretical Models</td>
<td>Psychodynamic, Behavioural, CBT.</td>
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<tr>
<td>Difficulties</td>
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<tr>
<td>Range of Experience</td>
<td>Direct 1:1 work with 9 clients between ages 20 and 70. Psychometric assessments, capacity assessments, dementia assessments, indirect work with staff and carers, staff training at residential home, formal observations and functional analysis, formal risk assessment, Makaton training workshop, visits to other services, observation and participation of groups at day centre.</td>
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### Older People, Year 3

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<td>12 Month split older adult and psychotherapy specialist placement (core and specialist)</td>
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<td>Settings</td>
<td>Community Mental Health Team for older adults (outpatients, inpatients on 2 x wards, residential homes, clients homes)</td>
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<td>Theoretical Models</td>
<td>CBT, Integrative.</td>
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<tr>
<td>Presenting</td>
<td>Anxiety, depression, memory difficulties, disinhibited behaviour, dementia related difficulties, bereavement, difficulties associated with chronic health condition, interpersonal difficulties, challenging behaviour.</td>
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<tr>
<td>Difficulties</td>
<td></td>
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<tr>
<td>Range of Experience</td>
<td>Direct 1:1 work with 8 clients aged 60–92, work with carers, systemic work with one family, consultation to staff team on inpatient unit, facilitation of group to support people with a diagnosis of dementia, psychometric and neuropsychology assessment. Service audit of group programme. Involvement in service development and new services for inpatients.</td>
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### Advanced Competencies, Year 3

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<td><strong>Settings</strong></td>
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<td>Childhood sexual abuse, interpersonal difficulties, depression.</td>
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<tr>
<td><strong>Range of Experience</strong></td>
<td>Long term direct 1:1 psychotherapy work with 2 clients aged 30-45. Observation of assessments by psychotherapists, observation of weekly meeting re Intensive Outpatients Programme for people with a diagnosis of personality disorder.</td>
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Summary of Clinical Case Report

Adult Mental Health 1:
Cognitive behavioural intervention with a 22 year old woman presenting with bulimia nervosa.

All identifying details of services, service users and their families have been removed. Some details have been changed to preserve anonymity.

Year 1

May 2006
Referral of the problem

Suzie is a 22 year old woman of white British Origin. She was referred to the community mental health team (CMHT) by her GP due to concerns about binge-eating and vomiting. After receiving full assessment by a specialist eating disorder service it was decided that Suzie would be seen within the CMHT due to the long waiting list for the specialist service.

Presenting Problem

Suzie was concerned about her relationship with food which she felt was controlling her life. She was very preoccupied with ideas about her weight, shape and appearance and was constantly dieting to attempt to lose weight. Suzie alternated between restricting her food intake and binge eating and vomiting. Suzie reported that she felt ‘down’ at times but not depressed. At the time of assessment Suzie was binge eating and vomiting on a daily basis.

Initial assessment of the problem

Suzie’s difficulties were fully assessed at the eating disorder service by a clinical psychologist and dietician where she was given a diagnosis of bulimia nervosa (BN). She completed psychometric questionnaires, the Stirling Eating Disorders Scale (SEDS) specifically designed to measure eating disorder symptoms. At the start of therapy Suzie was asked to complete the SEDS again, in addition to the Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI) to provide baseline measures against which outcomes for therapy could be evaluated.
Initial Formulation

Several factors were hypothesised to have precipitated Suzie’s BN including; experiencing her mother as critical and her father as unavailable, a family emphasis on high achievement/attractiveness and a judgemental school environment in a private all girls school whereby eating disorders were common. It was hypothesised that critical comments from her Suzie’s family and other girls at school triggered negative automatic thoughts regarding not being attractive and also activated core beliefs about not feeling ‘good enough’. Suzie restricted her food intake to attempt to lose weight and become “thinner”. Bingeing was initially a symptom of her overly restrictive diet. Over time bingeing developed the additional function of allowing Suzie to disconnect from her distressing feelings as she experienced feelings of detachment during binges.

Action Plan

NICE guidelines state that Cognitive Behavioural Therapy (CBT) has the most empirical evidence for eating disorders including BN. It became apparent in early sessions that Suzie was able to identify her thoughts and feelings clearly therefore CBT was clearly indicated. Fairburn et al (1993) developed manualised CBT for BN based on a cognitive model of maintenance factors of binge eating. Suzie was offered 19 x 60 minute sessions based on Fairburn et al’s model. The expected outcomes were:

- Introduction and maintenance of structure in daily diet.
- Reduction in binge eating.
- Reduction in vomiting.
- Reduction in concern about body weight/shape.
- Improved problem solving skills.
Intervention

At the time that the case report was written Suzie had attended 12 of the 19 sessions.

Stage 1, (Sessions 1-8)

During this stage food diaries were introduced and Suzie was given psychoeducation about BN. Suzie completed the food diaries and her eating behaviours were explored in more depth. We explored how the Fairburn model of the maintenance of BN fit Suzie’s experiences and identified her triggers for bingeing. We then explored various behavioural strategies to provide Suzie with alternatives to bingeing. During this stage we also set aside time for Suzie to talk about any upsetting issues from her week.

Stage 2, (Sessions 9-12)

The CBT model was explicitly introduced and various worksheets were completed including rational vs irrational thinking, cognitive distortions worksheet, challenging thinking worksheets and thought monitoring sheets. Suzie grasped the various CBT techniques well.

Outcome & Follow Up

Outcome results at mid-therapy showed reduced scores on both the BAI and BDI. The SEDS was not re-administered at this stage. Suzie’s binge eating had reduced from several times per week to once-twice per week with some binge free weeks. At the time of the report Suzie had not binged for four weeks. Suzie only vomited after bingeing so this also decreased. Suzie reported still feeling concerned about her weight but also reported feeling “more comfortable” with herself. She was starting to use cognitive techniques to help her problem solve. With regards to follow up it was intended that the remainder of the 19 sessions be completed before a review.
Reformulation

The original cognitive formulation was added to and the Suzie’s difficulties were reconceptualised within Fairburn et al’s ‘Extended cognitive behavioural theory of the maintenance of BN’.

Critical Evaluation

Overall, use of Fairburn et al’s manualised therapy provided a good structure for the work and allowed a healthier eating structure to be introduced. However, the role of the impact of emotions and self esteem was not addressed fully by strict adherence to the model therefore maintaining flexibility with regards to the application of the model was necessary to fully meet Suzie’s needs.

References

Summary of Clinical Case Report

Adult Mental Health 2:
A neuropsychological assessment of a 25 year old man presenting with symptoms of adult attention deficit hyperactivity disorder (ADHD).

All identifying details of services, service users and their families have been removed. Some details have been changed to preserve anonymity.

Year 1

September 2006
Reason for referral

John is a 27 year old single white British man. He was referred to the Community Mental Health Team (CMHT) by his GP who had diagnosed depression. John was assessed by a psychologist who thought that John's difficulties may be indicative of adult ADHD and was then referred for specialist neuropsychological assessment to establish whether a diagnosis of adult ADHD was appropriate.

Presenting Problem

John described severe difficulties with memory and concentration which had affected him since childhood. These difficulties made it difficult for John to stay in employment as he often lost jobs due to mistakes made as a result of his memory difficulties. He also experienced extreme mood swings and outbursts of rage which he felt he could not control and resulted in him becoming verbally and physically aggressive. John sought help from his GP as he felt that his difficulties were affecting his relationship with his partner who was expecting his baby.

Assessment

Neuropsychological assessment took place over four, two-hour sessions over a two month period. The assessment included clinical interview, behavioural observation, neuropsychological tests and informal writing and drawing tasks. All assessments were conducted under the supervision of a clinical psychologist specialising in neuropsychology.

Tests Administered:  Wechsler Adult Intelligence Scale – III (WAIS-III)
Wechsler Memory Scale – III (WMS-III)
Wechsler Tests of Adult Reading (WTAR)
Controlled Oral Word Association
Cognitive Estimations Test
Behavioural Assessment of Dysexecutive Syndrome (BADS)
Color Trails
Hayling Sentence Completion Test

Results

Analysis of the results of the testing process suggested that John did have a neurodevelopmental disorder and the majority of evidence was supportive of the hypothesis that John had adult ADHD. Clinical recommendations and referral to the appropriate services were made.
Summary of Clinical Case Report

Child, Adolescent & Family:
An Integrative intervention with a 10 year old boy presenting with aggressive anger outbursts.

All identifying details of services, service users and their families have been removed. Some details have been changed to preserve anonymity.

Year 1

September 2006
Referral

James Gates is a ten year old boy of white British Origin. He was referred to the Child and Adolescent Mental Health Service (CAMHS) following concerns about him having aggressive anger outbursts.

Presenting Problem

James' mother, Mrs Gates, was concerned about James anger outbursts at home during which he became verbally and physically aggressive. James thought that his anger was a problem but also explained that he was being bullied at school and this is why he would "explode" at trivial matters when he was at home. During the initial assessment it was noted that James and his mother's interactions appeared to frustrate James and contribute to his anger as they were both very talkative and frequently interrupted each other.

Initial Assessment

Two assessment sessions were conducted using the trust's standard assessment questionnaire. It was requested that Mrs Gates and James' teacher complete the Strengths and Difficulties Questionnaires but these were not returned.

Initial Formulation

It was hypothesised that there were several predisposing factors contributing to James' difficulties including; James' experience of growing up with a brother with a learning disability resulting in his brother receiving special care and attention, James' mother's style of expressing anger on which James 'modelled' his own behaviour, a stressful home environment due to frequent parental arguments and also attending a private school with
an emphasis on high achievement. Precipitants to James’ anger outbursts included; feeling that his parents were not listening to him, an important friendship ending, being teased and bullied at school. It was considered that ongoing experiences of not feeling listened to and bullying incidents at school maintained his anger outbursts.

Action Plan

It was decided that an integrated intervention may be most appropriate combining cognitive behavioural strategies to help James’ problem solve and make changes to address the bullying and also systemic work with James and his mother to address their style of communicating with each other.

Intervention

At the time that the case report was written, six sessions of therapy had been completed comprising of;

- Four sessions of individual work exploring bullying incidents at school and problem solving ways to manage and seek support with this. We also covered anger management strategies that James could use to help himself when he started to feel ‘wound up’.
- Two sessions of systemic work with James and his mother exploring ways that they enjoyed their relationship, ways to improve their relationship with each other and role plays with Mrs Gates practising listening to James talk without interrupting him.

Progress towards goals

James was practising techniques to manage the teasing and bullying at school. He reported that the techniques were working well and the “bullies” had stopped as he no
longer reacted to their name calling. He also had sought help and support from a teacher that he felt was approachable who was closely monitoring the situation. Mrs Gates reported that James was still having the occasional “blow up” but overall this was less frequent since the bullying had stopped.

There were some important changes as a result of the systemic work with James and Mrs Gates. Mrs Gates recognised and acknowledged how much James had been affected by the bullying at school and started to view his difficulties from a different perspective. James reported that he thought Mrs Gates was “listening more” and Mrs Gates reported that she had found it helpful having a third party observe and feedback regarding their interactions.

Reformulation

In the light of further information gathered from the joint sessions James’s difficulties were formulated form a systemic perspective highlighting relational dynamics within his school and family system.

Critical Evaluation

The limitations of working with James and his mother were recognised, particularly in relation to time constraints and the number of sessions that were offered. In addition it was recognised that to be working truly systemically it would have been helpful to have involvement from other member of James’ family, in particular his father, and also some form of communication with James’ school.
Summary of Clinical Case Report

People with Learning Disabilities:
Short term psychodynamic therapy with a 54 year old man with a learning disability experiencing emotional difficulties.

All identifying details of services, service users and their families have been removed.
Some details have been changed to preserve anonymity.

Year 1

September 2006
**Referral**

Miguel Tavares is a 54 man of Portuguese origin who has a mild to moderate learning disability. English is his second language. He lives in supported group accommodation with his fiancée, Janet. Miguel was known to the learning disability service and was referred to the psychology service by a community psychiatric nurse (CPN) regarding verbally and physically aggressive behaviours.

**Presenting Issues**

Staff at Miguel's home and the day services that he attended had reported concerns in the past about Miguel becoming frustrated which culminated in him hitting his fiancée. At the time of assessment it was reported that Miguel had not hit Janet for two years but that there appeared to be relationship and cultural issues which stemmed from Miguel's childhood which were affecting him. It was thought that his issues may have stemmed from being raised in an environment whereby his father was violent to him, his mother and siblings. It was reported that Miguel kept his feelings “bottled up” which then resulted in him “lashing out”. Miguel reported that he felt very upset and that his main concerns were due to people teasing him or calling him names.

**Initial Assessment**

It was considered important that Miguel be encouraged to decide the focus of our work together and I initially took a non-directive stance exploring his family background and his current day-to-day concerns. Miguel responded well to this approach and readily used the sessions to discuss issues and events that were upsetting him. The first four sessions were considered part of an extended assessment. Risk issues were addressed and closely monitored throughout therapy with the assistance of Miguel’s keyworker.
Initial Formulation

I had several ideas regarding formulation for Miguel's difficulties and found it useful to construct a broad formulation using an integrated approach. The main predisposing factors for Miguel's difficulties included; being physically abused by his father, having communication difficulties resulting in increased frustration, having difficulty understanding social situations resulting in him misunderstanding jokes and feeling persecuted. As a result of his childhood experiences being teased or called a name was experienced as very attacking by Miguel and he would act out his feelings of frustration. Miguel's tendency to keep his feelings to himself, resulting in rising levels of frustration was considered to contribute to maintaining his difficulties.

Action Plan

Miguel had already received behavioural input from his CPN re strategies to manage anger and he was implementing these. He reported his main concern was other people upsetting him therefore the primary aim of the intervention was the provision of a safe and containing environment for him to explore his emotions. I hypothesised that likely issues were;

1) Complicated grief regarding the loss of his parents.
2) A difficult situation at his residential home regarding another resident with whom he did not get along with.

Intervention

Miguel attended fifteen sessions over five months. He engaged easily in therapy and made good use of the sessions. In weekly supervision I began to formulate Miguel's issues within a psychodynamic framework. Themes emerged including; managing
emotions, relationships with others, complicated grief over loss of parents, intimate relationships and desire.

Reformulation

Reformulation of Miguel’s difficulties was within a psychodynamic framework. I considered it useful to draw on Bowlby’s attachment theory in thinking about Miguel’s relationships with others and I hypothesised that he may have developed insecure attachments in childhood due to the lack of sense of safety in his family home. I also used Malan’s model of psychotherapy to consider Miguel’s ‘core conflicts’ in terms of his relationships with others including his fiancée.

Outcomes

Miguel was able to explore his ambivalent feelings towards his deceased father including feelings of anger, loss and sadness. He was able to explore his feelings towards the other resident at his home and clarified the nature of this relationship which previously he found threatening. Miguel reported the sessions helped him to feel “less upset” and that he thought it had been beneficial to talk about his feelings.

Critical Evaluation

It was acknowledged that there is a lack of suitable outcome measures when working with people with learning disabilities. Also, the evidence base regarding psychodynamic psychotherapy provides inconsistent evidence for use of the model with people with learning disabilities.
Summary of Clinical Case Report

Older People:
Cognitive Behaviour Therapy with an 83 year old lady experiencing anxiety and depressed mood.

All identifying details of services, service users and their families have been removed.
Some details have been changed to preserve anonymity.

Year 1

September 2006
Referral

Mrs Pat Green is an 83 year old lady of white British origin. At the time of referral to psychology Mrs Green had been under the care of a community psychiatric nurse (CPN) and psychiatrist at the Older Persons Community Mental Health Team (CMHT) for several years. Mrs Green was referred to the psychology service by the psychiatrist with regards to a “relapse” in her depression.

Presenting Difficulties

Mrs Green had a diagnosis of recurrent depressive disorder and anxiety. She reported that her mood was “depressed” but that it was her anxiety that was her primary concern. She described how her anxiety made her reluctant to engage in any activities and she had to “push” herself to do things. She reported that in her life she had just “got on with things” but felt that things were “catching up” with her.

Initial Assessment

Mrs Green attended a one hour long clinical interview guided by the trust’s CORE assessment form as a guide. She also completed the Beck Anxiety Inventory (BAI) and the Hospital Anxiety and Depression Scale (HADS).

Initial Formulation

A cognitive model was used to consider Mrs Green’s difficulties with her mood. Predisposing factors were considered to include; possible genetic predisposition to anxiety as her mother and sister both suffer and the death of one of her two sons from cancer when he was 23 years old. It was considered that her retirement from her job and loss of daily structure may have been a precipitating factor as well as a minor car accident.
and experiencing increasing physical pain with her arthritis. Increased time spent ruminating and avoidance were considered to be maintenance factors.

**Action Plan**

Mrs Green described a number of losses in her life during the assessment session. However, she reported that she did not wish to talk about her experiences of loss and instead wanted to learn skills to help manage her anxiety. Cognitive Behaviour Therapy (CBT) is the treatment of choice recommended for anxiety by the National Institute of Clinical Excellence (NICE) therefore Mrs Green was offered six sessions of CBT to be followed by a review with the possibility of a further four sessions if she felt the sessions were useful.

**Intervention**

At the time of writing the case report Mrs Green had attended six sessions. The intervention was comprised of the following stages;

- Relationship Building & Socialisation to the CBT model.
- Psychoeducation and setting therapy goals.
- Relaxation Training
- Activity Scheduling
- Identifying and challenging unhelpful thinking.

**Outcomes mid therapy**

There was a slight drop in Mrs Greens’ scores on the BAI and the HADS. Mrs Green reported that she was engaging in more activities and she had started to “think differently about things” using the challenging thinking techniques.
Reformulation

Readings on lifespan perspectives/developmental psychology gave me a broader understanding of Mrs Greens' difficulties. I realised that my earlier formulation was overly simplistic and ignored the complexity of the specific challenges that older people may face. I built on the original formulation using a broader CBT model proposed by Laidlaw et al (2003), in which cohort beliefs, role investments, intergenerational linkages and sociocultural context are also included.

Critical Evaluation

The report was written mid-therapy therefore it was not surprising that the objective outcome measures demonstrated only a small change. I reflected on the need to adapt CBT techniques to fit with a pace that Mrs Green was comfortable with. I also considered the need to ensure that CBT is delivered within a supportive and empathic therapeutic relationship so that it is not experienced as too laden with techniques and invalidating of the experiences of loss that Mrs Green had encountered in her life.

References

Cognitive Behaviour Therapy with Older People. Chichester: John Wiley and Sons.
Service Related Research Project

Access to Psychology: Wait lists and their management within 5 Community Mental Health Teams (CMHTs) in the NHS.

Year 1

June 2006
Abstract

Rationale: Increasingly psychological therapies are being considered the 'treatment of choice' for various mental health conditions and the government is highlighting concerns about access to psychology services. At present government guidelines on the provision of mental health services do not specify psychology wait time targets. A decision is currently being made by the Health care commission as to whether psychology waiting times will be included within Trust Performance Indicators. With targets likely to be set in the near future a need was identified to profile recent psychology wait times within a service to provide 'base-line' figures and a snapshot of current psychology service activity.

Objectives

1. To establish the profile of psychology wait times for service users across 5 Community Mental Health Teams (CMHTs).
2. To identify wait list strategies currently employed by each team.

Design: A retrospective case file audit.

Setting: 5 adult CMHTs within one NHS Trust.

Participants 179 service users were identified as having accessed psychology services within the 5 CMHTs between 1 April 2005 and 31st July 2005. 155 files were available to be audited.

Outcome measures:

1. Mean wait time for service users, in days, from referral to assessment.
2. Mean wait time for service users, in days, from assessment to start of therapy.
3. Identification of main wait list strategies currently being used by each team.

Results:

1. A varied profile of wait times for service users across the 5 teams was clearly identified.
2. A Kruskal Wallis test showed there was no statistically significant difference between the teams in the mean wait time from assessment to start of therapy.
3. There was a statistically significant difference between the teams in the mean referral – assessment wait times. However, Mann Whitney U Tests conducted as post hoc analysis showed no significant difference between the teams.
4. Current wait list strategies adopted by each team were identified.

Conclusions: Implications and recommendations for the CMHTs and limitations of the study are discussed.
Introduction

Current government guidelines regarding treatment of mental health advocate a broader role for psychological therapies in service user treatment than ever before. Increasingly psychological therapies are being considered the 'treatment of choice' for various conditions, for example, the National Institute for Clinical Excellence (NICE) guidelines advocate that CBT be offered for Schizophrenia and Depression (Nice 2002, 2004). Service users have identified access to psychological therapies as a primary need that is not being met (Mind ‘My Choice’ Campaign 2002). With this ever-increasing demand for psychological therapies questions are being asked about how supply can meet this demand.

The National Service Framework for Mental Health (Department of Health (DoH), 1999) outlined seven standards for how national mental health services should be developed, delivered and subsequently measured. Standards two and three specifically address concerns about access to services. Despite the priority and suggestions that psychological therapies should be considered as a Performance Indication ‘The National Service Framework for Mental Health – Five Years On’ (DoH, 2004) does not specify psychology wait time targets. The five-year review continues the emphasis on access to psychological therapies as an area to be developed within mental health care.

The governments paper ‘Organising and Delivering Psychological therapies’ (DoH, 2004) highlighted the integral role psychological therapies are playing within the NHS and documented ways in which services could manage their wait lists. This paper indicates that psychology wait lists have come to the attention of the Healthcare Commission and a decision is being made as to whether psychology waiting times will be included within Trust Performance Indicators. The paper suggested it is advantageous for services to find effective strategies locally to manage their wait lists.
Consultation with the lead clinical psychologist within a Community Mental Health Team (CMHT) highlighted the need to identify recent psychology wait times for the 5 CMHTs in one locality. This 'snapshot' of previous activity of the 5 teams could potentially be used to guide realistic target setting within the service and take account of the different needs of each CMHT and the population they serve. With waiting list management targets potentially on the horizon each team’s strategies to manage its waiting list also needed to be identified. The purpose of gathering this information was to identify good practise and any problem areas and generate ideas for future management of wait lists.

Objectives

This study is an audit to provide ‘base-line’ figures for future comparison and identify wait list strategies. Therefore the objectives of this study are:

1. To establish the profile of psychology wait times within each CMHT for clients over a 4-month period, April 1 – July 31st 2005.
2. To identify wait list strategies currently employed by each team.
Method

Setting  5 CMHTs within one NHS trust providing mental health and social care to an ethnically diverse population of adults with “severe and enduring” mental health needs. Each team has at least one psychologist accepting referrals for psychological assessment and therapy from:

1. External sources: GP’s, Psychiatrists.

2. Internal sources: From another member of the CMHT, mainly the care coordinator currently involved with the service user.

Participants 155 service user files were audited across 5 CMHTs. Team psychologist’s identified all clients seen by the psychology service between 1 April 2005 and 31st July 2005. All files were audited regardless of whether the service user was a) assessed/started therapy during this time period or b) in ongoing therapy with the psychologist. At time of audit some service users were in therapy, others had since been discharged from the service. See Table 1 for participant characteristics.

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5 The CMHTs audited in this study accept referrals for adults aged 16-64. The catchment area covers a mix of urban and rural areas with varying affluence. The principal town has low levels of socio economic deprivation although high rates of substance misuse and homelessness.
Table 1. Participant Characteristics

<table>
<thead>
<tr>
<th>Participant demographics</th>
<th>Team A (n=13)</th>
<th>Team B (n=19)</th>
<th>Team C (n=27)</th>
<th>Team D (n=28)</th>
<th>Team E (n=68)</th>
<th>Total Sample (n=155)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Mean Age</td>
<td>45.31</td>
<td>41.37</td>
<td>42.78</td>
<td>40.46</td>
<td>42.13</td>
<td>42.41</td>
</tr>
<tr>
<td>Age Range (min-max)</td>
<td>38-61</td>
<td>21-65</td>
<td>25-69</td>
<td>19-66</td>
<td>20-65</td>
<td>19-69</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>7.13</td>
<td>10.76</td>
<td>13.38</td>
<td>11.60</td>
<td>10.87</td>
<td>10.75</td>
</tr>
</tbody>
</table>

Not all files identified were available, see Table 2. Reasons for this included: file being transferred to another CMHT, unavailable due to being archived off-site, being used by staff member in a different location at time of audit.

Table 2. Availability of files

<table>
<thead>
<tr>
<th>Files</th>
<th>Team A</th>
<th>Team B</th>
<th>Team C</th>
<th>Team D</th>
<th>Team E</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of files identified</td>
<td>14</td>
<td>26</td>
<td>32</td>
<td>39</td>
<td>68</td>
<td>179</td>
</tr>
<tr>
<td>Files available for audit (%)</td>
<td>92.86</td>
<td>(73.08)</td>
<td>(84.4)</td>
<td>(71.79)</td>
<td>(100)</td>
<td>(86.60)</td>
</tr>
</tbody>
</table>

From files that were located, not all data were available to calculate wait times, see Table 3. This was due to a) referral to psychology not being documented (particularly with internal referrals) b) assessment entry in notes not dated c) client assessed only and ‘not suitable for individual therapy’/referred to alternative service/client declined therapy therefore no ‘start of therapy’ date documented.
Table 3. Data available within files to calculate wait times.

<table>
<thead>
<tr>
<th></th>
<th>Data available to calculate wait referral-assessment</th>
<th>Data available to calculate wait assessment-therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service users assessed</td>
<td>N=82</td>
<td>N=86</td>
</tr>
<tr>
<td>prior to January 2005</td>
<td>(92.1%)</td>
<td>(96.6%)</td>
</tr>
<tr>
<td>Service users assessed post January 2005</td>
<td>N=57</td>
<td>N=34</td>
</tr>
<tr>
<td></td>
<td>(86.4%)</td>
<td>(51.5%)</td>
</tr>
</tbody>
</table>

*Ethics* This study was considered a clinical audit therefore it was not necessary to involve an ethics committee. The NHS trust’s clinical audit department was consulted and approval was granted at a routine clinical governance meeting (see Appendix A).

*Procedure*

Psychologist/s at each team were informed that an audit of psychology wait times would take place. A four month period in 2005 was identified. April 1st – July 30th 2005 was chosen, as it was likely this would represent a ‘typical’ time period with some staff annual leave providing an accurate picture of wait times. Each psychologist was asked to produce a list from their personal records of all clients seen by themselves for assessment, therapy or both during the specified period.

An audit record sheet was designed to collect data from each team (Appendix B). Each CMHT was visited to collect data from the files identified by the team psychologist. Data collected from each file included age, sex, date of referral to the CMHT psychologist (internally or externally), date of assessment by the psychologist and date of start of individual therapy with the psychologist. Team E kept an excel spreadsheet with this information input by the team psychologists therefore dates were taken from the spreadsheet rather than files.
Once data had been collected from the files one psychologist from each team was asked to provide information regarding the referral path and wait list strategies for their team so that results could be discussed in context and current wait list initiatives identified. The project results are scheduled to be fed back to local services.\(^6\)

\(^6\) Results will be presented to the psychology teams within the 5 CMHTs on 12\(^{\text{th}}\) July 2005. Following presentation feedback will be gained and a letter of verification will be provided by the lead clinical psychologist.
Analysis

The objective of this study was to provide a 'recent profile' of psychology wait times therefore the data collected were split into two groups:
1) Clients assessed prior to 1/1/2005
2) Clients assessed post 1/1/2005.
Data from each group were analysed separately so that older data did not contaminate an accurate picture of psychology wait times in 2005.

The post January 2005 data is the most relevant to the CMHTs needs therefore more detailed statistical analyses were performed on these data using the SPSS statistical package. Non-parametric statistics were chosen because wait times were not normally distributed. A Kruskal Wallis test was conducted followed by Mann-Whitney U tests as a post hoc procedure. Statistical significance was initially set at 5%.

Results

Analysis of the data identified the mean wait time from referral to assessment and the mean wait time from assessment to therapy for each team, see Table 4. For graphical representation of this data see Appendix C.
Table 4. Summary of mean wait times for each team.

<table>
<thead>
<tr>
<th>Team</th>
<th>Mean Wait from Referral to Assessment (in days)</th>
<th>Mean Wait from Assessment to start of therapy (in days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assessment prior 2005</td>
<td>Assessment post 2005</td>
</tr>
<tr>
<td>Team A</td>
<td>53.67 (26.33)</td>
<td>60.00 (19.37)</td>
</tr>
<tr>
<td></td>
<td>N = 6</td>
<td>N = 4</td>
</tr>
<tr>
<td>Min-Max</td>
<td>24-102</td>
<td>35-82</td>
</tr>
<tr>
<td>Team B</td>
<td>68.73 (37.59)</td>
<td>46.50 (40.22)</td>
</tr>
<tr>
<td></td>
<td>N = 11</td>
<td>N = 6</td>
</tr>
<tr>
<td>Min-Max</td>
<td>10-131</td>
<td>16-31</td>
</tr>
<tr>
<td>Team C</td>
<td>37.00 (49.92)</td>
<td>27.25 (10.41)</td>
</tr>
<tr>
<td></td>
<td>N = 16</td>
<td>N = 8</td>
</tr>
<tr>
<td>Min-Max</td>
<td>3-197</td>
<td>12-41</td>
</tr>
<tr>
<td>Team D</td>
<td>46.44 (42.81)</td>
<td>134.29 (100.50)</td>
</tr>
<tr>
<td></td>
<td>N = 16</td>
<td>N = 7</td>
</tr>
<tr>
<td>Min-Max</td>
<td>13-170</td>
<td>55-327</td>
</tr>
<tr>
<td>Team E</td>
<td>116.48 (123.53)</td>
<td>51.31 (33.75)</td>
</tr>
<tr>
<td></td>
<td>N = 32</td>
<td>N = 33</td>
</tr>
<tr>
<td>Min-Max</td>
<td>0-469</td>
<td>9-129</td>
</tr>
<tr>
<td>Total</td>
<td>76.30 (90.72)</td>
<td>58.23 (52.85)</td>
</tr>
<tr>
<td></td>
<td>N = 82</td>
<td>N = 57</td>
</tr>
<tr>
<td>Min-Max</td>
<td>0-469</td>
<td>9-327</td>
</tr>
</tbody>
</table>

Distribution of the wait times from referral to assessment and from assessment to therapy post January 2005 are indicated in Figures 1 & 2. For distribution of wait times prior to January 2005 see Appendix D.
Figure 1. Distribution of wait times from referral to assessment post January 2005
Statistical analysis was undertaken to test for any statistically significant differences in the mean wait times between teams in the post January 2005 files only as this is of direct relevance to provide a recent profile of wait list activity.

Results of a Kruskal Wallis Test suggested there was no significant difference in the mean assessment - therapy wait times between teams (Asymp. Sig = .105, Chi-Square = 53.23, df = 4).

Significant differences were found in the mean referral-assessment wait times between teams (Asymp. Sig = .013, Chi-Square = 12.70, df = 4). Team C had the lowest mean rank (16.31) and Team D had the highest mean rank (45.36).

Individual Mann-Whitney U tests were conducted as a post hoc procedure to compare teams and identify where significance resided. A Bonferroni adjustment was applied to
the alpha level to control for the increased risk of Type 1 errors from making several comparisons thus significance was set at 0.005. At this stringent alpha level there were no significant differences in the mean wait times from referral to assessment between teams. See Appendix E for a summary of these results.
**Referral Process**

Information provided by the psychologists indicated all teams have a weekly allocations meeting where referrals are discussed and allocated to an appropriate team member.

Team B, Team D and Team E run a traditional wait list system i.e. referrals are placed on a wait list for assessment. If assessed as suitable for therapy the service user is then placed on a separate wait list for therapy.

Team A limits the wait list to 3-4 service users. If demand is greater the psychologist refers onto another service or acts in a consultancy role to another member of staff who provide the intervention.

Team C does not keep a wait list. The psychologist communicates with the team regarding availability of psychology time and accepts referrals when time is available. After assessment the client is given a fixed appointment time (if necessary weeks in advance) rather than being put on a wait list.

**Current wait list strategies**

A summary of information provided by team psychologists regarding wait list strategies is provided in Table 5.
Table 5. Summary of wait list strategies currently used

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Team A</th>
<th>Team B</th>
<th>Team C</th>
<th>Team D</th>
<th>Team E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer onto other specialist services; psychotherapy, eating disorders etc.</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Act in consultancy role to other team members who then provide psychological intervention.</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Creation of group programmes to provide increased psychological input to more service users</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Provision of psychological input at weekly allocations meeting (only possible in small teams that act as 'case conference').</td>
<td>√</td>
<td>Sometimes(^7)</td>
<td>√</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Close the waiting list and pass decisions for treatment of service users up to management</td>
<td>√(^8)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>√(^9)</td>
</tr>
<tr>
<td>Psychologist involved in decision regarding who is a suitable for referral to psychology</td>
<td>√</td>
<td>Usually(^10)</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Separate assessment and therapy waiting lists kept</td>
<td>√</td>
<td>√</td>
<td>x</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Initially assessment only offered to check suitability for therapy</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

\(^7\) Team psychologists do not usually work on the day of the allocations meeting
\(^8\) This strategy is only used when the team is very short staffed
\(^9\) This strategy was only used once to clear a backlog waiting list of 50+ service users
\(^10\) Occasionally GP referrals go direct to psychology for assessment rather than through allocations
Discussion

The results clearly indicate the varied profiles of wait times from referral to assessment and from assessment to therapy across all teams. As mentioned, there are currently no specified standards for psychology waiting times. However, information provided in this study will prove useful for the service to set its own targets.

There was a wide range of wait times for service users within some services. This may be accounted for by different management strategies within the team. For example, in one team service users may be moved up the list if they are considered urgent or ‘ready’ for therapy. Other factors that may influence the range include; service user’s being considered less urgent if they are being care coordinated (with the psychologist providing consultancy input), clinical judgement made that the person is not yet ‘ready’ for therapy, repeated ‘Did not attends’ (DNA’s) by the service user, attending group intervention but remaining on the wait list for individual therapy.

Statistical analysis of the post 2005 data suggests a significant difference in the wait time from referral to assessment between some of the teams (though post-hoc analysis failed to identify where significance resided). This result is not surprising considering the diversity of the demands on the psychologist/s within each team. Comparison of wait times between teams should be made only with extreme caution and interpreted carefully due to numerous factors which influence wait times at each team as outlined below;

*Population size served & psychologist hours employed by each CMHT*

The size of the population served by the CMHT impacts on the number of referrals into the CMHT as a whole and to the psychology staff (see Table 6). The number of referrals and the psychologist hours available undoubtedly impact on wait times. Referral figures
for each CMHT were not available at time of writing. At present only Team E logs all referrals into the psychology service.

Table 6. Psychology staff and population served for each team.

<table>
<thead>
<tr>
<th>Psychology Staff</th>
<th>Team A</th>
<th>Team B</th>
<th>Team C</th>
<th>Team D</th>
<th>Team E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population served&lt;sup&gt;11&lt;/sup&gt;</td>
<td>25,618</td>
<td>42,593</td>
<td>36,799</td>
<td>37,958</td>
<td>111,948</td>
</tr>
<tr>
<td>Population served aged 15-64&lt;sup&gt;12&lt;/sup&gt;</td>
<td>16,452</td>
<td>29,096</td>
<td>23,478</td>
<td>25,076</td>
<td>77,719</td>
</tr>
</tbody>
</table>

*Diversity between CMHTs*

The composition and staffing levels of each CMHT influences the role of the psychologist within it. For example, in one team the psychologist performed significant care coordinating tasks with clients on enhanced care plans. Additionally, the composition of the team and their understanding of psychology services will influence the frequency and reasons for internal referrals. Teams vary in the skills and willingness of non-psychology staff to provide psychological interventions. Mostly psychology staff time was taken up with direct work with clients. However, additional commitments noted by psychologists in all teams included; consultation, meeting attendance, supervision of trainees/non psychology staff and training course attendance.

*Individual differences in therapeutic approach adopted by psychologist*

Wait times may be influenced by therapy style, for example, a psychodynamic approach favours longer term intervention than a cognitive behavioural approach.

*Waiting list strategies*

All psychologists had an awareness of the need to keep waiting times as short as possible and used strategies to manage service user wait times. Psychologists provided input at the referral stage and made themselves accessible to other staff to ensure referrals were

<sup>11</sup> PCT population figures collated in 2004
<sup>12</sup> Also collated in 2004
suitable. This minimised clients being placed on a wait list for assessment only to be assessed as ‘not suitable for therapy’.

The type of strategy employed by each team varied according to the individual demands placed upon the psychology staff within the team. Distinct differences, for example, keeping a traditional wait list versus informing the CMHT when a psychology ‘space’ is available, heavily influence the data and restrict validity of comparing wait times between teams.

Limitations

The current study identifies recent wait list times and strategies being used for their management. It was not able to account for all influences that impact on psychology wait times and the diversity between teams. Specifically it does not identify the unmet need for psychology i.e. service users not referred to psychology as other staff are aware of unavailability. It also does not account for psychology input provided elsewhere. For example, attendance at a group or psychology input provided indirectly to service users through consultation with other staff. All these factors may increase wait times for clients on ‘official’ wait lists whilst not recognising significant psychology input through alternative routes. Additionally the current study did not disregard data from service users who repeatedly failed to attend (DNA) that considerably increased overall wait times.

Implications

The diversity between the CMHT would not allow for a standard waiting list management strategy for all teams. However, with increasing focus on wait lists sharing initiatives on effective management strategies may prove valuable in the future. For example, Team E noticed significant benefits of providing group interventions. All team psychologists provided a consultancy capacity to other staff, which also proves an effective use of
psychology resources. Once targets are set psychologists may need to find ways to ensure indirect psychology input, including supervision, is fully recognised.

Recommendations

At present psychology services are embedded within each CMHT and undertake multiple roles inevitably impacting wait lists. With increasing scrutiny on wait lists systems need to be implemented to identify psychology services activity and ensure all psychology input is acknowledged (see below).

1. Team E’s Excel spreadsheet could be implemented in other teams for ease of reporting in future and effective management of wait lists. Notes could be placed on this spreadsheet identifying clinical reasons why a client may have waited longer.

2. All internal referrals to psychology officially documented within the file and the number of referrals to psychology logged. Records also need to be kept of indirect work, most notably consultation and supervision to ensure this psychological input to the team is recognised.

3. System implemented to ensure attendance at group therapy is recognised as a psychological intervention.

Any future audits need to include when first appointments for assessment or therapy are offered to prevent service user DNAs increasing wait list calculations. It would be valuable for teams to actively manage DNAs, initially sub classifying the reasons why service users DNA and developing an appropriate strategy to manage each.

It could be useful to create a forum to allow sharing of successful strategies between CMHTs and ideas from elsewhere in the trust/evidence base to encourage proactive management of wait lists.
Conclusions

Clinical and counselling psychology resources are scarce and inevitably will not expand as rapidly as demand with recent focus on psychological therapies as treatment of choice. With this mounting pressure and interest in psychological therapies, finding creative ways to maximise psychology resources effectively is paramount. This study identifies a positive awareness of the necessity of wait list management strategies and sharing of knowledge between the teams would be valuable.

Undoubtedly the size and composition of each team influences how psychology input to the team is operationalised and comparisons should be made with caution. Implementation of standardised policies and targets encourage efficacious service delivery but this must not be at the expense of allowing flexible local decision-making to best fit the team and the population it is serving.
References


Appendices
Appendix A.

Consent from audit committee
Project Reference AU / 10302

Title Psychology Waiting list Times in

Project Lead Psychology

Objectives Project will identify the average waiting times for service users from referral to psychology assessment, and from psychology assessment to psychological treatment. National Service Frameworks are focusing on increasing access to psychology services. The project will provide base-line figures so that local standards/targets may be set.

Methodology Identify service users seen in psychology between April and July 2005 in the five teams. Pull out these clients' client files, note date of referral to psychology services dates of assessment, date of start of therapy, Calculate minimum, maximum, average wait times for clients.

Sample Group Clients seen by psychology services between April and July 2005 in the five teams that comprise the area.

Participating Orgs Psychology teams at

Outcomes

ETHICS
Approved □

TIMESCALES
StartDate 01/02/2006 EndDate 01/06/2006

CLINICAL AUDIT SUPPORT
Design □ DataCollection □ Analysis □ ReportWriting □

CLINICAL GOVERNANCE MEETING
Approved □ Date 03/02/2006

PROPOSAL FROM:
Date 03/02/2006

If you have any questions regarding the information in this report please contact:
Clinical Audit and Effectiveness,
Appendix B

Data collection Sheet

Appendix C

Mean wait time between referral and assessment for each team.
Mean wait time between assessment and therapy for each team.
Appendix D

Distribution of wait times from referral to assessment prior to 2005

![Box plot showing wait times](image-url)
Distribution of wait times from assessment to therapy prior to 2005

Assessment prior to 2005

Waiting time between assessment and therapy

Team A  Team B  Team C  Team D  Team E

0  100  200  300  400
## Appendix E

### Results of Mann Whitney U Tests to compare mean referral – assessment wait times between teams post 2005

<table>
<thead>
<tr>
<th>Teams being compared</th>
<th>Z</th>
<th>Asymp. Sig (2-tailed)</th>
<th>Mean Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teams A &amp; B</td>
<td>-1.28</td>
<td>0.201</td>
<td>Team A = 7.00, Team B = 4.50</td>
</tr>
<tr>
<td>Teams A &amp; C</td>
<td>-2.21</td>
<td>0.027</td>
<td>Team A = 9.75, Team C = 4.88</td>
</tr>
<tr>
<td>Teams A &amp; D</td>
<td>-1.32</td>
<td>0.186</td>
<td>Team A = 4.25, Team D = 7.00</td>
</tr>
<tr>
<td>Teams A &amp; E</td>
<td>-.881</td>
<td>0.378</td>
<td>Team A = 22.88, Team E = 17.95</td>
</tr>
<tr>
<td>Teams B &amp; C</td>
<td>-.904</td>
<td>0.366</td>
<td>Team B = 8.67, Team C = 6.63</td>
</tr>
<tr>
<td>Teams B &amp; D</td>
<td>-2.00</td>
<td>0.046</td>
<td>Team B = 4.67, Team D = 9.00</td>
</tr>
<tr>
<td>Teams B &amp; E</td>
<td>-.027</td>
<td>0.603</td>
<td>Team B = 17.33, Team E = 19.91</td>
</tr>
<tr>
<td>Teams C &amp; D</td>
<td>-2.72</td>
<td>0.006</td>
<td>Team C = 5.06, Team D = 11.36</td>
</tr>
<tr>
<td>Teams C &amp; E</td>
<td>-1.96</td>
<td>0.050</td>
<td>Team C = 13.25, Team E = 22.31</td>
</tr>
<tr>
<td>Teams D &amp; E</td>
<td>-2.56</td>
<td>0.010</td>
<td>Team D = 30.00, Team E = 17.81</td>
</tr>
</tbody>
</table>
Letter to evidence feedback of SRRP to service.
To Whom It May Concern:

Please accept this letter as verification that Sally Field, Trainee Clinical Psychologist, presented her Service Related Research Project to the Guildford and Waverley Psychology Team on 5th July 2006. Sally presented the results of the audit and facilitated an informal discussion regarding its outcomes and implications.

If you require any further information please feel free to call me on the above number,

Yours sincerely,

Dr. Christine Openshaw
Consultant Clinical Psychologist
Abstract of Qualitative Research Project

An Interpretive Phenomenological Analysis Study of the Lay Person's View of Psychologists working in Clinical Settings

Year 1

May 2006
Title:
An Interpretive Phenomenological Analysis Study of the Lay Person’s View of Psychologists working in Clinical Settings

Introduction:
Lack of knowledge and uncertainty about mental health services can discourage people from seeking help. In America research shows a lack of understanding about the specific roles of mental health professionals. This study investigates whether the lack of understanding surrounding psychology and psychologists in America is also present in the United Kingdom. It explores lay person’s understanding of the role of psychologists, their willingness to access services and their views about the future need for psychology.

Methods:
Semi structured interviews explored the views of one female and four male participants between the ages of 18 and 30 years. Open ended interview questions were designed by four trainee clinical psychologists and one trainee counselling psychologist to explore the study’s research questions. Each trainee conducted one pilot interview. These were used to refine the interview schedule. Each trainee then conducted one research interview.

Results:
The results were analysed using interpretive phenomenological analysis. The epistemological stance of the researchers was discussed and the impact of preconceived ideas on results was acknowledged. Four master themes; uncertainty, media representation, social acceptability and profession image were identified.

Discussion:
Emergent themes were understood in terms of the lack of concrete and accurate information available to the lay person about psychologists working within clinical settings. This means that they have to rely on stereotypes portrayed in the media, which may help to create and maintain stigma attached to psychological problems and a reluctance to access services. A greater need to educate the general public about the role of psychologists was identified and discussed.
Major Research Project

Obesity surgery: Factors affecting success in the longer term and impact on emotional eating behaviour.

Year 3

July 2008
## Contents

**Abstract**

**Introduction**

1.1 Overview 137  
1.2 Definition and Aetiology 138  
1.3 Obesity related medical conditions 138  
1.4 Obesity related psychosocial consequences 139  
1.5 Psychological factors and theories associated with obesity 139  
1.6 Coping 142  
1.7 Cognitive factors associated with obesity 144  
1.8 Current treatments for obesity 144  
1.9 Bariatric Surgery 145  
1.10 Physical Health consequences of surgery 146  
1.11 Psychosocial consequences of surgery 146  
1.12 ‘Successful’ vs ‘Unsuccessful’ outcomes post surgery 150  
1.13 Role of psychology in the surgery process 152  
1.14 The current study 154  
1.15 Aims and Hypotheses 155  

**Method**

2.1 Design 157  
2.2 Sample 157  
2.3 Procedure 157  
2.4 Measures 158  
2.5 Ethics 163  
2.6 Power Analysis 163  
2.7 Statistical Analysis 163  

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135
Abstract

**Aims:** The aims of the study were to describe participant’s weight change, emotional, cognitive and eating behaviour characteristics at least three years post surgery, to identify factors associated with successful weight loss outcomes in the *longer term* and to explore the changing role of emotional eating behaviour and its relationship to alternative forms of coping.

**Method:** A cross-sectional between subjects design was used. Individuals (n=44) who had obesity surgery between the years 2000 - 2005 completed a questionnaire consisting of measures of emotion (e.g. depression, anxiety, self esteem) cognitions (e.g. styles of coping, control over eating) and eating behaviour (e.g. food preferences, bingeing, hunger, emotional eating). Quantitative analyses were conducted to test for differences between ‘successful’ and ‘not successful’ groups. Analyses were also conducted to determine the predictive validity of the variables on a change in Body Mass Index (BMI) and to explore differences in coping responses between participants who reported lower levels of emotional eating post surgery compared to participants who reported no change or worsening of their emotional eating.

**Results:** Surgery resulted in substantial weight loss for the majority of individuals and post surgery individuals reported positive mood states, control over eating and a reduction in emotional eating. However most individuals reported weight regain since their lowest weight achieved post surgery. ‘Successful’ participants (current BMI<30) reported lower fatigue, lower preoccupation with food and lower bingeing/emotional eating but higher levels of vigour, higher control over eating and higher problem-focused coping than participants who were ‘not successful’ (current BMI>30). Change in BMI was predicted by levels of vigour, problem-focused coping, control over eating and disordered eating. Participants whose emotional eating had reduced post surgery reported lower levels of disordered eating and higher levels of active coping than individuals whose emotional eating had stayed the same post surgery.

**Conclusions:** Results suggested surgery facilitated substantial weight loss for the majority of individuals. However, ‘successful’ longer term weight loss outcomes were associated with various psychosocial factors, which in general surgery fails to address. It is suggested that combining obesity surgery for weight loss with psychological intervention to address disordered eating, emotional eating and maladaptive coping responses may afford obesity surgery candidates greater chances of longer term success.
Introduction

1.1 Overview
Obesity is classified by the World Health Organisation (WHO) as a ‘chronic’ disease and described as a ‘global epidemic’, which affects both developing and industrialised nations (WHO, 2003). Prevalence rates for obesity in the UK are rapidly increasing and government statistics estimated that in 2006, 38% of adults were overweight and 24% were obese. Furthermore, an estimated 3% of women and 1% of men were classified as ‘morbidly’ obese (Information Centre for Health and Social Care, 2008). 30,000 deaths per year in the UK are attributed to obesity and obese individuals lose an average of nine years from their expected life span (National Obesity Forum, 2008). In addition to disabling health conditions obese individuals report having to manage painful psychosocial consequences including discrimination, prejudice, social isolation, feelings of inferiority, low mood and difficulties in intimate relationships (e.g. Stunkard & Wadden, 1992, Torgerson & Sjostrom, 2001). There are vast economic costs associated with obesity with related health conditions costing the NHS an estimated one billion pounds annually (Information Centre for Health and Social Care, 2008). Obesity is currently considered a high priority public health concern due to the associated health conditions, increased mortality rates and costs incurred by health services.

1.2 Definition & Aetiology
Obesity is defined as an excess of fat/adipose tissue which accumulates to such a level that it threatens an individual’s health (Fairburn et al, 2002). Currently, in western countries, Body Mass Index (BMI) is the most recognised measure of obesity (National Obesity Forum, 2008). BMI is defined as an individual’s weight in kilograms divided by the square of the person’s height in metres (kg/m²). Essentially, the higher an individual’s BMI the greater the associated health risks. With regards to BMI in adults, the following categories have been used to indicate overweight and obesity: ‘Healthy Weight’- 20 to 25, ‘Overweight’- 25 to 30 and ‘Obese’- Over 30 (Department of Health, 2008).
Obesity is considered to have complex aetiologies involving a multitude of interacting environmental and genetic risk factors (e.g. Fairburn & Brownell, 2002). Such factors include heredity, nutrition, physical inactivity, hormonal, environmental, socioeconomic, biological and psychological factors (e.g. Fairburn & Brownell, 2002). The role of psychological factors is addressed below although comprehensive discussion of the aetiology of obesity is beyond the scope of this paper.

1.3 Obesity related medical conditions
Medical complications associated with obesity can be categorised as either weight related or metabolic (Mehler et al, 2003). Metabolic complications include hyperlipidemia, type 2 diabetes, hypertension, coronary heart disease, increased risk of cancer, arthritis and infertility. Weight related complications include congestive heart failure, sleep apnea, ulcers, gastroesophageal reflux, urinary stress incontinence, hernia and systemic hypertension (Mehler et al, 2003). The majority health consequences associated with obesity are improved with weight loss and reduction of 5-10% of bodyweight can drastically improve the health complications associated with obesity (National Obesity Forum, 2008).

1.4 Obesity related psychosocial consequences
Whilst the physical consequences of obesity are well documented there is much less consistency in findings concerning the psychological consequences (Fairburn & Brownell, 2002). Some research has demonstrated that obesity is associated with a number of mental health conditions and psychosocial consequences as summarised below.

*Relationship with Eating disorders*
Research has documented high co-morbidity between obesity and disordered eating, particularly binge eating (Greenberg et al, 2005). Binge eating disorder (BED) is currently given provisional status as a psychiatric classification in the DSM – IV. It is characterised by recurrent episodes of binge eating without engaging in compensatory behaviours such as vomiting or laxative abuse. Estimated prevalence rates of BED in community samples range between 2-5% (de Zwaan, 2001). Research has consistently
demonstrated higher prevalence rates of BED in overweight people seeking weight loss treatment with between 30-38% meeting the diagnostic criteria for BED (Hsu et al, 1996, Saunders et al, 1998). High levels of binge eating in response to a range of emotional states has been identified in groups of overweight patients with a diagnosis of BED (Masheb & Grilo, 2006) with bingeing behaviour being triggered by depression, anxiety and anger (de Zwann, 2001). Within the obese population the presence of BED is associated with higher rates of depressive symptoms and cognitive distortions compared to people without BED (e.g. de Zwann, 2001, Powers et al, 1999).

**Mood and Health Related Quality of Life (HRQL)**

Research indicates that increased weight is associated with higher risk of developing psychopathology including depression, panic disorder, phobias and alcohol dependence (e.g. Bulik et al, 2002). Glinski et al (2001) found that 70% of obese individuals seeking surgical intervention for obesity met the criteria for a mood disorder as defined by the DSM-IV, either in the past or at the time of the study. Depression was the most commonly reported disorder followed by anxiety. Research has demonstrated lifetime prevalence rates of depression to be between 29-51% in an obese population compared to approximately 17% in the general population (Hsu et al, 1996).

The Swedish Obese Subjects (SOS) study is an ongoing longitudinal study following 1879 matched patient pairs who have chosen either surgical treatment or conventional treatment for obesity. This study is yielding vast amounts of information regarding weight loss, physical consequences and HRQL in obese individuals compared to healthy weight reference subjects (Torgerson & Sjostrom, 2001). HRQL consists of the measurement of several 'core dimensions'; health perception, psychosocial functioning, mental well-being/mood disorders and self assessment of eating behaviour. Baseline measures demonstrated increased anxiety and depression symptoms in obese individuals seeking treatment compared to healthy weight reference subjects (Torgerson & Sjostrom, 2001).
It is currently unclear whether psychopathology predisposes a person to obesity or if it is a psychological consequence of obesity. Research has indicated a complex relationship between obesity and depression and it is currently considered the relationship may be bidirectional with each influencing the other (Karlsson et al, 2007). Similarly it is hypothesised that obesity contributes to low self esteem but also that low self esteem contributes to obesity (Glinski et al, 2001). Whilst some evidence suggests differences in psychological variables between obese and healthy weight individuals it is important to note research has not found consistent differences between these two groups (Fairburn & Brownell, 2002). It has been demonstrated that not all obese individuals suffer psychological distress, leading many to conclude that obesity is not associated with general psychological problems and that obese people are heterogeneous with respect to psychological functioning (Fairburn & Brownell, 2002).

1.5 Psychological factors and theories associated with obesity
Since the 1950's psychological theories have hypothesised that psychopathology such as depression, underlying conflicts or poor adaptation to life stress may contribute to obesity and there has been a continued interest in establishing whether or not obesity is associated with psychopathology (e.g. Allison & Heshka, 1993). Attention has often focused on ideas surrounding the relationship between eating and internal emotional states, often referred to as 'emotional eating' (Ganley, 1989). Kaplan & Kaplan (1957) proposed the 'anxiety-reduction' model of overeating, which suggested that obese individuals overeat to reduce anxiety. Psychodynamic or 'psychosomatic' perspectives on obesity postulate that symptoms such as compulsive eating represent the expression of an unresolved conflict and as such eating behaviour is a defence or coping mechanism in the person's emotional life. Eating behaviour is interpreted as a reaction to past experiences in an attempt to meet current unmet needs (Buckroyd et al, 2006).

Psychosomatic theories of obesity draw on the evidence base for support. Research has consistently demonstrated that emotional eating is positively correlated with excessive eating including bulimic tendencies and obesity (e.g. Lindeman & Stark, 2001, Masheb & Grilo, 2006). Emotional eating appears to be extremely common in
groups of obese people seeking treatment (Ganley, 1989). Rosen and Aniskiewicz (1983) studied a pre-surgical group and dietary treatment group of obese individuals and identified 71% and 93% of patients as 'reactive' eaters respectively. Many studies consistently report emotional eating in response to anger, depression, boredom, anxiety and loneliness (Ganley, 1989). Emotional eating has consistently been demonstrated to be positively related to higher incidence of binge eating (Waller & Osman, 1998).

Glinski et al (2001) postulate hypotheses for the development of emotional eating drawing on psychological theories of 'attachment' processes in childhood. If children are not able to develop an inner sense of safety through their relationship with caregivers they remain dependent on external sources of comfort which may include food. Essentially the eating behaviour enables avoidance of distressing emotions, which facilitates denial, a psychological defence mechanism (Glinski et al, 2001). It is important to note that psychosomatic theories of obesity and ideas regarding the relationship between emotional eating and obesity are not accepted by all and it has been argued further hypothesis-driven research is necessary to clarify or rule out alternative theories (e.g. Allison & Heshka, 1993).

1.6 Coping
The concept of 'coping' has become an important aspect of health related research (Ryden et al, 2001). Coping is typically conceptualised as a conscious response/reaction to external stressful events (Parker & Endler, 1992). It is commonly defined as the “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p 141, Lazarus & Folkman, 1984). Coping can be considered a relatively stable trait in an individual, which influences how the person reacts to stress. Alternatively, it can be considered a dynamic process, which is specific to the particular type of situation or stressor being studied (Ryden et al, 2001).

Research into coping styles typically utilises self report measures or inventories of coping, which come with inherent issues regarding measurement of the coping construct (Parker & Endler, 1992). However, there appears to be some consensus in
the literature regarding a basic distinction between emotion-focused and problem-focused coping. Problem-focused coping refers to a task-orientation, cognitively reconceptualising a problem or taking action to solve it or minimise its effects. Emotion-focused strategies indicate a person orientation which is directed at regulating the person’s emotional response to the problem to reduce stress (Parker & Endler, 1992). Research has generally indicated that problem-focused coping is unrelated to or associated with improved mental health, whilst emotion-focused coping is linked to increased distress (Parker & Endler, 1992). Research has also identified a third basic coping dimension, avoidance, which may include both person oriented strategies e.g. seeking company as a distraction, or task-oriented strategies e.g. watching TV instead of studying (Parker & Endler, 1992).

Whilst coping capacity is an important aspect of psychological functioning it has not been comprehensively addressed with regards to the aetiology or treatment of obesity. A small number of studies suggest the relationship between stress and an individual’s coping style may influence an individual’s eating behaviour and also the ability to lose and sustain weight loss (Elfhag and Rossner, 2005). Research has consistently found that women with eating disorders underutilise a problem-focused approach and instead make higher use of avoidant and emotion-focused coping strategies (Bittinger & Smith, 2003, Koff & Sangani, 1997). People with eating disorder symptomatology are less likely to respond to problem situations with active attempts to solve problems or rethink them and more likely to adopt escape-avoidance strategies (Bloks et al, 2001).

Following conventional weight loss treatment people who regain weight have a more passive or ‘escape-avoidance’ style of coping including eating more, sleeping more and ‘wishing’ for the problem to vanish (Kayman et al, 1990). These ‘regainers’ tend to eat more in response to stress/negative emotions using eating to regulate mood (Elfhag & Rossner, 2005). In contrast, people who are successful in maintaining weight loss use more direct and active methods of coping with situations, including in response to episodes of over-eating in order to regain control. Active coping strategies help dieters cope with dietary lapses, prevent them from slipping into weight regain patterns and are a predictor of successful weight loss maintenance (Dohm et al, 2001).
These strategies also help to control the urge to overeat in response to emotional upset and social situations (Grilo et al., 1993). Essentially, it appears successful weight loss maintainers use more direct and confrontative methods of dealing with stress and problems in their life and try to find new solutions.

1.7 Cognitive factors associated with obesity

Overweight and obese individuals appear to engage in certain thinking styles, which affect their feelings and behaviours including eating behaviours (Glinski et al., 2001). Rigid, simplistic and dichotomous (all-or-nothing) ways of thinking are common in the obese population and are often moralistic (Byrne et al., 2003). Eating healthy food and losing weight is associated with ‘goodness’ and eating fattening foods or not losing weight is viewed as being a ‘failure’. These thinking styles lead to feelings of discouragement and hopelessness if a person eats too much, which may in turn increase uncontrolled eating (Glinski et al., 2001). Rigid and dichotomous thinking styles have been shown to be more common in weight loss ‘regainers’ than weight loss ‘maintainers’ (Byrne et al., 2003).

1.8 Current treatments for obesity

The physical and psychosocial consequences associated with obesity identify a clear need to develop effective treatments to aid individual’s weight loss. The majority of individuals manage their obesity using behavioural interventions, which encourage changes in eating behaviour combined with increased physical activity. These interventions include dieting using self help books/advice from magazines, joining formal slimming clubs and also more structured interventions such as counselling or Cognitive Behaviour Therapy (CBT). Such approaches emphasise the psychological and behavioural aspects of obesity and try to change behaviour through changes in cognition and eating behaviour.

In contrast, some individuals manage their obesity using medical or surgical interventions. In terms of medication there are a number of drugs available that work either by reducing appetite or by preventing fat absorption. This approach also tries to change behaviour but provides a medical support for behaviour change as the desire to eat is reduced or overeating results in unpleasant consequences. More recently
individuals have turned to surgery to address obesity, which involves reducing the stomach size to limit food intake. The different approaches to obesity treatment can therefore be seen within the framework of the 'bio psychosocial' model as each intervention addresses one of three components of the individual. However, in reality the situation is not as simple as this as interventions generally impact more than area. For example, the medical and surgical approaches to obesity address the 'bio' part of the model (by reducing appetite or stomach size) but invariably these interventions also effect psychological and social changes such as different attitudes to food and eating (e.g. Ogden, 2006).

With regards to the success of behavioural and pharmacological interventions, research has found that weight lost is invariably regained over time (e.g. Byrne et al, 2003, Garner & Wooley, 1991). At three to five years post-treatment approximately 80% of patients will have returned to or exceeded their pre-treatment weight (Byrne et al, 2003). Psychological interventions for obesity, such as CBT, are not considered to have demonstrated consistent efficacy in terms of long-term weight reduction (Glinski et al, 2001). As these more conventional methods of weight reduction have proven relatively unsuccessful in the longer term management of obesity, attention in medical circles has become increasingly focused on surgical interventions which have demonstrated dramatic weight loss outcomes for individuals in the shorter term.

1.9 Bariatric Surgery

Bariatric surgery aims to produce weight loss through surgical alteration to either the stomach or the intestine (Crookes, 2006). The most commonly performed procedures are the Roux-en-y Gastric Bypass and Adjustable Gastric Banding, which combine reduced stomach capacity with a limited gastric outlet (Crookes, 2006). This imposition of a physical restriction lessens the need to voluntarily restrict eating behaviour as eating large quantities of food becomes difficult (Bocchieri et al, 2002). Other surgical methods include malabsorption based surgeries such as the duodenal switch and sleeve gastrectomy. However, these surgeries are currently less favoured than the 'restriction' surgeries as medical complications are more frequent (Bocchieri et al, 2002).
Post surgery individuals are required to change their eating patterns, including the quantity, frequency and types of foods eaten (Bocchieri et al, 2002). Post surgical guidelines recommend small meal sizes, low fat/sugar foods and avoiding liquids with meals (Saunders et al, 1998). Failure to stick to these guidelines results in vomiting and ‘dumping’ syndrome, which includes nausea, cramping, palpitations and tremors. These unpleasant side-effects provide immediate feedback to the patient that they have made unsuitable food choices acting as a negative reinforcer (Rusch & Andris, 2007). As such some researchers consider that bariatric surgery is a form of forced behaviour modification (van Hout et al, 2005).

NICE guidelines advise bariatric surgery be recommended as a treatment option for people with a BMI of greater than 40 or between 35-40 alongside another significant health condition (NICE, 2006). With regards to characteristics of individuals who seek surgery, research has suggested that these individuals experience greater psychological distress than individuals seeking help through supported dieting (Higgs et al, 1997). A review of the literature reported 70% of studies were based on gender ratios of approximately 4:1, women: men, undergoing surgery (Bocchieri et al, 2002). Research thus far has not explored why women are more likely to opt for surgery than men though it has been hypothesised that this is due to women feeling more stigmatised regarding their obesity (Bocchieri et al, 2002).

1.10 Physical health consequences of surgery
Research into the efficacy of bariatric surgery consistently demonstrates dramatic weight loss with patients losing on average two thirds of their excess body weight within two years of surgery (Bocchieri et al, 2002). The SOS study reported an average of 25kg of excess weight lost in the surgery group two years post surgery compared to an average of 0.5kg weight loss in the control group (Torgerson & Sjostrom, 2001). In addition, the SOS study results showed dramatically reduced incidence of diabetes and hypertension in the surgery group at 2 year follow-up. Results such as these have resulted in surgery being broadly considered the most effective method of weight reduction by the medical profession (e.g. Crookes, 2006). Interestingly, there is no agreed definition of ‘success’ with regards to weight loss post surgery though common criteria include a percentage of pre-operative weight lost, a percentage of excess weight lost or a change in BMI (Vallis & Ross, 1993).
Longer term follow up of patients post surgery has failed to demonstrate successful maintenance of weight loss. There are subgroups of people that do not lose weight or who find maintaining weight loss difficult resulting in weight regain approximately 18-24 months post surgery (Bocchieri et al, 2002). Ten year follow up in the SOS study observed weight regain between one and six years post surgery. After six years, weight regain generally levelled off, with weight loss at ten years post surgery averaging 16% weight loss (12.1kg) compared to pre-surgery weight (Karlsson et al, 2007). Individuals in the conventionally treated control group had gained 1.5% body weight (9.9 kg) at ten year follow up compared to their baseline weight.

1.11 Psychosocial consequences of surgery
Research has also explored the impact of surgery on other aspects of individual’s lives including HRQL, mood, changes in attitudes to eating/eating behaviours, coping behaviours and subtle psychological indicators such as self esteem and body image. Ogden et al (2005, 2006) completed both quantitative and qualitative research regarding the impact of surgery approximately fifteen months post surgery. The quantitative research compared the post surgery population with waiting list controls. Results showed that the groups were comparable on measures of positive and negative side effects of eating, anxiety and depression. However, the surgery group reported lower fatigue, higher global health status and higher quality of life than the wait list controls (Ogden et al, 2005). Qualitative research expanded on these results and semi-structured interviews were conducted with 15 individuals to explore their experience of surgery. Four themes emerged where patients described their personal histories, their decision making process regarding surgery, the adjustment process following surgery and the impact of significant weight loss. Overall, individuals experienced surgery as giving them renewed confidence and self-esteem. Having previously experienced their eating behaviour as ‘out of control’, individuals reported experiencing a greater sense of self-control, which rippled out into wider areas of the individual’s life (Ogden et al, 2006). Further research regarding the psychosocial impact of surgery is summarised below.
Impact on mood and HRQL

At two year follow up the SOS study reported improvements on all HRQL measures, compared with only minor changes in the control group. Improvements were consistent across the dimensions of health perception, mental well-being and psychosocial functioning and were positively correlated with the magnitude of weight lost i.e. the greater the weight loss the more improved HRQL (Torgerson & Sjostrom, 2001). At ten year follow up there were improvements in all HRQL domains compared to baseline measures although these improvements were diminished compared to HRQL observed at two years post surgery (Karlsson et al, 2007). In a review of 171 publications concerning the psychosocial impact of surgery, Herpertz et al (2003) concluded that compared to pre surgery prevalence rates for mood disorders were considerably lower post surgery. With regards to specific ratings for anxiety and depression, results were consistent with the SOS study i.e. the greater the weight loss, the less the anxiety and depression symptoms (Herpertz et al, 2003). Overall, it is generally accepted that for most individuals surgery results in improved psychological functioning and quality of life (e.g. Vallis & Ross, 1993, van Hout et al, 2006).

There appears to be some consensus in the literature regarding the impact of surgery on subtle psychological variables with two reviews of the literature indicating overall improvements in self esteem, body image and social functioning post surgery (Bocchieri et al, 2002, Herpertz et al, 2003). Surgery facilitates weight loss, which contributes to higher self esteem (Glinski et al, 2001). Post surgery patients tend to report high levels of satisfaction with their surgery. Indeed, studies have reported that 72-90% of individuals report that they are ‘very’ satisfied with the results (Herpertz et al, 2003). However, it is important to note that in many studies satisfaction levels are measured before the general period of weight regain.

Impact on cognitions and coping responses

Research has indicated that without intervention thinking patterns and attitudes towards food may revert to unhelpful patterns post surgery. For example, Saunders (2004) identified individuals returning to labelling foods as ‘good’ or ‘bad’ and
labelling themselves as 'bad' if they ate certain foods. Some foods were still avoided post surgery for fear that they could not be eaten in moderation. These restrictions resulted in feelings of deprivation, which in turn triggered uncontrolled eating. Individuals reported disappointment that they were often still preoccupied with food and experienced cravings, feelings which also triggered eating in the form of 'grazing' 3-5 times per week (Saunders, 2004).

With regards to the impact of surgery on coping responses the SOS study explored individual’s coping strategies to the ‘stressor’ of obesity pre and post surgery (Ryden et al, 2001). Pre surgery, problem-focused strategies reduced distress and feelings of helplessness in both the surgery group and the conventionally treated group, whereas emotion-focused strategies, increased distress. At two year follow-up, all individuals in the study, both the surgery group and the conventionally treated group, had decreased their use of emotion-focused strategies but there was no change in the use of the problem-focused strategies. It was suggested that elevated distress in obesity is associated with less use of adaptive and increased use of maladaptive coping strategies (Ryden et al, 2003).

Kinzl et al (2002) highlighted that the need to stop using food as a coping strategy post surgery results in some individuals identifying psychosocial reasons for their obesity whilst simultaneously recognising an inadequacy in addressing their difficulties. There is a paucity of research measuring dispositional coping styles, how individuals respond to life stressors in general post surgery, rather than in response to the specific stressor of obesity. It is therefore not known how individuals manage their emotions post surgery and the possible relationship between emotional eating and alternative forms of coping. The current research suggests that an individual’s coping style is potentially one of the variables which influence the longer term outcomes of obesity surgery. Once food is removed as a ‘coping mechanism’ what impact does this have on how the individual manages difficult emotions? Does the individual adapt and find alternative ways to manage their emotions and if so do they choose socially considered healthy substitutes or unhealthy substitutes? Research thus far has not explored longer term post surgery coping behaviours and the relationship between emotional eating and alternative forms of coping.
Impact on eating behaviour and emotional eating

Surgery may help prevent eating in response to emotional states for some individuals as typical high-fat snacks cannot be consumed without experiencing consequences such as nausea and vomiting (Rusch & Andris, 2007). The SOS study showed post surgical reductions in hunger and disinhibition regarding eating as well as increases in self reported restrained eating six months post surgery. The longer term changes as measured at two years were consistent with this pattern though there had been a slight return to baseline scores (Torgerson & Sjostrom, 2001). The ten year results regarding eating behaviour in the SOS study have not yet been published. Overall, it has been found that surgery reduces levels of physical hunger compared to pre surgery (Green et al, 2004). Length of follow-up is negatively correlated with restrained eating and physical exercise suggesting that eating and exercise habits become less healthy over time (Larsen et al, 2006, Mathus-Vliegen, 2007). These findings highlight the need for research with longer term follow up periods.

Research exploring the impact of surgery on emotional eating is sparse. Research has shown that up 40% of individuals seeking surgical intervention identified themselves as 'emotional eaters' (Walfish, 2004). Post surgery significantly higher levels of emotional and external eating are reported compared to norm values from the general population (Mathus-Vliegen, 2007). Fischer et al (2007) attempted to measure emotional eating both pre and post surgery and its relationship to post-surgical outcome. Prior to surgery individuals were identified as 'high' or 'low' emotional eaters. However, following surgery there were no differences between the two groups on measures of BMI, depression or the tendency to eat in response to emotional cues suggesting that pre surgical emotional eating is not predictive of surgery outcomes. It was hypothesised the lack of effect may have been due to the short average follow-up time (8 months), which may not have been long enough for pre-surgery eating habits to resurface (Fischer et al, 2007).

With regards to the impact of surgery on binge eating research findings are inconsistent. Some research reports general reductions in levels of binge eating post surgery (e.g. Boan et al, 2004, de Zwann, 2001, Herpertz et al, 2003). However,
surgery is not successful in addressing eating disturbance for all individuals and
research has identified continuation of disordered eating as one of the primary factors
influencing weight loss outcomes (see next section).

1.12 ‘Successful’ vs ‘Unsuccessful’ outcomes post surgery
Following surgery individuals have to make significant and sustained changes to their
lifestyle. Surgical outcomes are not solely dependent on the adequacy of the
procedure (Larsen et al, 2006). Research has started to explore pre and post surgery
psychosocial factors which are predictive of success i.e. sustained weight loss post
surgery (Glinski et al, 2001).

As mentioned, the influence of pre surgery eating patterns on post surgery weight
outcomes is unclear. Research exploring the impact of pre surgical binge eating found
no relationship between pre surgery binge eating and weight loss outcomes (e.g.
Bocchieri-Ricciardi et al, 2006, Powers et al, 1999). However, other research has
demonstrated that people who binge eat before surgery are more likely to continue
binge eating post surgery (Niego et al, 2007) and binge eating is correlated with
poorer weight loss (e.g. Hsu et al 1996, Larsen et at, 2006). Overall, it appears binge
eating decreases with surgery but if it does continue it is associated with weight regain
and poorer outcomes (Hsu et al, 1996)

Research has identified that a significant proportion of individuals have difficulty
managing changes to their eating pattern post surgery and that eating disorders
interfere with compliance (Hafner et al, 1991). Some patients repeatedly eat small
amounts of ‘forbidden’ high-fat foods, which eventually results in eating such foods
without the negative physical consequences i.e. the surgically induced controls no
longer work. This failure to stick to the post operative diet is correlated with
insufficient weight loss or weight regain (Rusch & Andris, 2007). Some individuals
return to binge-eating, although amounts consumed during the binge tend to be
smaller than pre-surgery (Saunders, 2004). Alternatively, it has been demonstrated
that former binge eaters develop ‘grazing’ behaviours, the frequent consumption of
small amounts of food over a long period of time, accompanied by feelings of loss of
control over eating. As with binge eating, grazing behaviour is a high-risk behaviour in terms of weight regain (Saunders, 2004).

Eating in response to emotions and social situations is significantly correlated with less weight reduction (Hsu et al, 1996, Mathus-Vliegen, 2007). Larsen et al (2006) explored the relationships between emotional eating, external eating (eating in response to external cues), restrained eating, binge eating and outcomes of gastric banding surgery for 157 patients approximately 34 months post surgery. Emotional and external eating showed a significant relationship with binge eating, whilst restrained eating did not. The researchers concluded that emotional and external eating posed a threat to control of eating and that binge eating is a mediator between emotional eating and weight loss outcomes.

Research has attempted to identify other predictors of success in addition to post surgery eating behaviours. With regards to age, research has demonstrated that younger patients show greater success post surgery and also that patients who report earlier onset of obesity tend to lose more weight than patients who became obese later in life (van Hout et al, 2005). It has been found that pre surgery weight is related to success with heavier patients losing greater amounts of weight but a smaller percentage of their excess weight than patients who are less obese before surgery (Vallis & Ross, 1993).

Expectations regarding the outcomes of surgery have also been shown to play a role in determining success. Patients who expected surgery to afford them with more opportunities to be physically active achieved greater levels of success than individuals whose primary expectations were aesthetic in nature (van Hout et al, 2005). It was speculated that one explanation for this difference is that the former expectations imply increased physical activity, whereas aesthetic expectations imply a more passive attitude (van Hout et al, 2005). Some individuals have reported that the adverse effects of surgery leave them more at risk of over eating post surgery. People may expect unrealistic changes, which do not occur leaving them feeling disappointed (Saunders, 2004). In a twelve week post surgery support group patients reported feelings ‘coming to the surface’ as they could no longer use food to avoid their
emotions. This in turn triggered a return to uncontrolled eating, albeit in a modified way due to the surgery (Saunders, 2004). Overall, realistic expectations and greater motivation to make changes have been shown to be indicators of success (Pessina et al, 2001).

Delin et al (1995) identified characteristics of twenty individuals who were more and less successful at losing and maintaining weight loss two years post surgery. People who were more successful had higher cognitive restraint of eating, a greater need to achieve in life, worked towards planned goals, reported lower emotional eating and showed a greater change in eating patterns. They also reported higher feelings of self-efficacy and self esteem, which were related to lower disinhibition regarding food. People who achieved less weight loss reported higher hunger levels, higher support seeking, daydreamed and fantasised more and reported less change in their eating patterns. They were more likely to report that food and eating were the most important things in their life remaining preoccupied with food. The researchers concluded that surgery does not help individuals differentiate emotional from physical hunger.

For people who experience surgery as having positive psychosocial effects it is not clear whether the benefits are maintained in the longer term. A review of 45 studies suggested psychosocial benefits identified six months post surgery seemed not to be maintained at 2-3 years post surgery (Bocchieri et al, 2002). Such research indicates that the early effects of surgery need to be regarded as temporary and it has been suggested that two years post surgery only be considered an ‘interim’ period for measurement of outcomes (Torgerson & Stostrom, 2001). Research with longer follow up times is necessary to determine the effects of surgery that are temporary and those which are more stable (Bocchieri et al, 2002).

1.13 Role of psychology in the surgery process
Surgery is successful in the treatment of obesity for many individuals resulting in significant sustained weight loss and improvements in both physical health and psychosocial factors post surgery (Herpertz et al, 2004). However, it appears that not all individuals are able to adhere to the post surgical diet and subsequently have difficulty maintaining weight loss. The continuation of disordered eating and
emotional eating suggests that some individuals still use food for affect regulation post surgery. It has been suggested that it is necessary to clarify the role that eating behaviours play in surgical outcomes so that interventions can be developed for at risk patients (Saunders et al, 1998).

Several studies have identified a role for psychological intervention to prepare patients for surgery and to manage adjustments post surgery. In particular, it has been suggested that binge eating be studied further to improve patient selection and to provide pre and post operative support (Hsu et al, 1996). Emotional factors impact the success of surgery and it has been argued that patients who are ‘emotional eaters’ pre surgery need to be identified so that interventions can be designed to facilitate long term maintenance of weight loss (Walfish, 2004, Guerdjikova et al, 2007). Greenburg et al (2005) recommend both pre and post operative treatment plans and highlight the role of mental health professionals in enhancing the likelihood of success.

At present psychological interventions to accompany surgery are in their infancy. A twelve week post surgery cognitive behavioural therapy group reported positive feedback from individuals (Saunders, 2004). However, there are no studies comparing outcomes for individuals who attended support groups with individuals who did not. One specialist medical centre in the USA reports all patients undergo psychological evaluation before surgery and are encouraged to attend a weekly support group even prior to their surgery (Glinski et al, 2001). Anecdotal evidence regarding this group suggests it encourages successful weight loss and post-operative adherence (Glinski et al, 2001). However, further research is necessary to clarify whether these groups or interventions which focus on binge eating and emotional eating behaviour improve surgical outcome (Larsen et al, 2006).
1.14 The Current Study

Research has clearly highlighted the longer term physical outcomes of bariatric surgery and the variation in weight loss outcomes achieved by individuals. However, there is still a lack of research on the longer term psychosocial effects of surgery. It has been highlighted that research with follow-up times of greater than three years is needed to explore whether the beneficial effects of surgery on psychosocial wellbeing are maintained and to identify which factors are related to successful weight loss and maintenance. Ogden et al’s research (2005, 2006) explored the psychosocial impact of surgery on individuals, approximately fifteen months post surgery. The current study aims to expand upon Ogden et al’s (2005, 2006) research by exploring the impact of surgery in the longer term. In addition, the study aims to identify which psychosocial factors are associated with greater degrees of ‘success’ post surgery and to explore the changing role of emotional eating throughout the surgery process as this has received sparse attention in the literature thus far.
1.15 Aims and Hypotheses

The aims of the study were as follows;

**Aim 1**: To describe participant’s clinical characteristics (including weight & BMI change), emotional, cognitive and eating behaviour characteristics at least three years post surgery.

**Aim 2**: To identify emotional, cognitive and eating behaviour characteristics which were associated with ‘successful’ weight loss outcomes in the *longer term*.

**Aim 3**: To explore the role of emotional eating behaviour both pre and post surgery and its relationship to alternative forms of coping.

**Hypotheses**

1) ‘**Emotions**’. Individuals who are successful in losing and maintaining weight loss in the longer term will demonstrate higher self esteem and more positive mood states than individuals who are not successful.

2) ‘**Cognitions**’. Individuals who are successful in losing and maintaining weight loss in the longer term will demonstrate higher control over eating, less preoccupation with food, higher problem-focused coping and lower avoidant coping responses to stressors than individuals who are not successful.

3) ‘**Eating behaviour**’. Individuals who are successful in losing and maintaining weight loss in the longer term will eat more healthily, demonstrate lower levels of bingeing/grazing behaviour and lower levels of emotional eating than individuals who are not successful.
4) 'Compensatory Coping Responses'
Individuals who report reduced levels of emotional eating post surgery compared to pre surgery will demonstrate different coping responses and eating behaviours than individuals who report the same or worse levels of emotional eating post surgery.
Method

2.1 Design
A *cross-sectional between subjects design* was used and data were collected from individuals who had undergone surgery between three and eight years previously.

2.2 Sample
Participants were 44 individuals who had undergone bariatric surgery between 1st January 2000 and 30th December 2005. All participants were recruited via an NHS obesity clinic. A census sample of all individuals that had surgery in the designated time period was identified and approached to participate in the research (n=127). The final sample included 39 females and 5 males who had gastric banding, gastric bypass, sleeve gastrectomy or duodenal switch procedures. The 44 returned questionnaires represented an overall response rate of 35%.

2.3 Procedure
The project was administrated by staff at the NHS clinic to protect confidentiality of the participants. Questionnaire packs were prepared by the researcher, which included a research questionnaire (Appendix A), participant information sheet (Appendix B) and a stamped return envelope addressed to the clinic. The questionnaire did not ask participants for their name so that their responses remained anonymous. 127 packs were addressed and posted out by a nurse practitioner inviting all people who had undergone surgery between 2000- 2005 to participate in the research. Participants were requested to complete the questionnaire and return it within a two week period. Following the initial mail out, 24 participants returned completed questionnaires. Four weeks after the initial mail-out reminder packs were sent out, which included a reminder letter (Appendix C), a further copy of the questionnaire and a stamped return envelope. 20 were returned increasing the sample size to a total of 44. Completion of the questionnaire was at the discretion of the individual and it was considered that completion of the anonymous questionnaire indicated participant’s consent to participate.
2.4 Measures
A research questionnaire was developed which compiled several different measures (Appendix A). Where appropriate, reliability for the measures was assessed using Cronbach’s Alpha (see Appendix H for summary). Items were deleted if it improved the reliability of the scale (as recommended by Field, 2005). Coefficients above 0.7 are generally considered acceptable (Field, 2005). The measures used in the questionnaire are outlined below. They have been broadly categorised as measures of emotion, cognition or eating behaviour.

2.4.1 Demographics and Clinical Characteristics
Participants were asked to record their sex, age, height, ethnicity, class, smoker/non-smoker status, living arrangements, current weight, preferred weight, medically ideal weight, previous successful weight loss before surgery and duration of maintenance, age of onset of weight problems, type of surgery, date of surgery, weight at time of surgery, lowest weight following surgery, length of time this weight loss was maintained and current health status.

2.4.2 Emotions

Mood
Participants were asked to complete 12 items from the Profile of Mood States (POMS, McNair, Lorr & Dropplemam, 1992). These items asked how often participants had experienced emotions such as guilt and hopelessness over the past month. Items are rated on a likert scale ranging from ‘not at all’ (1) to ‘very often’ (5). The 12 items were summated to describe 4 mood states; Anxiety (α = 0.89), Depression (α = 0.84), Fatigue (α = 0.85) and Vigour (α = 0.80). A higher score reflects greater levels of anxiety, depression, fatigue and vigour. The POMS has been widely used and has demonstrated sound psychometric properties, including factorial validity for the separate subscales (McNair, Lorr & Droppleman, 1992). The POMS was chosen as it is considered a more reliable measure of current mood states in response to situations rather than measuring individual’s personality traits.

Self Esteem
Participants were asked to complete the 10 item Rosenberg Self-Esteem Scale (RSE, Rosenberg, 1965). This scale asks participants whether they agree or disagree with various statements about themselves, for example, ‘On the whole I am satisfied with myself’, ‘I certainly feel useless at times’ and ‘I wish I could have more respect for myself’. Items are rated on a 4 point likert scale ranging from ‘Strongly Disagree’ (1) to ‘Strongly Agree’ (5). A higher score reflects greater self esteem. The RSE is a widely used and well validated measure of self esteem and studies have reported adequate internal consistency and test-retest reliability co-efficients above .85 (Rosenburg, 1979). In addition to being considered the most widely validated measure of self esteem the RSE was chosen as it has only ten items and therefore is quickly administered and easily compiled with other measures. In the current study the Cronbach alpha coefficient was 0.91.

2.4.3 Cognitions

Relationship to food

Participants were asked to complete the ‘Relationship to Food Questionnaire – Part A’ (RFQ - A). This 21 item scale was designed by Ogden et al (2005) to measure cognitions regarding experiences and relationship to food over the previous month. Qualitative research identified common factors regarding individual’s experiences post surgery and questionnaire items designed to capture these factors (Ogden et al, 2005, 2006). This questionnaire was chosen as despite not being widely validated it was designed specifically for the post surgery population. Items were rated on a 5-point likert scale ranging from not at all (1) to very often (5). The items were summated to describe 7 psychosocial constructs as outline below. A higher score reflects greater levels of each construct.

- Experiences of control e.g. ‘How often have you felt in control of your eating?’. α = 0.88
- Food Preferences i.e. the need to choose foods carefully e.g. ‘How often have you felt that you should eat healthy foods?’. α = 0.60.
- Preoccupation with food e.g. ‘How often have you felt that food is a central part of your life?’. α = 0.81
- Personal control over food e.g. 'How often have you felt that you are controlling what you eat yourself?'. $\alpha = 0.89$
- Imposed control e.g. 'How often have you felt that your eating is being controlled by your stomach?'. $\alpha = 0.82$
- Positive side effects of eating e.g. 'How often have you felt content after you have eaten?'. $\alpha = 0.91$
- Negative side effects of eating e.g. 'How often have you felt nauseated after eating?'. $\alpha = 0.91$

Coping
Participants were asked to complete a 28 item scale, the ‘COPE’ (Carver et al, 1989). This scale was chosen as it identifies 14 coping constructs/responses that individuals may use when faced with difficult or stressful life events. It provides rich data compared to other coping scales, which measure fewer constructs and as such may be too simplistic to capture the complexity of coping as a construct. The brief version was chosen to reduce the time burden on participants as it has been demonstrated to have reliability similar to that of the full version (Carver, 1997). Possible responses to stressful situations in life, for example, ‘I just give up trying to deal with it’, ‘I think hard about what steps to take’ and ‘I make jokes about the situation’ are measured on a 4-point likert scale ranging from ‘I don’t usually do this’ (1) to ‘I usually do this a lot’ (5). The 28 items are summated to describe the 14 differentiable coping constructs as outlined below;

- Self Distraction
- Active Coping
- Denial
- Substance Use (Drugs and Alcohol)
- Use of Emotional Support
- Use of instrumental support
- Behavioural disengagement
- Venting
- Positive reframing
This scale has been widely used in health related research in different populations and the reliability and validity of the sub-scales independently verified (Clark et al, 1995). Coping was only one of the variables to be explored in the present study therefore for part of the analysis the 14 constructs were summated to represent 3 core ‘coping styles’ to reduce the data. The 3 constructs were identified in accordance with literature regarding avoidant, problem focused and emotion focused styles of coping in response to stressors.

- ‘Avoidant coping’ included original items of ‘self-distraction’, ‘denial’, ‘substance use’ and ‘behavioural disengagement’ ($\alpha = 0.72$).
- ‘Emotion-focused coping’ included the original items ‘using emotional support’, ‘venting’ and ‘religion’ ($\alpha = 0.60$).
- ‘Problem-focused coping’ included original items ‘positive reframing’, ‘planning’, ‘active coping’ and ‘using instrumental support’ ($\alpha = 0.74$).

Higher scores reflect greater levels of avoidant coping, emotion-focused coping and problem-focused coping.

### 2.4.4 Eating behaviour

Participants were asked to complete the ‘Relationship to Food Questionnaire – Part B’ (RFQ-B), a 21 item scale identifying different eating behaviours. Behaviours included were identified in qualitative research into obesity as previously described when discussing the use of the RFQ-A (Ogden et al, 2005, 2006). Items were rated on a 5-point likert scale ranging from not at all (1) to very often (5). Additional items were added to the questionnaire regarding bingeing behaviours (Binge Eat. B) as post surgery bingeing behaviour was of particular interest in this study. The items were
summated to describe 7 eating constructs as outlined below. A higher score reflects greater levels of each construct.

- Binge Eating 'A' e.g. 'How often have you felt a fear of overeating?'. $\alpha = 0.84$.
- Binge Eating 'B' e.g. 'How often have you felt that you lose total control of your eating?'. $\alpha = 0.77$.
- Grazing e.g. 'How often have you felt that you seem to be continually eating with no planned meals?'. $\alpha = 0.55$.
- Desire to eat healthily e.g. 'How often have you felt that you prefer to eat low fat foods?'. $\alpha = 0.75$.
- Desire for sweet foods e.g. 'How often have you felt that you want to eat cakes?'. $\alpha = 0.91$
- Desire for fatty foods e.g. 'How often have you felt that you want to eat fried foods?'. $\alpha = 0.89$
- Experienced Hunger levels e.g. 'How often have you felt a great sense of hunger?'. $\alpha = 0.86$

**Emotional Eating**

Participants were asked to complete the emotional eating scale from the Dutch Eating Behaviour Questionnaire (DEBQ, van Strien et al, 1986). This 13 item scale asks participants to rate how often they have a desire to eat in response to different emotions. Items are rated on a 5-point likert scale ranging from 'not at all' (1) to 'very often' (5). Eating behaviour in response to emotions such as irritation, boredom, loneliness and disappointment are measured. Participants were asked to rate their eating behaviour in response to emotions over the previous month (current emotional eating). The DEBQ has been demonstrated to be a valid and reliable instrument for evaluating emotional eating in eating disorder, obese and normal populations (Wardle, 1987), it has high internal consistency and factorial validity (van Strien et al, 1986). With only 13 items this scale is quick to administer and easily combined with the other measures reducing the time burden on participants. In the current study, the Cronbach alpha coefficient was 0.96.
At the end of the questionnaire participants were asked to complete the emotional eating scale from the DEBQ again, retrospectively, thinking about their eating behaviour in response to their emotions before they had surgery (pre surgery emotional eating). This was intended to measure any perceived change before and after surgery.

Single item measures asked participants whether they felt their surgery had been successful (Yes/No) and whether they had received any psychological intervention with regards to their surgery (Yes/No).

2.5 Ethics
Ethical approval was granted by the Central Office for Research Ethics Committee (COREC) to Professor Jane Ogden for the original study of this population in 2003 (Appendix D). For publication of this research see Ogden et al (2005, 2006). Ethical approval included permission to complete longer term follow-up this population. Research governance approval from the Research and Development (R&D) committee in the NHS trust was also granted (Appendix E). On commencing the current research a notice of substantial amendment was completed and submitted to COREC to seek permission to use additional questionnaire measures with this population. Permission was granted for use of the additional measures and to follow up individuals more than 12 months post surgery (Appendix F). The R&D committee of the NHS trust was informed that research in this area was still active. The proposal was submitted to Surrey University’s ethics committee and permission was granted for the research (Appendix G).

2.6 Power analysis
A small scale study (Rouse, 2007) was carried out in 2007 following up 20 patients post surgery using the RFQ-A and RFQ-B. The results showed significant changes from before to after surgery for a number of variables including control over eating. In addition, the results showed a significant correlation between change in BMI (before and after surgery) and perception of control \((r=-0.40, p=0.01)\), which indicated a ‘medium’ effect size. On the basis of the results from this study it was calculated that
to detect 0.40 in the current study with 80% power and alpha set at 0.05, a sample size of 50 participants was required.

2.7 Statistical analysis
All analyses were completed using SPSS for Windows V14.0 (SPSS INC, Chicago, III). For the purposes of analysis variables were split into the three categories as outlined in the method section; ‘Emotions’, ‘Cognitions’ and ‘Eating behaviour’.
Some individual variables fit neatly into a specific category e.g. the variable ‘anxiety’ sits comfortably in the ‘emotions’ category. Other individual variables fall awkwardly between categories e.g. ‘self esteem’ could arguably be categorised as a cognition, what the person thinks of themselves or an emotion, what they feel about themselves.
It is fully recognised that how the variables were categorised is controversial and debatable. However, for the purposes of analysis using these three categories provided the best fit for exploration of the data.

To explore the hypotheses regarding which variables were associated with success following surgery it was necessary to define ‘success’. There is currently no widely agreed definition of what constitutes ‘successful’ outcome of surgery. It could be argued that any weight loss above 5-10% constitutes success as this will be accompanied by a reduction in health risks. However, the current study is interested in which factors are associated with greater degrees of ‘success’. Therefore, for the purposes of the current study success was defined as having a current BMI of less than 30. With a BMI of less than 30 participants will have shifted from the ‘obese’ to ‘overweight’ category using the Department of Health’s (2008) classification system and therefore moved out of the ‘high risk’ bracket in terms of health complications.
This definition also provided a working split in the data with 17 participants falling into the ‘successful’ category and 26 participants falling into the ‘not successful’ category (due to missing data one completed questionnaire was not included in this part of the analysis).

Data were screened to determine whether they met the assumptions for parametric testing. Using the Kolmogorov-Smirnov test, it was found that a number of variables were not normally distributed and four of the variables were positively skewed.
Transforming the data using square root transformation to reduce positively skewed data (as recommended by Field, 2005) did not improve the normality of the data set overall therefore analyses were conducted on the original data.

When comparing the two groups ‘successful’ and ‘not successful’ differences between the groups were analysed using independent sample t-tests. When the variables did not meet the assumptions for parametric testing differences between the two groups were also analysed using the Mann-Whitney Test. To determine the predictive validity of variables on the change from pre surgery BMI to current BMI multiple regression analysis was conducted (see results section for more detail). Specific hypotheses had been developed concerning the measures included in the study indicating that a one tailed test could be used. However, given the small sample size and the number of tests being carried out alpha was not reduced and two tailed test significance levels were used.

Further analyses were completed to explore the difference between individuals who identified that their emotional eating had reduced post surgery and individuals who identified that emotional eating had stayed the same or worsened. Individuals were split into two groups ‘emotional eating reduced’ and ‘emotional eating same’ according to their scores on the DEBQ pre and post surgery. The two groups were then compared on the different coping response variables. For this part of the analysis the COPE was used in its entirety and the two groups were compared on all 14 psychosocial constructs of the COPE (rather than the summated 3 core constructs). The groups were also compared on the eating behaviour variables of bingeing and grazing. As the majority of the coping variables were not normally distributed the assumptions for parametric tests were not met and Mann-Whitney Tests were conducted to check for differences.
Results

3.1 Overview
The data were analysed in the following ways:

1) To describe participant characteristics in terms of their demographics, clinical characteristics, emotions, cognitions and eating behaviours.

2) To divide the participants into two groups ‘successful’ and ‘not successful’ and to look for differences between these two groups in terms of participant characteristics, emotions, cognitions and eating behaviours.

3) To identify which variables (emotions, cognitions and eating behaviour) predicted the most change between pre surgery BMI and current BMI.

4) To divide the participants into two groups ‘emotional eating reduced’ and ‘emotional eating same’ and to look for differences between these two groups in terms of coping responses and disordered eating.

Data Reduction
To describe participant characteristics in terms of emotions, cognitions and eating behaviour data were reduced. Scores from the 5-point likert scales were split to create three categories; low (1-2.4), medium (2.49 – 3.4) and high (3.5 – 5.0). Scores from the 4-point scales were also split to create three categories; low (1-2), medium (2.1-2.9) and high (3.0-4.0). Frequencies of the number of participants in each category were calculated (see Tables 4, 5 and 6 for results).

3.2 Participant Characteristics
3.2.1 Demographics
The demographic characteristics of the participants are presented in Table 1. The majority of participants were white females who described themselves as working class or middle class. Most participants were non-smokers who rated their current health from good to excellent and the majority co-habited. The mean age was 45 years old.
Table 1. Participant demographics.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
<th>(x \text{ (s.d.) range})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td>(x = 45.45) (6.88)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>29 - 59</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td></td>
<td></td>
<td>(x = 1.68) (0.092)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.54 - 2.00</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>39</td>
<td>88.6</td>
<td></td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Class</td>
<td>24</td>
<td>57.1</td>
<td></td>
</tr>
<tr>
<td>Middle Class</td>
<td>18</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td>Upper Class</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>3</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>39</td>
<td>88.6</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td><strong>Health Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>5</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>21</td>
<td>47.7</td>
<td></td>
</tr>
<tr>
<td>Very Good</td>
<td>10</td>
<td>22.7</td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>8</td>
<td>18.2</td>
<td></td>
</tr>
<tr>
<td><strong>Smoking Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smokers</td>
<td>6</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>Non-Smokers</td>
<td>38</td>
<td>86.4</td>
<td></td>
</tr>
<tr>
<td><strong>Living Arrangements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alone</td>
<td>17</td>
<td>39.5</td>
<td></td>
</tr>
<tr>
<td>Cohabiting</td>
<td>26</td>
<td>60.5</td>
<td></td>
</tr>
</tbody>
</table>

3.2.2 Clinical Characteristics

Participant’s weight histories prior to surgery are presented in Table 2. The mean current weight was 93.22kg whilst the mean ‘preferred’ weight was 20 kg lighter (73.21kg). Weight loss prior to surgical intervention by alternative methods ranged from 5.45 to 41.36 kg and this pre-surgery weight loss was maintained for an average
of 20 months. The mean age at which body weight became a problem was reported to be just below 14 years of age.

Table 2. Participant weight history

<table>
<thead>
<tr>
<th></th>
<th>x</th>
<th>s.d.</th>
<th>range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medically Ideal Weight</td>
<td>66.32</td>
<td>9.62</td>
<td>50.09 - 114.55</td>
</tr>
<tr>
<td>(kg)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred Weight (kg)</td>
<td>73.21</td>
<td>12.03</td>
<td>54.09 - 114.55</td>
</tr>
<tr>
<td>Current Weight (kg)</td>
<td>93.22</td>
<td>23.72</td>
<td>51.82 - 152.73</td>
</tr>
<tr>
<td>Most weight lost before surgery (kg)</td>
<td>22.65</td>
<td>10.24</td>
<td>5.45 - 41.36</td>
</tr>
<tr>
<td>Time weight loss maintained (months)</td>
<td>20.15</td>
<td>29.53</td>
<td>2 - 161</td>
</tr>
<tr>
<td>Age weight became problem (years)</td>
<td>13.74</td>
<td>8.97</td>
<td>1 - 40</td>
</tr>
</tbody>
</table>

Details of surgical procedures and associated weight changes are presented in Table 3. The most commonly performed procedures were gastric bypass and gastric banding. Two participants had more than one procedure (at separate times). On average, participants had surgery 50 months prior to data collection i.e. March 2004. The mean baseline weight at the time of surgery was 140.69 kg with a mean BMI of 50.48. The mean lowest reported weight following surgery was 87.05 kg resulting in a mean BMI of 30.71 which was maintained on average for 21 months. The mean current weight was 93.22 kg and mean BMI at the time of the study was 33.07. 26 people reported a current BMI of 30 or above (‘obese’), 12 individuals reported a BMI of 26-30 (‘overweight’), 4 individuals reported a BMI of 20-25 (‘healthy’) and 1 individual reported a BMI of less than 20 (‘underweight’). The mean weight loss from pre surgery weight to current weight, including any regain, was 45.17 kg, which

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13 One patient had a second surgical procedure in November 2007. The date of the initial procedure was in the designated time period 2000 – 2005 but the exact date was not recorded on the questionnaire, this therefore affects the range regarding time since surgery (months).
represents an average of 32% overall bodyweight lost since the time of surgery. 8 individuals lost between 0-30 kg, 25 individuals lost between 30-60 kg, 6 individuals lost between 60-90 kg and 2 individuals lost more than 90 kg. With regards to weight regain i.e. the difference between current weight and lowest weight since surgery, 15 individuals gained 0-5 kg, 8 individuals gained 5-10 kg, 11 individuals gained 10-20 kg, 3 individuals gained 20-30 g and 2 individuals gained more than 30 kg.

Table 3. Surgical weight history

<table>
<thead>
<tr>
<th></th>
<th>x (s.d.)</th>
<th>n</th>
<th>%</th>
<th>range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of surgery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastric Band</td>
<td>140.69(24.07)</td>
<td>8</td>
<td>18.2</td>
<td></td>
</tr>
<tr>
<td>Gastric Bypass</td>
<td></td>
<td>28</td>
<td>63.6</td>
<td></td>
</tr>
<tr>
<td>Sleeve</td>
<td></td>
<td>1</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Gastrectomy</td>
<td></td>
<td>5</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Duodenal Switch</td>
<td></td>
<td>2</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>&gt; 1 procedure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time since surgery (months)</td>
<td>50 (20.87)</td>
<td></td>
<td></td>
<td>5-107</td>
</tr>
<tr>
<td>Weight at time of surgery (kg)</td>
<td></td>
<td></td>
<td></td>
<td>86.36-238.64</td>
</tr>
<tr>
<td>Lowest weight reached post surgery (kg)</td>
<td>87.05 (22.63)</td>
<td></td>
<td></td>
<td>44.09 - 153.1</td>
</tr>
<tr>
<td>Time lowest weight maintained (months)</td>
<td>20.85 (18.12)</td>
<td></td>
<td></td>
<td>2-107</td>
</tr>
<tr>
<td>Weight loss since surgery, kg</td>
<td>45.17 (21.66)</td>
<td></td>
<td></td>
<td>0 - 101.36</td>
</tr>
<tr>
<td>(difference between surgical and current weight)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMI at time of surgery</td>
<td>50.48 (8.44)</td>
<td></td>
<td></td>
<td>33.41 - 77.92</td>
</tr>
<tr>
<td>Lowest BMI following surgery</td>
<td>30.74 (6.87)</td>
<td></td>
<td></td>
<td>18.59 - 51.62</td>
</tr>
<tr>
<td>Current BMI</td>
<td>33.07 (7.81)</td>
<td></td>
<td></td>
<td>19.79 - 51.62</td>
</tr>
</tbody>
</table>
3.2.3 Emotional Characteristics
Details of participant’s mood states and self-esteem over the previous month are presented in Table 4. The majority of participants reported low levels of depression though a significant proportion reported medium to high levels of anxiety. A significant proportion of participants reported low levels of fatigue and high levels of vigour. The majority of participants reported medium to high levels of self esteem.

Table 4. Participant’s Emotional Characteristics.

<table>
<thead>
<tr>
<th>‘Emotion’ Variables</th>
<th>Low n (%)</th>
<th>Medium n (%)</th>
<th>High n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>17 (38.6)</td>
<td>11 (25.0)</td>
<td>16 (36.4)</td>
</tr>
<tr>
<td>Depression</td>
<td>30 (68.2)</td>
<td>7 (15.9)</td>
<td>7 (15.9)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>19 (44.2)</td>
<td>12 (27.9)</td>
<td>12 (27.9)</td>
</tr>
<tr>
<td>Vigour</td>
<td>10 (22.7)</td>
<td>10 (22.7)</td>
<td>24 (54.5)</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>8 (18.2)</td>
<td>20 (45.5)</td>
<td>16 (36.4)</td>
</tr>
</tbody>
</table>

3.2.4 Cognitive Characteristics
Details of participant’s cognitions regarding their relationship with food and their coping responses to stressors are presented in Table 5. The majority of participants reported a high level of experienced control over eating and low to medium levels of preoccupation with food. Most participants reported high personal control over their eating although a significant proportion reported medium levels of imposed control on their eating. The majority of participants reported high levels of positive side effects of eating and low levels of negative side effects of eating.

With regards to coping styles the majority of participants reported low levels of avoidant coping and emotion-focused coping. The majority of participants reported medium to high levels of problem-focused coping.
Table 5. Participant’s Cognitive Characteristics.

<table>
<thead>
<tr>
<th>‘Cognition’ Variables</th>
<th>Low n (%)</th>
<th>Medium n (%)</th>
<th>High n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiences of control over eating</td>
<td>10 (23.3)</td>
<td>9 (20.9)</td>
<td>24 (55.8)</td>
</tr>
<tr>
<td>Preoccupation with food</td>
<td>17 (40.5)</td>
<td>14 (33.3)</td>
<td>11 (26.2)</td>
</tr>
<tr>
<td>Personal control</td>
<td>12 (27.3)</td>
<td>10 (22.7)</td>
<td>22 (50)</td>
</tr>
<tr>
<td>Imposed control</td>
<td>12 (27.9)</td>
<td>18 (41.9)</td>
<td>13 (30.2)</td>
</tr>
<tr>
<td>Positive side effects of eating</td>
<td>7 (16.7)</td>
<td>15 (35.7)</td>
<td>20 (47.6)</td>
</tr>
<tr>
<td>Negative side effects of eating</td>
<td>28 (65.1)</td>
<td>8 (18.6)</td>
<td>7 (16.3)</td>
</tr>
<tr>
<td>Avoidant coping</td>
<td>32 (72.7)</td>
<td>7 (15.9)</td>
<td>3 (6.8)</td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td>5 (11.4)</td>
<td>24 (54.5)</td>
<td>15 (34.1)</td>
</tr>
<tr>
<td>Emotion-focused coping</td>
<td>28 (63.6)</td>
<td>14 (31.8)</td>
<td>1 (2.3)</td>
</tr>
</tbody>
</table>

3.2.5 Eating Behaviours

Participants reported eating behaviours are presented in Table 6. Whilst the majority of participants reported low levels of bingeing behaviour this still left approximately 45% of participants reporting medium to high levels of bingeing behaviour. Similarly, the majority of participants reported medium to high levels of grazing behaviour. The majority of participants reported high levels of desire to eat healthy foods, low levels of desire to eat fatty foods, low levels of hunger and high levels of needing to choose foods carefully (food preferences). The majority of participants reported high levels of emotional eating prior to surgery (pre surgery emotional eating). In contrast, the majority reported low levels of current emotional eating.
Table 6. Participant’s eating behaviour.

<table>
<thead>
<tr>
<th>'Eating Behaviour' Variables</th>
<th>Low n (%)</th>
<th>Medium n (%)</th>
<th>High n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bingeing Behaviour A</td>
<td>22 (55)</td>
<td>4 (10)</td>
<td>14 (35)</td>
</tr>
<tr>
<td>Bingeing Behaviour B</td>
<td>24 (54.5)</td>
<td>17 (38.6)</td>
<td>3 (6.8)</td>
</tr>
<tr>
<td>Grazing Behaviour</td>
<td>13 (29.5)</td>
<td>16 (36.4)</td>
<td>15 (34.1)</td>
</tr>
<tr>
<td>Healthy Foods</td>
<td>4 (9.5)</td>
<td>11 (26.2)</td>
<td>27 (64.3)</td>
</tr>
<tr>
<td>Sweet Foods</td>
<td>15 (34.1)</td>
<td>17 (38.6)</td>
<td>12 (27.3)</td>
</tr>
<tr>
<td>Fatty Foods</td>
<td>30 (69.8)</td>
<td>9 (20.9)</td>
<td>4 (9.3)</td>
</tr>
<tr>
<td>Hunger</td>
<td>34 (81.0)</td>
<td>2 (4.8)</td>
<td>6 (14.3)</td>
</tr>
<tr>
<td>Pre surgery emotional eating</td>
<td>5 (12.8)</td>
<td>4 (10.3)</td>
<td>30 (76.9)</td>
</tr>
<tr>
<td>Current emotional eating</td>
<td>25 (59.5)</td>
<td>9 (21.4)</td>
<td>8 (19.0)</td>
</tr>
<tr>
<td>Food Preferences</td>
<td>4 (9.3)</td>
<td>15 (34.9)</td>
<td>24 (55.8)</td>
</tr>
</tbody>
</table>

Results from single items on the questionnaire are presented in Table 7. The majority of participants considered their surgery to have been successful overall. The minority received psychological intervention regarding their surgery.

Table 7. Results from single item questions.

<table>
<thead>
<tr>
<th>Single Item Variables</th>
<th>n</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Consider surgery a 'success'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37</td>
<td>84.1</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>15.9</td>
</tr>
<tr>
<td>Received psychological therapy re surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>15.9</td>
</tr>
<tr>
<td>No</td>
<td>37</td>
<td>84.1</td>
</tr>
</tbody>
</table>
3.3 Differences between ‘successful’ and ‘not successful’ participants
Participants were split into two groups ‘successful’ and ‘not successful’ as defined by their current BMI (BMI <30 = Success). Independent sample t-tests were conducted to test for differences between the groups. Homogeneity of variance was tested for using Levene’s test and where necessary equal variances not assumed (as noted in results tables). In addition, Mann-Whitney tests were conducted for any variables that were not normally distributed (all results were consistent with t-test results and did not alter significance of findings).

3.3.1 Demographics and Clinical Characteristics
Results of t-tests conducted to determine any differences in demographics and clinical characteristics between the ‘successful’ and ‘not successful’ groups are presented in Table 8. There were no significant differences in age, height, medically ideal weight, age weight became a problem and BMI at time of surgery between the two groups. There were significant differences between the two groups on several measures. The ‘successful’ group reported a lower preferred weight, lower weight at time of surgery, lower current weight, lighter lowest weight reached post surgery and higher weight loss since surgery than the ‘not successful’ group. The ‘not successful’ group reported greater success at losing weight by other means prior to surgery than the ‘successful’ group.
Table 8. Differences in demographics and clinical characteristics between groups.

<table>
<thead>
<tr>
<th>Demographics/Clinical Characteristics</th>
<th>Not Successful n=26</th>
<th>Successful n=17</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x(s.d.)</td>
<td>x(s.d.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (equal variances not assumed)</td>
<td>44.92 (7.24)</td>
<td>46.06 (6.61)</td>
<td>0.519</td>
<td>34.3</td>
<td>0.607</td>
</tr>
<tr>
<td>Height</td>
<td>1.69 (.082)</td>
<td>1.65 (.105)</td>
<td>1.171</td>
<td>41</td>
<td>0.249</td>
</tr>
<tr>
<td>Medically Ideal Weight (kg)</td>
<td>65.93 (7.50)</td>
<td>64.42 (9.72)</td>
<td>0.488</td>
<td>30</td>
<td>0.629</td>
</tr>
<tr>
<td>Preferred Weight (kg)</td>
<td>77.18 (11.13)</td>
<td>65.83 (8.96)</td>
<td>3.52</td>
<td>41</td>
<td>0.001***</td>
</tr>
<tr>
<td>Current Weight (kg) (equal variances not assumed)</td>
<td>107.59 (18.07)</td>
<td>71.28 (11.00)</td>
<td>8.18</td>
<td>40.9</td>
<td>0.00***</td>
</tr>
<tr>
<td>Most weight lost before surgery (kg)</td>
<td>26.62 (9.57)</td>
<td>17.81 (9.10)</td>
<td>2.86</td>
<td>36</td>
<td>0.007***</td>
</tr>
<tr>
<td>Age weight became problem (years)</td>
<td>12.00 (6.40)</td>
<td>16.65 (11.55)</td>
<td>-1.68</td>
<td>40</td>
<td>0.102</td>
</tr>
<tr>
<td>Weight at time of surgery (kg)</td>
<td>144.72 (13.42)</td>
<td>128.01 (21.95)</td>
<td>3.07</td>
<td>40</td>
<td>0.004***</td>
</tr>
<tr>
<td>Lowest weight reached post surgery (kg)</td>
<td>94.79 (18.33)</td>
<td>71.31 (14.72)</td>
<td>4.42</td>
<td>41</td>
<td>0.00***</td>
</tr>
<tr>
<td>Weight loss since surgery, kg (difference between surgical and current weight)</td>
<td>37.15 (18.01)</td>
<td>58.21 (21.19)</td>
<td>-3.44</td>
<td>40</td>
<td>0.001***</td>
</tr>
<tr>
<td>BMI at time of surgery</td>
<td>50.99 (6.39)</td>
<td>47.92 (8.59)</td>
<td>1.32</td>
<td>40</td>
<td>0.194</td>
</tr>
</tbody>
</table>

*** Significant where p<0.01

There were no significant differences between the ‘successful’ group and ‘not successful’ group on measures of time weight loss maintained before surgery \((U=166.00, p>.05)\), time since surgery \((U=169.50, p>.361)\) or time weight loss maintained after surgery \((U=176.50, p>.05)\). There was no significant association between the individuals in the ‘successful’ and ‘not successful’ groups and living
arrangements ($\chi^2 (1)=0.51, p>.05$), health status ($\chi^2 (1)=0.068, p>.05$) or class ($\chi^2 (1)=2.36, p>.05$). With regards to sex, smoker status, type of surgery and ethnicity the chi-square test could not be calculated due to small numbers in the cells therefore differences for these variables were not analysed.

3.3.2 Hypothesis Testing

Hypothesis 1 ‘Emotions’

Results of t-tests conducted to determine differences between the ‘successful’ and ‘not successful’ groups on ‘emotion’ variables are presented in Table 9. There were no significant differences between the groups on measures of anxiety, depression or self esteem. There were significant differences between the two groups on measures of fatigue and vigour with the ‘successful’ group experiencing lower levels of fatigue and higher levels of vigour than the ‘not successful’ group.

Table 9. Differences in emotion variables between groups.

<table>
<thead>
<tr>
<th>‘Emotion’ Variables</th>
<th>Not Successful $n=26$</th>
<th>Successful $n=17$</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x (s.d.)</td>
<td>x (s.d.)</td>
<td></td>
<td></td>
<td>(two-tailed)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>3.23 (1.34)</td>
<td>2.57 (1.09)</td>
<td>1.7</td>
<td>41</td>
<td>0.097</td>
</tr>
<tr>
<td>Depression*</td>
<td>2.49 (1.23)</td>
<td>1.88 (0.99)</td>
<td>1.7</td>
<td>41</td>
<td>0.097</td>
</tr>
<tr>
<td>Fatigue</td>
<td>3.21 (1.38)</td>
<td>2.33 (0.94)</td>
<td>2.29</td>
<td>40</td>
<td>0.028**</td>
</tr>
<tr>
<td>Vigour</td>
<td>3.24 (0.95)</td>
<td>3.76 (0.65)</td>
<td>-1.97</td>
<td>41</td>
<td>0.05**</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>2.99 (0.64)</td>
<td>3.34 (0.49)</td>
<td>-1.92</td>
<td>41</td>
<td>0.062</td>
</tr>
</tbody>
</table>

* Not normally distributed therefore Mann Whitney Tests also conducted.

** Significant where $p< 0.05$

The ‘successful’ group did not significantly differ in levels of depression from the ‘not successful’ group ($U=156.00, p>.05$).
Hypothesis 2 ‘Cognitions’

Results of t-tests conducted to determine differences between the ‘successful’ and ‘not successful’ groups on ‘cognition’ variables are presented in Table 10. There were significant differences between the two groups on experiences of control over eating and preoccupation with food with the ‘successful’ group experiencing higher levels of control and lower levels of preoccupation than the ‘not successful’ group. There were no significant differences between the groups on measures of personal control, imposed control, positive side effects of eating or negative side effects of eating.

With regards to coping responses there were no significant differences between the two groups on measures of avoidant or emotion-focused coping. There was a significant difference between the two groups on the measure of problem-focused coping with the ‘successful group’ reporting higher levels of problem-focused coping than the ‘not successful’ group.
Table 10. Differences in cognition variables between groups.

<table>
<thead>
<tr>
<th>'Cognition' Variables</th>
<th>Not Successful n=26</th>
<th>Successful n=17</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiences of control over eating</td>
<td>3.07 (1.18)</td>
<td>4.01 (1.00)</td>
<td>-2.72</td>
<td>40</td>
<td>0.009***</td>
</tr>
<tr>
<td>Preoccupation with food</td>
<td>3.08 (1.24)</td>
<td>2.31 (0.99)</td>
<td>2.08</td>
<td>39</td>
<td>0.044**</td>
</tr>
<tr>
<td>Personal control*</td>
<td>2.81 (1.24)</td>
<td>3.50 (1.22)</td>
<td>-1.79</td>
<td>41</td>
<td>0.08</td>
</tr>
<tr>
<td>Imposed control (equal variances not assumed)</td>
<td>2.93 (1.01)</td>
<td>3.45 (1.05)</td>
<td>-1.59</td>
<td>33.5</td>
<td>0.121</td>
</tr>
<tr>
<td>Positive side effects of eating</td>
<td>3.28 (1.14)</td>
<td>3.60 (0.96)</td>
<td>-0.94</td>
<td>39</td>
<td>0.351</td>
</tr>
<tr>
<td>Negative side effects of eating*</td>
<td>2.27 (1.16)</td>
<td>1.94 (0.91)</td>
<td>0.973</td>
<td>40</td>
<td>0.336</td>
</tr>
<tr>
<td>Avoidant coping*</td>
<td>1.89 (0.58)</td>
<td>1.65 (0.37)</td>
<td>1.46</td>
<td>39</td>
<td>0.153</td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td>2.54 (0.51)</td>
<td>2.92 (0.41)</td>
<td>-2.56</td>
<td>41</td>
<td>0.014**</td>
</tr>
<tr>
<td>Emotion-focused coping*</td>
<td>1.93 (0.66)</td>
<td>1.86 (0.37)</td>
<td>0.376</td>
<td>40</td>
<td>0.709</td>
</tr>
</tbody>
</table>

* Not normally distributed therefore Mann Whitney Tests also conducted.

** Significant where p< 0.05

*** Significant where p<0.01

The ‘successful’ group did not significantly differ on measures of personal control (U=149.50, p>.05) negative side effects of eating (U=176, p>.05), avoidant coping (U=147.00, p>.05) or emotion-focused coping (U=205.50, p>.05) from the ‘not successful’ group.

Hypothesis 3 ‘Eating Behaviour’

Results of t-tests conducted to determine differences between the ‘successful’ and ‘not successful’ groups on ‘eating behaviour’ variables are presented in Table 11. There were no significant differences between the two groups on measures of bingeing.
behaviour 'A', grazing behaviour, desire to eat sweet foods, desire to eat fatty foods, pre surgery emotional eating and food preferences. The 'successful' group reported significantly lower levels of bingeing behaviour 'B', significantly greater desire to eat healthy foods and significantly lower levels of hunger than the 'not successful' group. In addition, the 'successful' group reported significantly lower levels of current emotional eating and a greater reduction in the levels of emotional eating between pre and post surgery than the 'not successful' group.

Table 11. Differences in eating behaviour variables between groups.

<table>
<thead>
<tr>
<th>'Eating behaviour' Variables</th>
<th>Not Successful n=26</th>
<th>Successful n=17</th>
<th>t</th>
<th>df</th>
<th>p (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bingeing Behaviour A*</td>
<td>3.01 (1.54)</td>
<td>2.11 (1.13)</td>
<td>1.95</td>
<td>37</td>
<td>0.058</td>
</tr>
<tr>
<td>Bingeing Behaviour B</td>
<td>2.40 (0.99)</td>
<td>1.76 (0.71)</td>
<td>2.29</td>
<td>41</td>
<td>0.027**</td>
</tr>
<tr>
<td>Grazing Behaviour (equal variances not assumed)</td>
<td>3.23 (1.11)</td>
<td>2.61 (1.13)</td>
<td>1.76</td>
<td>33.94</td>
<td>0.088</td>
</tr>
<tr>
<td>Healthy Foods</td>
<td>3.46 (0.89)</td>
<td>4.02 (0.78)</td>
<td>-2.03</td>
<td>39</td>
<td>0.049**</td>
</tr>
<tr>
<td>Sweet Foods</td>
<td>3.19 (1.17)</td>
<td>2.59 (1.07)</td>
<td>1.71</td>
<td>41</td>
<td>0.094</td>
</tr>
<tr>
<td>Fatty Foods</td>
<td>2.35 (0.99)</td>
<td>2.00 (0.93)</td>
<td>1.14</td>
<td>40</td>
<td>0.263</td>
</tr>
<tr>
<td>Hunger*</td>
<td>2.28 (1.25)</td>
<td>1.51 (0.59)</td>
<td>2.24</td>
<td>39</td>
<td>0.031**</td>
</tr>
<tr>
<td>Food Preferences*</td>
<td>3.83 (0.97)</td>
<td>3.44 (1.25)</td>
<td>1.13</td>
<td>40</td>
<td>0.264</td>
</tr>
<tr>
<td>Pre surgery emotional eating</td>
<td>3.78 (1.27)</td>
<td>3.91 (0.94)</td>
<td>-0.35</td>
<td>40</td>
<td>0.728</td>
</tr>
<tr>
<td>Current emotional eating</td>
<td>2.71 (1.15)</td>
<td>1.93 (0.84)</td>
<td>2.37</td>
<td>39</td>
<td>0.023**</td>
</tr>
<tr>
<td>Change in emotional eating pre vs post surgery*</td>
<td>0.96 (1.19)</td>
<td>1.99 (0.77)</td>
<td>-3.09</td>
<td>38</td>
<td>0.004**</td>
</tr>
</tbody>
</table>

* Not normally distributed therefore Mann Whitney Tests also conducted.
** Significant where p < 0.05
The 'successful' group did not significantly differ on measures of bingeing behaviour 'A' \( (U=120.50, p>.05) \) or food preferences \( (U=176.50, p>.05) \) than the 'not successful' group. Consistent with results from the t-tests there were significant differences between the two groups on measures of hunger \( (U=120.00, p<.05) \) and change in emotional eating \( (U=96.50, p<.05) \) with the 'successful' group reporting lower levels of hunger and a greater reduction in levels of emotional eating than the 'not successful' group.

### 3.4 Predicting changes in BMI

A multiple regression analysis with the enter method was conducted to explore how much each variable was predictive of an overall change in BMI pre vs post surgery ('BMI at time of surgery' minus 'Current BMI'). This change in BMI was therefore the dependent variable. Analyses were conducted utilising the same conceptual framework used in the previous analyses i.e. variables were split into the categories of emotions, cognitions and eating behaviour, which created three separate models to determine which variables were the best predictors of change. With limited sample sizes it is recommended that there are 10-15 cases of data per predictor variable put into each model (Field, 2005). Therefore, with a sample size of 44 it was recommended that 2-3 predictor variables be entered into each model. A screening process using univariate correlations was conducted to identify which variables correlated with a change in BMI. The following variables were identified as having a significant relationship to change in BMI at the 0.05 significance level and were entered into the three conceptual models as follows;

1. **'Emotion' Model.**
   - Predictor 1. Negative Mood States (aggregated score of 'anxiety' plus 'depression')
   - Predictor 2. Vigour.
   - Predictor 3. Self Esteem.

2. **'Cognition' Model.**
   - Predictor 1. Problem-focused Coping.
   - Predictor 2. Personal Control.
3. 'Eating behaviour' Model.

Predictor 1. Disordered Eating (aggregated score of 'binge Eating' and 'grazing').


Predictor 3. Healthy Eating.

Results of the multiple regression are presented in Table 13. At the time of analysis residuals were plotted on histograms to check for normal distribution. As the outcome variable (change in BMI) and the residuals were normally distributed it was considered that two variables that were not normally distributed ('depression' and 'personal control') could be entered as predictor variables.

Table 13. Results of multiple regression analysis to predict change in BMI.

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictor Variables</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion</td>
<td>Negative Mood States</td>
<td>-0.697</td>
<td>1.72</td>
<td>-0.093</td>
<td>-0.404</td>
<td>0.688</td>
</tr>
<tr>
<td></td>
<td>Vigour</td>
<td>3.156</td>
<td>1.499</td>
<td>0.332</td>
<td>2.105</td>
<td>0.042**</td>
</tr>
<tr>
<td></td>
<td>Self Esteem</td>
<td>2.642</td>
<td>2.944</td>
<td>0.193</td>
<td>0.898</td>
<td>0.375</td>
</tr>
<tr>
<td>Cognition</td>
<td>Problem-focused coping</td>
<td>5.782</td>
<td>2.211</td>
<td>0.351</td>
<td>2.615</td>
<td>0.013***</td>
</tr>
<tr>
<td></td>
<td>Personal Control</td>
<td>2.665</td>
<td>0.901</td>
<td>0.397</td>
<td>2.959</td>
<td>0.005***</td>
</tr>
<tr>
<td>Eating</td>
<td>Disordered Eating</td>
<td>-3.468</td>
<td>1.354</td>
<td>-0.409</td>
<td>-2.562</td>
<td>0.015**</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Current Emotional Eating</td>
<td>-0.855</td>
<td>1.205</td>
<td>-0.112</td>
<td>-0.71</td>
<td>0.483</td>
</tr>
<tr>
<td></td>
<td>Healthy Eating</td>
<td>2.562</td>
<td>1.333</td>
<td>0.272</td>
<td>1.922</td>
<td>0.063</td>
</tr>
</tbody>
</table>

** Significant where p< 0.05  *** Significant where p<0.01

The 'emotion' variables predicted 19.4% of the variance in change in BMI, adjusted $r^2 = 0.194 \, (F = 4.30, \, p<.01)$. Change in BMI was predicted by vigour but not predicted by negative mood states or self esteem, which indicates that higher reported levels of vigour were related to a greater decrease in BMI.
The 'cognition' variables predicted 26.7% of the variance in change in BMI, adjusted $r^2 = 0.267$ ($F = 8.47, p<.01$). Change in BMI was predicted by problem-focused coping and personal control, which indicates that both higher levels of problem-focused coping and a higher sense of personal control were related to a greater decrease in BMI.

The 'eating behaviour' variables predicted 34% of the variance in change in BMI, adjusted $r^2 = 0.340$ ($F= 5.83, p<0.01$). Change in BMI was predicted by disordered eating but not predicted by current emotional eating or healthy eating. This indicates that higher levels of disordered eating were related to a lower decrease in BMI.

A further exploratory multiple regression analysis was conducted with the significant predictor variables. Results of this analysis are presented in Table 14. As only 2-3 predictor variables could be entered (due to the sample size) 'vigour' was excluded as it is considered more likely that there is a bi-directional relationship between vigour and change in BMI rather than levels of vigour 'predicting' a change. The variables 'problem-focused coping', 'personal control' and 'disordered eating' were entered into the new model.

Table 14. Results of exploratory multiple regression analysis to predict change in BMI.

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictor Variables</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Significant Predictors'</td>
<td>Personal Control</td>
<td>1.331</td>
<td>1.307</td>
<td>0.198</td>
<td>1.019</td>
<td>0.315</td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td></td>
<td>4.78</td>
<td>2.3</td>
<td>0.29</td>
<td>2.078</td>
<td>0.045**</td>
</tr>
<tr>
<td>Disordered Eating</td>
<td></td>
<td>-2.463</td>
<td>1.766</td>
<td>-0.281</td>
<td>-1.395</td>
<td>0.171</td>
</tr>
</tbody>
</table>

**Significant where $p< 0.05$
The 'significant' variables from the previous analysis predicted 28.4% of the variance in change in BMI, adjusted $r^2 = 0.284$ ($F = 6.434$, $p<.01$). When comparing these three variables, change in BMI was predicted most strongly by problem-focused coping, which indicates higher levels of this construct are significantly more related to a greater decrease in BMI in comparison to personal control and disordered eating. To clarify, greater endorsement of problem focused coping was related to a greater decrease in BMI following surgery.

3.5 The role of emotional eating

**Hypothesis 4 'Compensatory Coping Responses'**

Post surgery coping responses have not previously been studied therefore exploratory analysis was conducted to test for differences between the groups 'Emotional Eating Reduced' ($n=25$) and 'Emotional Eating Same' ($n=9$) on all 15 subscales of the COPE and the bingeing and grazing measures. As multiple comparisons were analysed it was recognised that there was a risk of making a type 1 error i.e. detecting that a significant result exists when it would have existed by chance alone, therefore a significance level of $P<.01$ was used. Results are presented in Table 14. Due to missing data and screening out data where emotional eating was not rated as problematic before surgery and had remained non-problematic there was a reduced sample size of 33.

<table>
<thead>
<tr>
<th></th>
<th>Emotional Eating Reduced' $n=25$ Median/Mean</th>
<th>Emotional Eating Same' $n=9$ Median/Mean</th>
<th>U</th>
<th>z</th>
<th>p (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grazing Behaviour</td>
<td>2.5/2.52</td>
<td>4/4.0</td>
<td>28.5</td>
<td>-3.31</td>
<td>0.001***</td>
</tr>
<tr>
<td>Binge Eating A</td>
<td>2/2.07</td>
<td>5/4.14</td>
<td>19.5</td>
<td>-3.04</td>
<td>0.002***</td>
</tr>
<tr>
<td>Binge Eating B</td>
<td>1.5/1.87</td>
<td>2.5/2.97</td>
<td>19.5</td>
<td>-3.04</td>
<td>0.002***</td>
</tr>
<tr>
<td>Self Distraction</td>
<td>2.5/2.7</td>
<td>2.5/2.67</td>
<td>108.5</td>
<td>-0.16</td>
<td>0.873</td>
</tr>
<tr>
<td>coping</td>
<td>p1</td>
<td>p2</td>
<td>n</td>
<td>Z</td>
<td>p</td>
</tr>
<tr>
<td>---------------------</td>
<td>----</td>
<td>--------</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Active Coping</td>
<td>3/2.96</td>
<td>2.5/2.44</td>
<td>46</td>
<td>-2.72</td>
<td>0.007***</td>
</tr>
<tr>
<td>Denial</td>
<td>1/1.56</td>
<td>1.5/1.61</td>
<td>98</td>
<td>-0.44</td>
<td>0.661</td>
</tr>
<tr>
<td>Substance Use</td>
<td>1/1.67</td>
<td>1/1.0</td>
<td>67.5</td>
<td>-2.09</td>
<td>0.036</td>
</tr>
<tr>
<td>(Drugs and Alcohol)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Emotional</td>
<td>2.5/2.34</td>
<td>2/2.33</td>
<td>109.5</td>
<td>-1.22</td>
<td>0.903</td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of instrumental</td>
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<td>2.5/2.39</td>
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<td>2/1.94</td>
<td>48</td>
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<td>0.007***</td>
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*** Significant where p<0.01

There was a significant difference between the 'emotional eating reduced' group and 'emotional eating same' group on measures of eating behaviour with the 'emotional eating same' group reporting higher levels of both bingeing and grazing behaviour. There were no significant differences between the two groups on ten of the coping response measures. The 'emotional eating reduced' group reported significantly higher levels of 'active coping' but significantly lower levels of 'behavioural disengagement' than the 'emotional eating same' group.
3.6 Summary of aims and key results

Aim 1: To describe participant's clinical characteristics (including weight & BMI change), emotional, cognitive and eating behaviour characteristics at least three years post surgery.

Following bariatric surgery participants lost an average of 45.17kg, which represented 32% overall bodyweight lost since time of surgery, with most individuals losing between 30-60kg. 15 individuals reported weight regain of 0-5kg since their lowest weight reached post surgery and 24 individuals reported weight regain of more than 5kg. The mean BMI reduced from 50.48 pre surgery to 33.07 post surgery. Participants reported low levels of depression, medium to high levels of anxiety, low levels of fatigue, high levels of vigour and medium to high levels of self esteem. Participants reported high levels of experienced control over eating, high positive effects and low negative effects of eating. The majority reported low avoidant and emotion-focused coping but medium to high levels of problem-focused coping. Approximately 45% of participants reported medium to high levels of bingeing and grazing behaviour. Participants reported high levels of emotional eating prior to surgery but low levels following surgery. A minority of participants received psychological intervention regarding their surgery. Overall, the majority of participants considered their surgery to have been 'successful'.

Aim 2: To identify emotional, cognitive and eating behaviour characteristics which were associated with 'successful' weight loss outcomes in the longer term.

The 'successful' group (current BMI<30) reported significantly lower levels of fatigue, preoccupation with food, bingeing behaviour, emotional eating and hunger than the 'not successful' group. In addition, the 'successful' group reported significantly higher levels of vigour, control over eating and problem-focused coping strategies than the 'not successful' group. Change in BMI after surgery was predicted by vigour, problem-focused coping and personal control over eating with higher levels of these constructs predicting a greater decrease in BMI. Change in BMI was also predicted by disordered eating with higher levels of this construct predictive of a
lower decrease in BMI. When comparing these significant variables, problem-focused coping was the strongest predictor of a change in BMI compared to personal control and disordered eating.

**Aim 3: To explore the role of emotional eating behaviour both pre and post surgery and its relationship to alternative forms of coping.**

The majority of participants reported that their emotional eating reduced post surgery. These participants reported lower levels of disordered eating, lower levels of behavioural disengagement and higher levels of active coping than individuals whose emotional eating had stayed the same or worsened post surgery. There were no differences between the two groups ('emotional eating reduced' vs 'emotional eating same') on ten of the coping response measures.
4.1 Overview
The current study aimed to address limitations of existing research by following up individuals three to eight years post surgery. Specifically, the study aimed to describe clinical characteristics, emotions, cognitions and eating behaviour and identify which of these factors were associated with ‘success’ in the longer term. Individuals who had achieved successful weight loss (current BMI <30) were compared with individuals who were not as successful on a number of variables. In addition, analyses were performed to identify which variables were predictive of greater change between pre surgery and current BMI.

Research exploring psychological factors associated with overweight and obesity often focuses on ‘emotional eating’ i.e. eating as a coping response to life stressors or to regulate emotions. There is a lack of research exploring whether the role of emotional eating changes as a result of surgery. Therefore, a further aim of the study was to explore the role of emotional eating pre vs post surgery and the relationship between emotional eating and alternative forms of coping. This was achieved by comparing individuals whose emotional eating had reduced post surgery with individuals whose emotional eating had stayed the same or worsened. The two groups were compared on measures of alternative coping responses and also the measures of disordered eating i.e. bingeing and grazing.

In order to achieve the aims of the research a cross-sectional between subjects design was used. It is important to highlight that the small sample size in the current study resulted in inadequate power to detect positive effects of some of the variables. As a result findings of no association need to be evaluated within these constraints.

4.2 Main Findings
4.2.1 Demographics and clinical characteristics
Demographic information regarding participants was generally considered to be in line with previous research with the majority of participants being white females with
a longstanding history of weight difficulties. This bias may restrict generalising of results to other populations. Participants reported some success with alternative weight loss methods prior to surgery but weight was generally regained, consistent with literature regarding behavioural and pharmacological interventions. The most common method of surgery was gastric bypass and on average, participants had surgery fifty months previously.

Overall, since surgery participants had lost an average of 45.17kg (including any weight regain) resulting in an average BMI of 33.07. This represents an average 32% overall bodyweight lost since time of surgery and results in a shift from ‘morbidly obese’ to ‘obese’ according to the Department of Health’s (2008) classification system. A substantially lower ‘preferred’ weight was reported suggesting participants would still like to lose more weight. It appears that the biologically induced restrictions may not be enough when used in isolation for individuals to achieve their desired weight. There was a general period of weight regain with the majority of individuals reporting weight gain of at least five kilos since their lowest weight achieved. This suggests that there could be a role for intervention to facilitate individuals in maintaining their weight loss as the physical restrictions imposed become less effective over time. Whilst it could be considered that all participants were ‘successful’ in achieving a degree of weight loss the present study was interested in identifying factors associated with greater degrees of success. 26 people reported a current BMI of 30 or above resulting in them still being classified as ‘obese’ despite surgery. These individuals were classified as ‘not successful’ for the purposes of analyses in the current study.

With regards to the psychosocial functioning of individuals 3-8 years post surgery, measures regarding participant’s emotions create a general picture of positive mental health states. These findings are consistent with research, which suggests surgery generally contributes to improved psychological functioning and quality of life (van Hout et al, 2006) though as a longitudinal design was not used in the current study no causal inferences can be made.
With regards to cognitions, results suggest that individuals feel in control of their eating but are still able to gain pleasure from eating without being overwhelmed by negative physical side effects. Findings regarding experiences of control over eating are consistent with previous research, which suggested increased experienced control is a crucial psychological change for people following surgery (Ogden et al, 2006). Such findings suggest that whilst surgery primarily addresses the biological aspects of obesity it may also effect change in some of the associated cognitions. Approximately 45% of participants reported engaging in medium to high levels of bingeing and grazing behaviour, consistent with findings from previous studies (e.g. Saunders, 2004). This suggests that surgery alone does not address disordered eating for all individuals as there are still behavioural ways to engage in excessive eating despite the biologically imposed controls. Such findings again highlight the potential role for psychological intervention to supplement the surgery process.

The majority of participants indicated that prior to surgery they had engaged in high levels of emotional eating but following surgery this had reduced. As only a minority of participants received psychological intervention regarding their surgery this suggests that the process of surgery itself and the imposition of a physical restriction to eating may change some individual’s emotional relationship with food. This provides further support for the idea that the effects of surgery are broader than simply addressing the biological aspects of obesity. With regards to alternative coping styles the majority of participants reported low avoidant and emotion-focused coping responses but medium to high levels of problem-focused coping. These findings may be consistent with earlier findings which suggested that engaging in any form of weight loss treatment reduces the use of emotion-focused strategies whilst use of problem-focused strategies remains higher (Ryden et al, 2001). Whilst, no causal inferences can be made in the current study it is suggested that coping strategies may be related to the ability to achieve and maintain weight loss.

Overall, the majority of participants considered their surgery ‘successful’. This is most likely due to the significant weight loss that had been maintained and possibly the awareness of a different emotional relationship with food or a reduction in preoccupation with food and/or hunger. Participant’s satisfaction rates in the current
study are also comparable to the satisfaction rates reported in the general literature (Herpertz et al, 2003). The current findings are interesting as they indicate that satisfaction appears to continue despite the general period of weight regain which is noted at 1-6 years post surgery (Karlsson et al, 2007).

4.2.2 Factors associated with ‘successful’ weight loss in the longer term

Demographics and clinical characteristics

Individuals who lost and maintained greater weight loss reported a significantly lower preferred weight and lower weight at time of surgery. These results are consistent with previous research that suggests that less obese patients are more successful at losing and maintaining weight post surgery compared to heavier patients (Vallis & Ross, 1993). It is not suggested that heavier patients are screened out of the surgery process as these patients potentially benefit the most by losing even a small amount of weight as obesity related health complications are reduced. Also, the definition of success used in the current study means that individuals may lose a large amount of absolute weight but still not achieve a BMI <30 resulting in them being classified as ‘not successful’ despite the significant health benefits associated with their weight loss. Overall, individuals who were classified as ‘successful’ using the current criteria BMI<30 have a significantly lower current weight and higher weight loss since surgery than the ‘not successful’ individuals. This would be expected as the concept of weight loss is related to the concept of reduction in BMI.

Emotions

Individuals who were more successful in losing weight reported lower levels of fatigue and higher levels of vigour than individuals who were less successful. These results are in line with the general health benefits that would be expected as a result of substantial weight loss by surgery or by other means (National Obesity Forum, 2008). There were no differences between the two groups on measures of anxiety, depression or self-esteem. These results are inconsistent with results of HRQL measures in the SOS study which demonstrated the greater the weight loss the more improved HRQL, including mental well-being and mood disorders (Torgerson & Sjostrom, 2001). It is possible that any differences between the groups on mood and self-esteem variables were not detected due to the study being underpowered. Alternatively, it may be that
mood states are not associated with levels of success following surgery and other
cognitive and behavioural factors are more responsible for the differences in levels of
success.

Overall, it is suggested that the results do not support hypothesis one, individuals who
are successful in losing and maintaining weight loss in the longer term do not
demonstrate higher self esteem or more positive mood states than individuals who
were not as successful.

Cognitions
The ‘successful’ group reported higher levels of experienced control over eating and
lower preoccupation with food than the ‘not successful’ group. These results were
consistent with research which identified that successful individuals demonstrate
higher cognitive restraint over eating and less preoccupation with food two years post
surgery (Delin et al, 1995). It appears these cognitive factors continue to be associated
with greater success in the longer term. It could be argued that any intervention
designed to supplement the surgery process needs to incorporate a focus on such
cognitive factors.

‘Successful’ individuals reported significantly higher use of problem-focused coping
than the ‘not successful’ individuals. Problem-focused coping is generally considered
to be adaptive as it is associated with lower levels of distress than avoidant and
emotion-focused forms of coping (Parker & Endler, 1992). Comparison of coping
responses for managing life stressors within a post surgery population has not been
explored before. However, research exploring the coping strategies of people who are
successful at maintaining weight loss following non-surgical weight loss treatment
demonstrated that ‘active’ coping strategies are a predictor of successful weight loss
maintenance (Elfhag & Rossner, 2005). It appears these problem-focused coping
strategies may also be helpful to the post surgical population in maintaining weight
loss in the longer term and therefore should be considered within psychological
intervention to supplement surgery.
Overall, there is reasonable support for the second hypothesis; individuals who are successful in losing and maintaining weight loss in the longer term demonstrate higher control over eating, less preoccupation with food and more problem-focused coping responses to stressors.

Eating Behaviour

With regards to eating behaviour the results were consistent with previous research, which identified that post surgery bingeing behaviour is correlated with poorer outcomes for surgery (e.g. Larsen et al, 2006, Hsu et al 1996, Saunders, 2004). The current results suggest that engaging in bingeing behaviour continues to be associated with poorer outcomes for surgery in the longer term. Research has reported high prevalence rates for binge eating in obese individuals seeking surgical treatment (e.g. Powers et al, 1999). It is unsurprising that without intervention this eating behaviour continues and that it impacts the outcomes of surgery. Surgery alone does not address disordered eating behaviour patterns for all individuals and eating behaviours can circumvent the physical restrictions imposed. Additional intervention may be necessary to address the behavioural aspects of obesity in addition to the biological aspects.

The majority of individuals reported themselves to engage in high levels of emotional eating prior to surgery. These results are consistent with previous research which demonstrated that levels of pre surgery emotional eating are not predictive of success post surgery (Fischer et al, 2007). The ‘successful’ group reported significantly lower levels of current emotional eating and also a greater reduction in emotional eating post surgery than the ‘not successful’ group. Eating in response to emotional cues is negatively associated with weight loss two years post surgery (Hsu et al, 1996). Results from the current study show that emotional eating continues to be associated with poorer outcomes in the longer term. It is possible that this is due to the positive relationship between emotional eating and binge eating, which is shown to influence outcomes (Larsen et al, 2006) i.e. individuals who eat in response to emotional states are likely to have greater difficulty achieving and maintaining weight loss. This relationship between emotional states and eating behaviour appears to have an association with levels of success post surgery, in contrast to emotional states per se,
which were not shown to be related to levels of success. Therefore it appears an individual’s relationship with food when they are under stress may need to be specifically targeted in intervention.

Overall, it is considered that there is significant support for the third hypothesis, individuals who are successful in losing and maintaining weight loss in the longer term eat more healthily, demonstrate lower levels of bingeing/grazing behaviour and lower levels of emotional eating than individuals who are not successful.

4.2.3 Predictive capability of variables on change in BMI

The current research also aimed to identify which variables were predictive of the most change in BMI (pre surgery BMI compared to current BMI). Higher levels of vigour were related to a greater decrease in BMI. These results were unsurprising and in fact it is more likely that there is a bi-directional rather than predictive relationship between vigour and change in BMI. Negative mood states (anxiety and depression) and self-esteem were not predictive of a change in BMI i.e. the individual’s current mood state did not predict the outcome of their surgery. There is a complex relationship between mood, obesity and outcomes of surgery, which substantial research efforts have not clarified thus far. From the current results it seems possible that it is an individual’s emotional relationship with food that may have a greater influence on outcomes of surgery, rather than the individual’s mood states per se.

A decrease in BMI was predicted by adopting higher levels of problem-focused coping and having a higher sense of personal control. These results are consistent with research looking at factors associated with weight loss maintenance following non-surgical treatment but are an important new finding in terms of the surgical population. Ogden et al (2006) demonstrated that surgery leads to the emergence of a greater sense of self control following surgery which is greatly valued by individuals. The current results expand on previous findings by showing not only is this sense of control important to create a sense of a ‘new beginning’ for the individual but it is actually predictive of successful surgical outcomes several years post surgery. Given these two cognitive factors are predictive of ‘success’ following surgery they might usefully be included in psychological intervention to aid individual’s who demonstrate
lower levels of personal control and problem-focused coping. Such intervention may also be useful for individuals engaging in non surgical weight loss treatments.

Higher levels of disordered eating were related to a lower decrease in BMI i.e. surgery was less successful. This result is consistent with research with shorter follow up times, which indicates that post surgery disordered eating is correlated with poorer outcomes post surgery (e.g. Rusch & Andris, 2007). It appears that the ‘enforced behaviour modification’ principle of surgery is not sufficient to aid all individuals and disordered eating remains problematic or develops for some people i.e. the biologically imposed controls are not sufficient for some individuals. This is an important finding as it suggests that it is imperative that intervention is provided to help individuals to address bingeing and grazing behaviours as disordered eating remains problematic for some individuals and is predictive of poorer outcomes in the longer term.

The results showed that a change in BMI was not predicted by current emotional eating. Previous research has demonstrated that emotional eating is negatively associated with weight loss post surgery (Delin et al, 1995) therefore it might have been expected to be predictive of a change in BMI in the longer term. However, current results are consistent with results of Larsen et al’s (2006) study, which showed emotional and external eating did not have a direct effect on weight outcome, rather these behaviours influence the mediator of binge eating, which in turn affects weight outcome.

Greater use of problem focused coping was more predictive of a decrease in BMI than personal control and disordered eating. This suggests that an individuals approach to dealing with life stressors may play a large role in how successful they are following surgery. It can be hypothesised that an active approach to dealing with stressors protects against maladaptive coping which involves a return to food as a coping strategy. It seems that for certain individuals, if surgery can address the biological aspects of obesity by limiting food intake, this may allow more adaptive psychological coping mechanisms to take precedence in times of stress enabling the person to sustain weight loss. More broadly speaking, it can be hypothesised that increasing use
of problem focused coping strategies may help individuals lose and maintain weight loss, regardless of the obesity treatment being utilised and intervention which helps increase use of such strategies may be a useful adjunct to treatment.

4.2.4 Role of emotional eating in the longer term
The majority of individuals reported lower levels of emotional eating post surgery compared to pre surgery. This group reported lower levels of bingeing and grazing behaviours. As the majority of individuals received no psychological intervention this suggests that for many individuals emotional eating is addressed by surgery alone and does not require a specific intervention. However, it appears there is a sub-group of individuals who still report a desire to eat in response to emotional states post surgery, which is associated with increased levels of bingeing and grazing on foods.

Individuals who reported their emotional eating had reduced reported higher levels of ‘active coping’ than individuals who reported that their emotional eating had stayed the same. An active coping style may be incompatible with emotional eating, which could be considered a more avoidant style of coping. It is possible that surgery facilitated a more active response style in these individuals by removing food as a coping mechanism. Alternatively, this group may have had more active coping responses pre surgery, which combined with the physical restriction introduced by surgery, enabled them to reduce their levels of emotional eating i.e. once the biological aspects of obesity were addressed this enabled the person to access their ‘active’ response style. It is unsurprising that the results showed that the ‘emotional eating reduced’ group reported lower levels of ‘behavioural disengagement’ than the ‘emotional eating same’ group. This response involves giving up attempts to cope, an avoidant style, which would be incompatible with a more active coping response.

Whilst there were no significant differences between the two groups on several of the coping constructs tested the results showed discreet differences in two areas and this may be an area for future research. It is suggested that there is partial support for the final hypothesis, individuals who reported reduced levels of emotional eating post surgery compared to pre surgery demonstrated different coping responses and eating
behaviours than individuals who reported the same or worse levels of emotional eating post surgery.

4.3. Summary of findings
The current research described clinical characteristics, emotion, cognition and eating behaviour variables for forty-four individuals who had bariatric surgery three to eight years ago. Overall, there was an average weight loss of 45kgs and the majority of individuals report a significantly lower current weight and BMI compared to pre surgery. Individual’s reported high levels of experiences of control over eating and a reduction in emotional eating, whilst still being able to gain enjoyment from food. Furthermore, the vast majority of participants rated their surgery as a ‘success’. A sustained weight loss of as little as 10% of baseline weight can result in significant health benefits and improved risk factors for illness (National Obesity Forum, 2008). This level of weight loss was achieved and maintained by the majority of individuals, therefore it could be suggested that surgery was successful for most people. However, the current research also identified significant weight regain for individuals and despite surgery more than half the sample would still be classified as ‘obese’. The next aim of the study was therefore to explore psychosocial factors within the post surgical population which were associated with a greater degree of success in the longer term.

The results of the current study suggest that in the longer term, surgery is most successful for people who have a greater sense of control over their eating behaviours, perhaps contributing to a greater sense of self efficacy in achieving their goal of maintaining long term weight loss. Most importantly, successful individuals adopt a problem-focused approach in response to the challenges and stressors that they encounter in their lives. This approach is associated with taking action to solve a problem or cognitively reframing it (Parker & Endler, 1992). It appears that this coping style protects individuals from the continuation of disordered and emotional eating post surgery, which in turn maximises their chances of success. Adopting this approach to dealing with life stressors was actually predictive of greater change in BMI. The majority of individuals in the current study received no psychological intervention concerning their surgery, therefore it seems likely that these individuals
either had a problem-focused coping style prior to surgery or surgery itself facilitated a more directive and active approach to dealing with life stressors. Successful individuals also experienced less fatigue and more vigour though it seems likely this is a result of weight loss rather than being predictive.

Unfortunately, surgery was not so successful for all individuals. In the present study twenty-six people reported a current BMI of 30 or above resulting in a classification of 'obese'. These individuals remained more preoccupied with food and experienced higher hunger levels than their more successful counterparts. Whilst this group report comparable avoidant and emotion-focused coping they do not adopt as much of a problem-focused approach to the stressors in their lives compared to the 'successful' group, perhaps leaving them more vulnerable to reverting to unhelpful old patterns of emotional eating, binging and grazing. Research has demonstrated high co-morbidity between obesity and disordered eating, particularly binge eating and these behaviours are well documented as interfering with success following surgery in the shorter term (Greenburg et al, 2005). The current research has shown that these behaviours, combined with less problem-focused coping responses are associated with poorer outcomes in the longer term. It can be hypothesised that for this group of individuals food and eating are still being used to 'numb' feelings and avoid experiencing negative emotions (Glinski et al, 2001), whilst for individuals who are more successful the opposite is true, problems and stressors are tackled in a directive and active manner.

Results of the exploration of the role of emotional eating showed that for many individuals surgery alone resulted in a reduction in the desire to eat in response to emotional states. For other individuals emotional eating continued post surgery and these individuals engaged in more binging and grazing behaviours. There were differences between these two groups on some of the coping responses measured. Of particular note, the theme of 'active' coping was identified again, being more prominent in individuals who had experienced a reduction in emotional eating. In contrast, individuals who were still engaging in emotional eating reported higher levels of disengagement from dealing with situations, an avoidant response.
It has been argued that eating behaviour following surgery must change due to the physical restrictions that are imposed on eating behaviour. In this sense surgery addresses the 'biological' aspect of the 'bio psychosocial' model of obesity treatment. However, it is apparent that surgery alone is not enough in itself to guarantee success. Individuals still need to exert control over their eating behaviour otherwise pre surgery disordered and emotional eating returns or develops. Individuals may have unrealistic expectations of surgery and hope that it will remove the desire to eat and the need to exert control over eating entirely but the post surgical diet requires control and commitment to maintain weight loss. Surgery clearly facilitates substantial weight loss for many individuals thus alleviating their obesity and its associated difficulties. However, it appears that surgery is not a 'cure' for all as it is unable to address the 'psychosocial' aspects of obesity for some individuals such as maladaptive eating patterns and coping responses. Without intervention these factors may continue to impede success for individuals in the longer term.

The imposition of a physical restriction on the amount an individual can eat addresses one of the primary causes of obesity or the 'biological' aspects if framing surgery within the 'bio psychosocial' model of obesity treatment. However, obesity is also influenced by psychological and social factors, which continue to exert their influence post surgery. For some individuals it appears that addressing the biological aspects of obesity alone is enough to facilitate sustained weight loss. For other individuals, the surgery process may be accompanied by psychological or social changes, such as the development or implementation of adaptive coping mechanisms or an increased sense of personal control, which enable the individual to achieve and maintain weight loss. However, it appears that for a subgroup of individuals, surgery leaves the psychological and social aspects of obesity, such as maladaptive coping, disordered eating and the person's emotional relationship with food, unaddressed. For these individuals a solely biological intervention is not enough and leaves them ill equipped to facilitate the changes that are necessary to sustain long term weight reduction.

The multi-faceted nature of the causes of obesity is well recognised and often conceptualised within a 'bio psychosocial' model. However, at present it appears obesity treatments aim to target just one aspect of the model whilst neglecting the
other areas. It is therefore unsurprising that weight loss is often not maintained. For obesity treatments to increase their effectiveness it is suggested they need to develop greater sophistication to encompass all aspects of obesity, the 'bio', the 'psycho' and the 'social'. In this sense, combining surgical or pharmacological intervention to address biological aspects of obesity, with psychological intervention to address the psychosocial factors which also influence obesity, may afford individuals with greater chances of longer term success.

4.4 Implications for clinical practice
Previous research exploring surgical outcomes two-three years post surgery has suggested that individuals may benefit from pre and post operative treatment plans to address factors which interfere with weight loss and maintenance (e.g. Greenburg et al, 2005). Based on the current results it is suggested that certain behaviours and psychosocial factors often remain problematic several years post surgery. As a result individuals may benefit from individual or group psychological intervention which targets specific emotions, cognitions and behaviours as outlined below.

Mood Management
Previous research has demonstrated that more positive mood states and higher self-esteem are generally associated with better outcomes of surgery. Individuals may benefit from intervention which includes strategies to manage depressed/anxious mood states and improve self esteem. This may equip individuals with alternatives to using eating to regulate emotions and also contribute to developing a greater sense of self-efficacy (see below).

Sense of self efficacy and active coping
Helping individuals build confidence in their abilities to manage and control their eating may assist them in adhering to the post surgery diet and resist temptations to engage in previous eating habits. Importantly, individuals may benefit from being encouraged to build skills to tackle stressors and problems in a more confrontational and directive manner. This problem-focused approach could potentially help decrease the importance of food as a coping mechanism thus reducing levels of preoccupation
with food and eating whilst increasing a sense of self efficacy. These skills could be applied when managing inevitable dietary lapses or small weight regain.

**Bingeing, grazing and emotional eating**

Consistent with recommendations from previous research, individuals will certainly benefit from intervention designed to address disordered eating and emotional eating. These habits clearly play a role in surgical outcomes in the longer term and are not extinguished by surgery alone or the passage of time. Learning to identify emotional states, which trigger uncontrolled eating and developing alternative adaptive strategies could potentially contribute the most to enhancing surgery outcomes.

With regards to the development of treatment programmes, various therapeutic techniques may be of use. However, there is already a solid evidence base for cognitive behavioural therapy (CBT) in addressing several of the ‘target’ behaviours and cognitions that have been identified. Indeed, NICE guidelines recommend CBT for Binge Eating Disorder (NICE, 2004). It has been suggested that interventions regarding relapse prevention for problem drinking and gambling could be adapted for use with a post surgery population (Walfish, 2004). Individuals who received individual psychotherapy and group cognitive therapy for bulimia nervosa and anorexia nervosa demonstrated increased use of adaptive coping strategies (Bloks et al, 2001) therefore potentially these interventions could also be adapted to benefit the post surgery population. It appears mental health professionals may be ideally placed to become involved in the pre and post surgical care of individuals undergoing weight loss surgery. With their involvement psychosocial and behavioural recommendations could be formulated that allow individuals to enhance their own chances of success (Greenburg et al, 2005). There is a need for findings such as the current research to be disseminated in medical circles so that the potential benefits of psychosocial intervention can be recognised and individual’s needs addressed in a person centred manner.

**4.5 Methodological Limitations**

A significant limitation of the current study was the small sample size (n= 44). Power calculations indicated that the study was under powered which means that there was
an increased risk of making a type II error i.e. failure to detect an effect which actually exists. As previously mentioned, due to the number of tests completed to explore the fourth hypothesis regarding emotional eating, there was also a risk of making a type I error i.e. detecting an effect which would have existed by chance alone. Difficulties with the small sample size were due to the response rate of the target sample. Despite sending out the questionnaire on two separate occasions to 127 people, the response rate was only 35%, reflecting the difficulties of postal questionnaire based studies.

It is not possible to know whether the 44 returned questionnaires were representative of the population or reflect a bias of some form e.g. individuals who were particularly pleased or displeased with the outcome of their surgery. The results of the study were based on self report and therefore are subject to bias which is inherent to this method of data collection. The lack of gender and ethnic diversity in the sample may affect confidence in how the results can be generalised as the majority of participants were white females. This may restrict the applicability of these findings in clinical settings when working with males and non white individuals.

The current study was cross-sectional and as such all data were collected at one time point rather than measuring individuals both pre and post surgery. Time constraints prevented use of a longitudinal design as the primary aim of the study was to explore surgical outcomes in the longer term. As with all research using cross-sectional design, results may be influenced by the individual’s current situation. In addition, this design prohibits causal inferences being made. For example, although success was associated with increased control and problem-focused coping it is not clear whether these are a cause or a consequence of weight change. With regards to the measurement of pre surgery emotional eating, the research only captured a retrospective baseline measure, which again may have been inaccurate or contaminated by current circumstances.

Finally, there were limitations with the measures used for the current study. Whilst several of the measures are well validated tools, one of the questionnaires has not been widely validated (RFQ). Standardised measures of bingeing behaviour are quite lengthy and were considered too time consuming to be combined with the other
measures and there are currently no standardised measures of grazing behaviour. As a result measures for these constructs were designed specifically for the purposes of the current study and therefore have not been widely validated. In addition, measurement of certain constructs, particularly coping, is inherent with methodological problems (see Parker & Endler, 1992, for review). Use of standardised measures would have benefited the current research and the research domain in general (Vallis & Ross, 1993). Some of the limitations were addressed by the reliability analysis that was completed on all scales within the questionnaire. Overall, the majority of scales demonstrated acceptable reliability meeting the criterion of .70 as recommended by Nunnally and Bernstein (1994).

4.6 Implications for research
Many studies fail to follow patients up for longer than one to two years post surgery and research in the area of longer term follow up of the outcomes of obesity surgery is sparse (Niego et al, 2007). Further work is necessary to continue to define outcome predictors of surgery in the longer term to create a more coherent picture of psychosocial factors affecting success. Future work should aim to recruit larger sample sizes and replication of the current study with a sufficiently powered sample would clarify the role of factors identified by the current study. A larger sample size would allow greater exploration of factors that act as predictors of a change in BMI through the use of broader multivariate statistical analyses. In addition, with a larger sample size the relationship between emotional eating behaviours and coping responses could be explored with greater certainty.

Future research should aim to recruit a broader and more diverse sample in terms of ethnicity and gender. This may be facilitated by the use of multiple sites for gathering data. If clinicians were willing to partake in the research, data could be collected as part of routine follow up appointments, perhaps encouraging greater participation in research and reducing the risks of samples being biased. Participation of clinics from the outset would allow a longitudinal design to be used, measuring psychosocial constructs and eating behaviours both pre and post surgery resulting in a more robust research design. Such research would contribute to answering questions regarding the
directionality of relationships between predictors, mediators and outcome variables (Larsen et al, 2006).

One of the main findings in the current study was the role of a problem-focused coping style in response to stress in successful outcomes and lower emotional eating. Further research would clarify the nature of the relationship between problem-focused coping and success and contribute further to the development of psychological intervention programmes. Research in the area of post surgery emotional eating and the relationship with alternative forms of coping is very limited. Results regarding the impact of surgery on pre surgical binge eating suggests that even if binge eating is addressed these individuals are more likely to have a disturbance in other areas of psychological functioning (Powers et al, 1999). It could be speculated that there may be a similar effect with regards to emotional eating i.e. if surgery reduces emotional eating this may result in the disturbance of other areas of psychological functioning. Future research should clarify the role of emotional eating and its relationship to alternative forms of coping.

It has been suggested that further research is needed to increase the awareness of psychosocial outcomes of surgery to a comparable level as medical outcomes (Bocchieri et al, 2002). Often variability in the tools used prevents comparison of results across different research studies (Niego et al, 2007). Standardised measures to assess obese individuals pre and post surgery would benefit this area of research as would an agreed definition of ‘success’ and fixed follow-up periods (van Hout et al, 2005). Whilst it is reported that psychological intervention programmes are being offered published reports outline only anecdotal evidence regarding the benefits. Such programmes need to be further developed and implemented but most importantly they need to be evaluated to ascertain whether or not they can enhance the outcomes of surgery.

4.7 Conclusions
The rapidly increasing prevalence rate of obesity in the UK and other western cultures has resulted in increased demand for effective weight loss treatments. Obese individuals often face dire health consequences in addition to having to manage
damaging psychosocial consequences of what is a heavily stigmatised condition in western society. Bariatric surgery is very successful in that it facilitates fast and often dramatic weight loss in individuals who previously have experienced little success in losing weight. However, research such as the SOS study has now indicated that individuals often have difficulty in losing or maintaining their weight loss in the longer term and many individuals go through a period of substantial weight regain (Karlsson et al, 2007). It appears that whilst facilitating substantial weight loss surgery does not address underlying eating disorders and emotional eating which can limit longer term success.

The current research aimed to follow up individuals more than three years post surgery, describe their characteristics and identify what psychosocial factors were associated with a greater degree of success. Research into overweight and obesity has often focused on the role of emotional eating or eating as a psychological coping mechanism. However, research has not explored how emotional eating is impacted by surgery and the relationship between emotional eating and alternative forms of coping therefore this was a further aim of the study.

In the current study surgery was shown to bring about substantial weight loss for the majority of individuals. Individuals also reported general positive mood states, experiences of control over eating, enjoyment of eating and a reduction in emotional eating. However, three to eight years post surgery, the majority of individuals would still be categorised as ‘obese’ using the Department of Health’s classification system and most individuals reported weight regain since their lowest weight achieved post surgery. The research explored which emotional, cognitive and eating behaviour factors were associated with greater success and what factors were predictive of a greater decrease in BMI. Surgery was most successful for individuals who reported less fatigue and greater vigour, greater control over eating and higher use of problem-focused coping strategies in response to life stressors. This problem-focused coping style was also predictive of a decrease in BMI. Surgery was less effective for individuals who remained preoccupied with food and experienced higher hunger levels. These individuals did not report such problem-focused coping responses
instead reporting higher levels of disordered eating; bingeing, grazing and emotional eating.

The current results suggest that for some individuals emotional eating is addressed by surgery alone. However, it appears this is not the case for all individuals some of whom continue to struggle to manage their emotional relationship with food several years post surgery. Obesity has complex aetiology, yet it is still considered a physical problem not taking into account the complexity of biological, psychological and social factors. Not achieving success following surgery is often due to psychosocial and behavioural factors therefore a multidimensional approach to treatment is needed involving a multidisciplinary team. Clinically, it is suggested that holistic intervention programmes that address coping styles and disordered eating need to be further developed and evaluated to ascertain whether long term surgical outcomes can be enhanced. Such interventions may help develop a greater sense of self-efficacy and control over eating combined with development of active and directive coping strategies. It is suggested that if underlying eating disorders and psychosocial factors are not addressed surgery only treats the symptoms of obesity, rather than the causes. Combining both bariatric surgery for weight loss and psychological treatment to address eating disorders, emotional eating and coping responses may afford individuals with a greater chance of longer term success.

The current research findings provide interesting insight into longer term factors which are associated with successful outcomes and draw attention to the role of both coping responses and eating behaviours. Future work needs to continue to focus on the longer term outcomes of surgery. A move towards a multi-dimensional view of individuals and obesity may broaden understanding of how to facilitate individuals to optimise their chances of success. Further work should attempt to engage with multiple sites to recruit larger, more diverse samples and conduct longitudinal research to monitor the changing role of emotions, cognitions and eating behaviours as individuals move through the process of surgery.
References


Appendix A. Research Questionnaire.
How do you feel about your weight?

Thank you for participating. Please complete the questionnaire in the next two weeks. The information provided on this questionnaire will remain completely anonymous. It will take approximately 30 minutes to complete.

Are you: □ Male □ Female How old are you? ___ (years)

How tall are you (in metres) ______

Are you: □ Living Alone □ Co-habiting

Are you a smoker? □ Yes □ No

If yes approximately how many cigarettes per day? □ 1-5 □ 6-20 □ More than 21

What is your current weight? _______________ (specify kg, 1lb or stone)

How much would you prefer to weigh? __________

What is your medically ‘ideal’ or ‘target’ weight for your height? ____________

What is the most weight you have ever lost before surgery? ________________

How long did you maintain the weight loss for? _______________ (months/years)

How old were you when you first had problems with your weight? ________ (years)

What type of weight loss surgery have you had? □ Gastric Banding □ Sleeve Gastrectomy
□ Gastric Bypass □ Duodenal Switch

When did you have surgery? ________________ (specify month and year)

How much did you weigh when you had surgery? __________ (specify kg, 1lbs, stone)

What was your lowest weight achieved following surgery? ____________ (specify kg, 1lbs, stone)

How long did you maintain this weight for? ______________ (months/years)

Would you say your health is now: Poor/Good/Very Good/Excellent.

The following questions are about yourself and your thoughts and feelings towards food and eating. Please circle the number that best describes how you have been feeling over the PAST MONTH

<table>
<thead>
<tr>
<th>How often have you felt.....</th>
<th>Not at all</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>In control of your eating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>That you should eat healthy foods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

216
<table>
<thead>
<tr>
<th>Perception</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>That it is necessary to eat regularly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you can manage your eating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That food is a very important part of who you are</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A fear of overeating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A desire to overeat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you can control what you eat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Preoccupied with food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That food is a central part of your life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you must avoid certain foods</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to binge</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you must choose your food carefully</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you prefer to eat low fat foods</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you can limit what you eat yourself and not just rely on stomach size</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you are controlling what you eat yourself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to eat fruit and vegetables</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to eat healthy food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That your body is controlling your eating behaviour not your mind</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to eat sweet food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to eat chocolate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to eat cakes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That your mind is controlling what you eat not your stomach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to eat fried foods</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to eat fatty foods</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That your eating is being controlled by your stomach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you want to eat foods high in fat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A great sense of hunger</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That your stomach is controlling what you eat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A feeling that you are always hungry</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you will never feel properly full</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Overfull once you have eaten</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Nauseated after you have eaten</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The need to be sick after eating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Pleasure after eating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Content after you have eaten</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Satisfied after eating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you have difficulty eating slowly in the proper manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you eat very quickly then feel uncomfortably full afterwards.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you lose total control of your eating.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That you eat three meals a day with only an occasional between meal snack.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That there are times when you seem to be continually eating, with no planned meals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>That there tends to be a pattern to your</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
eating of either 'feast' or famine'

The following questions are about your feelings and food in general OVER THE PAST MONTH.

Do you have a desire to eat when......

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>you are irritated?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you have nothing to do?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you are depressed or discouraged?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you are feeling lonely?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>somebody lets you down?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you are cross?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>something unpleasant is about to happen?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you are anxious, worried or tense?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>things are going against you or have gone wrong?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you are frightened?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you are disappointed?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you are emotionally upset?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you are bored or restless?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Over the PAST MONTH to what extent have you felt the following:

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tense</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Anxious</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Restless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Guilty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Hopeless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Lonely</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Weary</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Sluggish</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Listless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cheerful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Active</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Carefree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

The following questions are about how you confront difficult or stressful situations in your life. There are no right or wrong answers, please choose your answers carefully so they are the most accurate answers for you. Please answer the questions for how you have been coping OVER THE PAST MONTH.

<table>
<thead>
<tr>
<th></th>
<th>I usually don't do this at all</th>
<th>I usually do this a little bit</th>
<th>I usually do this a medium amount</th>
<th>I usually do this a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>I turn to work or other activities to take my</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
The following is a list of statements dealing with your general feelings about yourself. How have you been feeling about yourself OVER THE PAST MONTH?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the whole I am satisfied with myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>At times I think I am no good at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
I feel that I have a number of good qualities | 1 | 2 | 3
---|---|---|---
I am able to do things as well as most other people | 1 | 2 | 3
I feel I do not have much to be proud of | 1 | 2 | 3
I certainly feel useless at times | 1 | 2 | 3
I feel that I'm a person of worth, at least on an equal plane with others | 1 | 2 | 3
I wish I could have more respect for myself | 1 | 2 | 3
All in all, I am inclined to feel that I am a failure | 1 | 2 | 3
I take a positive attitude toward myself. | 1 | 2 | 3

Finally, please think back to BEFORE you had surgery and your feelings then.

<table>
<thead>
<tr>
<th>BEFORE SURGERY</th>
<th>Not at all</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>did you have a desire to eat when.....</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>you were irritated?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you had nothing to do?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you were depressed or discouraged?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you were feeling lonely?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>somebody let you down?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you were cross?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>something unpleasant was about to happen?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you were anxious, worried or tense?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>things were going against you or had gone wrong?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you were frightened?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you were disappointed?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you were emotionally upset?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>you were bored or restless?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Overall, would you say your surgery was... □ successful □ not successful

Did you have any counselling/therapy from a counsellor/psychologist/other mental health professional specifically regarding your surgery, either before or after surgery?

□ Yes □ No If so, please specify type and duration

Which of the following best describes you:

□ Black □ Asian □ White □ Other

Would you describe yourself as: □ Working class □ Middle Class □ Upper Class
Appendix B. Patient Information Sheet.

PATIENT INFORMATION ON A STUDY TO FIND OUT ABOUT PATIENTS’ VIEWS ON FOOD & DIET

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with friends, relatives and your GP if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Consumers for Ethics in Research (CERES) publish a leaflet entitled ‘Medical Research and You’. This leaflet gives more information about medical research and looks at some questions you may want to ask. A copy may be obtained from CERES, PO Box 1365, LONDON, N16 0BW.

Thank you for reading this.

What is the study about?
There is a lot of research about the effectiveness of surgery for treating overweight. But very little is known about how surgery changes how people eat or how they feel about food. We are asking people who have had surgery to complete a questionnaire to describe aspects of their eating behaviour. Such information should help us to understand how surgery works and if there are some patients who benefit more from surgery than others.

Why have I been chosen?
This invitation has been sent to all the patients of the xxxx Hospital Clinic who have had surgery. You are being invited to participate as part of this group.

Do I have to take part?
It is up to you to decide whether or not to take part. If you do decide to take part please keep this information sheet. Whether or not you decide to take part will not affect the standard of care you receive.

What do I have to do if I decide to take part?
If you decide to take part, please complete the enclosed questionnaire and return it to us in the Freepost envelope provided.

Is the study confidential?
All information which is collected about you during the course of the research will be kept strictly confidential. The questionnaire is anonymous and so your comments will not be able to be traced back to you in any way.
What will happen to the results of the study?

The results of the study will be written up into a report and this report will be published in a medical journal. If you decide to take part you can ask the researcher to send you a copy of the report when it is ready. The report should be ready by about November 2008.

Contact for further information

This study has received ethical approval LREC 08-03-170

Thank-you very much for reading this information

PLEASE COMPLETE THE QUESTIONNAIRE WITHIN 2 WEEKS.
REMINDER

STUDY TO FIND OUT ABOUT PATIENTS' VIEWS ON FOOD & DIET

You were recently sent a questionnaire to complete to take part in a study regarding patient's views following surgery. Unfortunately we have received very few responses for the study. The study will provide us with useful information regarding patient’s experiences of surgery. If you have not already done so, please complete the enclosed questionnaire and return it in the envelope provided.

If you no longer have the envelope which was provided the return address is as follows:

Follow-up study
Department of Hepatobiliary Surgery
Xxxxxx

This study has received ethical approval LREC xxxxxxx

Thank-you very much for your help in participating in this research.
Appendix D. Original Ethical approval for Professor Jane Ogden's research.

Dear Dr Ogden

Re: LREC Protocol No. 08-03-170
A cross sectional study of changes in psychological and behavioural factors following surgery for morbid obesity

Thank you for your letter dated 29 September 2003 in response to our queries. I am happy to provide approval on ethical grounds. The following documents were received:

• GP Letter
• Patient Consent Form

The conditions of approval are set out below:

• You do not undertake this research until approval has been given by the relevant NHS Trust. Without Trust approval, ethical approval is void.

• You do not deviate from, or make changes to, the protocol without prior written approval from this Research Ethics Committee, except where necessary to eliminate immediate hazards to research participants or when the change involves only logistical or administrative aspects of the research. In such cases, the REC should be informed within seven days of the implementation of the change.

• You complete and return the standard progress report form to the REC one year from the date on this letter and thereafter on an annual basis. This form should also be used to notify the REC when your research is completed and in this case should be sent to this REC within three months of completion.
• If you decide to terminate this research prematurely, you send a report to this REC within 15 days indicating the reason for early termination.

• You advise the REC of any unusual or unexpected results that raise questions about the safety of the research.

Please quote LREC Protocol No.08-03-170 in all future correspondence relating to this study.

This compliant with ICH GCP guidelines

Yours sincerely
Dear Dr Ogden

14 August 2003

RE: 03DE13 A cross sectional study of changes of psychological and behavioural factors following surgery for morbid obesity

Thank you for submitting this protocol to the R&D Committee for review. In general the committee were happy with the study but would like you to submit a version taking into account the reviewer’s comments enclosed for Chairman’s Action. The committee were also concerned that the time, which had elapsed since the surgery, might affect patients' perceptions and felt that the phrase “in the past year” did not describe the timescale with acceptable accuracy.

Kind Regards

Research Manager
Directorate of Research and Development
Appendix F. Ethical approval for amendments to research.

15th June 2007

Prof Jane Ogden
Department of Psychology
University of Surrey
Guilford
Surrey GU2 7XH

Dear Professor Ogden

Re: REC Ref No. 08-03-170

Amendment number 2 – 14th May 2007

The above amendment was reviewed at the meeting of the Sub-Committee of the REC.

Ethical opinion

- No Objection

The members of the Committee present gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

The documents reviewed and approved at the meeting were:

<table>
<thead>
<tr>
<th>Document</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice of Substantial Amendment (non-CTIMPs)</td>
<td>Amendment 2 – 14th May 2007</td>
</tr>
<tr>
<td>Participant Information Sheet</td>
<td>2 dated 21/05/07</td>
</tr>
<tr>
<td>Dutch Eating Behaviour Questionnaire-Emotional Eating Scale</td>
<td></td>
</tr>
<tr>
<td>COPE Questionnaire</td>
<td></td>
</tr>
<tr>
<td>Rosenberg Self Esteem Scale</td>
<td></td>
</tr>
</tbody>
</table>

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

Please would you send us a progress report as we have not received one for quite some time.

All investigators and research collaborators in the NHS should notify the R&D Department for the relevant NHS care organisation of this amendment and check whether it affects research governance approval of the research.
The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

Please quote this number on all correspondence

Yours sincerely

Committee Co-ordinator

Copy to R&D Department

Enclosures List of names and professions of members who were present at the meeting and those who submitted written comments are underlined below
Appendix G. Ethical Approval from Surrey University.

Dear Sally

Reference: 146-PSY-07
A cross sectional study of changes in psychological and behavioural factors following surgery for morbid obesity

Thank you for your submission of the above proposal.

The School of Human Sciences Ethics Committee has given a favourable ethical opinion.

If there are any significant changes to this proposal you may need to consider requesting scrutiny by the School Ethics Committee.

Yours sincerely

Dr Kate Davidson

Sally Field
Department of Psychology – Undergraduate
University of Surrey

3 August 2007
### Appendix H. Summary of reliability analysis for questionnaire.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Code</th>
<th>No. of items</th>
<th>Cronbach’s Alpha α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Internal Control</td>
<td>TINTCONT</td>
<td>3</td>
<td>0.88</td>
</tr>
<tr>
<td>Total Food</td>
<td>TFPREF</td>
<td>2</td>
<td>0.80</td>
</tr>
<tr>
<td>Preferences</td>
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<td></td>
<td>(item fpref1 deleted)</td>
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<tr>
<td>Total Grazing</td>
<td>TGRAZ</td>
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<tr>
<td>Total Preoccupation</td>
<td>TPREOCC</td>
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<td>0.81</td>
</tr>
<tr>
<td>Total Binge</td>
<td>TBING</td>
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<td>0.84</td>
</tr>
<tr>
<td>Total Healthy Eating</td>
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<td>Total Perceived Control</td>
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<tr>
<td>Total Imposed Control</td>
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<tr>
<td>Total Sweet Foods</td>
<td>TSWEET</td>
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<tr>
<td>Total Fatty Foods</td>
<td>TFAT</td>
<td>3</td>
<td>0.89</td>
</tr>
<tr>
<td>Total Hunger</td>
<td>THUNG</td>
<td>3</td>
<td>0.86</td>
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<tr>
<td>Total Negative Side Effects of Eating</td>
<td>TNEGSE</td>
<td>3</td>
<td>0.65</td>
</tr>
<tr>
<td>Total Positive Side Effects of Eating</td>
<td>TPOSSE</td>
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<td>0.91</td>
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<td>Total Binge Eating (extra questions)</td>
<td>TBEAT</td>
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<td>0.77</td>
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<tr>
<td>Total Emotional Eating Now (DEBQ)</td>
<td>TEMOEATN</td>
<td>13</td>
<td>0.96</td>
</tr>
<tr>
<td>Total Anxiety (POMS)</td>
<td>TANX</td>
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<td>0.89</td>
</tr>
<tr>
<td>Total Depression (POMS)</td>
<td>TDEP</td>
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<td>0.84</td>
</tr>
<tr>
<td>Total Fatigue (POMS)</td>
<td>TFATIG</td>
<td>3</td>
<td>0.85</td>
</tr>
<tr>
<td>Total Vigour (POMS)</td>
<td>TVIG</td>
<td>3</td>
<td>0.80</td>
</tr>
<tr>
<td>Total Self Esteem (Rosenburg Self Esteem Scale)</td>
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<td>0.91</td>
</tr>
<tr>
<td>Total Emotional Eating Before Surgery (DEBQ)</td>
<td>TEMOEATB</td>
<td>13</td>
<td>0.96</td>
</tr>
<tr>
<td>Total Grazing Frequency &amp; Distress</td>
<td>TQGRAZF</td>
<td>2</td>
<td>Not enough items to use cronbach alpha.</td>
</tr>
<tr>
<td>Total Bingeing Frequency &amp; Distress</td>
<td>TQBINGE</td>
<td>2</td>
<td>Not enough items to use cronbach alpha.</td>
</tr>
<tr>
<td>Total Compensatory Behaviours</td>
<td>TQCOMPF</td>
<td>2</td>
<td>Not enough items to use cronbach alpha.</td>
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<tr>
<td>Total Binge Factors</td>
<td>TQBINGE</td>
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<tr>
<td>Total Avoidance</td>
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<tr>
<td>Coping</td>
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<tr>
<td>------------------------</td>
<td>---------</td>
<td>-------</td>
<td>------</td>
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<tr>
<td>Total Active Coping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Emotion</td>
<td>TCEMOT</td>
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<td></td>
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<tr>
<td>Focused Coping</td>
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</tr>
</tbody>
</table>

(item emot2 deleted)
Log of Research Experience
Research Log Checklist

\( x = \text{completed}. \)

1. Formulating and testing hypotheses and research questions
2. Carrying out a structured literature search using information technology and literature search tools
3. Critically reviewing relevant literature and evaluating research methods
4. Formulating specific research questions
5. Writing brief research proposals
6. Writing detailed research proposals/protocols
7. Considering issues related to ethical practice in research, including issues of diversity, and structuring plans accordingly
8. Obtaining approval from a research ethics committee
9. Obtaining appropriate supervision for research
10. Obtaining appropriate collaboration for research
11. Collecting data from research participants
12. Choosing appropriate design for research questions
13. Writing patient information and consent forms
14. Devising and administering questionnaires
15. Negotiating access to study participants in applied NHS settings
16. Setting up a data file
17. Conducting statistical data analysis using SPSS
18. Choosing appropriate statistical analyses
19. Preparing quantitative data for analysis
20. Choosing appropriate quantitative data analysis
21. Summarising results in figures and tables
22. Conducting semi-structured interviews
23. Transcribing and analysing interview data using qualitative methods
24. Choosing appropriate qualitative analyses
25. Interpreting results from quantitative and qualitative data analysis
26. Presenting research findings in a variety of contexts
27. Producing a written report on a research project
28. Defending own research decisions and analyses
29. Submitting research reports for publication in peer-reviewed journals or edited book
30. Applying research findings to clinical practice