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Defining and explaining positive psychological outcomes in people with physical health conditions

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Defining and Explaining Positive Psychological Outcomes in People with Physical Health Conditions.

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Abstract

Experiencing a physical health condition can have wide ranging physical and psychological outcomes for an individual, impacting on many aspects of daily living. The psychological outcomes can vary widely, from extreme psychological distress to psychological growth, and are complex and dynamic. Traditionally, research has focused on those experiencing psychological distress, despite evidence showing that many individuals are able to achieve positive psychological outcomes. The literature is unclear in defining different positive psychological outcomes, and indeed distinguishing different outcomes and processes from one another. Attention needs to be paid to the definition applied to individuals who are reporting positive psychological outcomes following physical health difficulties and further understanding the process through which individuals achieve these outcomes.

This empirical study aimed to address some of the gaps in the literature, by exploring how six individuals reporting positive psychological outcomes following spinal cord injury described and explained these outcomes. Interpretative phenomenological analysis was used to investigate the experience of these individuals. Three superordinate themes were extracted: "Living a normal life, just doing things differently", "Overcoming challenges: Determination to succeed" and "Using the resources available to me". The research supported the idea that positive psychological outcomes arise through a complex interplay between personality, cognitive and environmental factors. Theoretically, this research has implications for defining positive psychological outcomes following

spinal cord injury, in addition to contributing towards future theoretical frameworks that aim to provide a basis for understanding the process through which positive psychological outcomes following spinal cord injury are achieved. Clinically, this research provides a narrative that can be used with people following spinal cord injury and also provides evidence for the use of cognitive screening measures such as appraisal style, to identify individuals who may be showing less adaptive cognitions.

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Paper A: Resilience: Definition and characteristics in people experiencing physical health difficulties.

1. Abstract

Experiencing a physical health difficulty can be a difficult time psychologically for many individuals. The links between poor psychological health and physical outcomes are well documented, highlighting the importance of further understanding the mechanisms behind positive psychological outcomes. Theories of resilience have aimed to describe the many individuals who report a lack of psychological distress following physical health difficulty. Resilience as a concept in relation to physical health difficulties is poorly and inconsistently conceptualised in the literature. The difficulties in defining resilience are discussed, with consideration given to resilience as an outcome, personality trait and as a process. Attention is also given to the importance of distinguishing resilience from other psychological constructs which also aim to describe and explain individuals who report lower levels of psychological distress following physical health difficulties. A greater understanding of resilience is required in order to provide a sound empirical, theoretical and clinical framework for those who report psychological distress following physical health difficulty.

2. Introduction

Resilience as a concept is often used but less well understood. Resilience generally in the literature is used to describe individuals who are "doing well" psychologically, despite having faced adverse life situations. Resilience has been studied in a number of areas relating to stressful experiences, when individuals have shown a lack of psychological distress, such as following physical health difficulties. There is an assumption that the relatively well-researched risk factors for outcomes such as posttraumatic stress disorder (PTSD) are simply the inverse of the protective factors that are equated with resilience (Bonanno, 2004). Resilience specifically, however is poorly

defined. The numerous definitions of resilience point to fundamental differences in theoretical and conceptual underpinnings in understanding the concept. While many definitions refer purely to an outcome, other definitions include reference to an underlying characteristic or process which may be associated with or lead to resilience. This lack of definitional and conceptual clarity needs to be addressed in order to better understand resilience (Agaibi & Wilson, 2005) and ensure the term is being used consistently. This review aims to discuss some of the different definitional approaches to understanding resilience in relation to people who have experienced physical health difficulties. Resilience as an outcome, a personality trait and a process will also be considered.

2.1 Why Study Resilience?

Most people will suffer at least one life threatening event throughout their lives (Ozer, Best, Lipsey & Weiss, 2003). It is essential to not only attend to those who face difficulty in the aftermath of such events, but also those who report little or no distress. Following a serious health condition, the individual faces a number of challenges, including reconstructing a world that makes sense to them (Lustig, 2005) in the face of adapting to possible physical or neuropsychological changes; this may or may not result in a negative psychological outcome. Negative psychological outcomes are often conceptualised in terms of PTSD, characterised by fear, re-experiencing the traumatic event, avoiding associated stimuli and increased physiological arousal (Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition; DSM-IV, 1994). Owing to the emphasis in the literature on PTSD as a psychological outcome following a traumatic event, resilience may have been traditionally viewed as a less commonly occurring response despite more recent evidence to the contrary, and more positive psychological outcomes may even have been viewed as pathological (Bonanno, 2004). However, it is essential that research and theory consider a wide range of responses to traumatic events (Bonanno, 2004).

Physical health is a particularly interesting area in relation to resilience. Health difficulties may often involve an isolated event (for example, the diagnosis of an illness or the sudden onset of disability) with ongoing adverse or challenging conditions (Richardson, 2002) usually involving

adjustment to changes in lifestyle. It may be that living with a physical health condition is qualitatively different from experiencing a traumatic event that does not have physical health implications, and therefore the literature pertaining to traumatic events may not be applicable to those suffering physical health conditions (White, Driver & Warren, 2008). The Diagnostic and Statistical Manual for Mental Disorders – Text Revision (DSM-IV TR, 2000) incorporated experiencing a threat to one's life due to physical health as part of their definition for PTSD. A serious physical health condition can have major implications for one's life, both physically and psychologically. Experiencing an injury which has physical health implications can lead to permanent changes in the individual's life which may include altered daily living, an inability to work or a loss of mobility (Martz, 2005). Medical advances mean that survival rates for physical health conditions, such as cancer (Rasmussen & Elverdam, 2008) are improving, and attention is turning to the psychological sequalae of experiencing such an illness. It is well documented that psychological functioning is associated with physical health outcomes (Whiteneck et al., 1992), it is essential to consider those individuals who show lower levels of anxiety and depression and experience higher levels of functional independence.

2.2 Resilience and Physical Health: Definitions

Resilience as it relates to physical health difficulties has been conceptualised in a number of different ways. Resilience can be seen in terms of the characteristics an individual displays, the type of behaviours exhibited, or the outcome reported (Agaibi & Wilson, 2005). Research into resilience has historically related to three main areas (Richardson, 2002): identifying the unique characteristics of individuals who cope well in the face of adversity, identifying the processes by which resilience is attained and identifying the cognitive mechanisms that govern resilient adaptations.

Following a review of the literature, three main ways of defining resilience are considered, incorporating the areas identified by Richardson. This will include a discussion of resilience as an outcome (e.g. Westphal & Bonanno, 2007) incorporating resilient behavioural

outcomes, resilience as a personality trait (e.g. Block & Block, 1980), and resilience as a process (e.g. Rutter, 2007) including cognitive theory (e.g. Lazarus & Folkman, 1984).

3. Resilience as an Outcome

Individuals experiencing physical health difficulties have different psychological outcomes, which may be dynamic. Many people show transient negative symptomatology (Bonnano, 2004), with depression and low self-esteem possible outcomes following physical injury (Driver, 2006). Indeed, more traditional theories of coping (e.g. Stage theory; Guttman, 1976) posit that a lack of grief should be viewed as pathological (Bonanno, 2004). However, resilient outcomes may be seen as those where psychological functioning is not significantly impaired (Westphal & Bonanno, 2007) while a general assumption exists that resilience equates to better adaptation following trauma (Campbell-Sils, Cohan & Stein, 2006).

Many studies have identified areas of physical health where such definitions of resilience as an outcome are present. An example of this is Bonanno (2005) who used the traditional conventions of defining resilience in terms of a lack of PTSD symptomatology for people suffering physical injury following terrorist attacks. Outcome measures are generally used to identify an absence of distress in samples which is then equated to resilience. Bonanno et al. (2008) used the Medical Outcome Study Short-Form Health Survey (SF-12; Ware, Kosinski, & Keller, 1996) to identify those showing what they classed as resilient outcomes, in people who had experienced the SARS virus. This is a twelve item self-report measure which assesses an individual's health status, including psychological functioning. A resilient outcome was defined as one that remained consistently highly functioning on this measure over three time points (Six, twelve and eighteen months following hospitalisation). Outcome-focused studies of resilience following cancer have also yielded evidence of individuals doing well psychologically. A diagnosis of cancer may lead to a threat to life, invasive treatments, side-effects, separation from peer groups and change in appearance (Phipps, 2007), but research shows many individuals

remain as well adjusted as their healthy peers (Phipps, Larson, Long & Rai, 2006) and show low levels of distress (Bennett, 1994).

Definitions of resilience in people with physical health conditions describe a resilient outcome as one where psychological functioning has not been significantly impeded (Bisconti, Bergeman & Boker, 2006). This is often described in terms of an absence of depression or anxiety (e.g. Bonanno, 2005; Judd, Akiskal & Paulus, 1997). These definitions are generally descriptive in nature and include:

- The ability to maintain a stable equilibrium (Bonanno, 2004)
- Resumption of normal functioning following excessive stress that challenges individual coping skills (Richardson, 2002)
- Healthy recovery from extreme stress and trauma (Wilson & Drozdek, 2004)
- Efficacious adaptation regardless of significant traumatic threats to personal and physical integrity (Harel, Kahana & Wilson, 1993).

Attention needs to be given to the type of outcome being measured in these definitions. When considering resilience as an *outcome* following physical health difficulties, there may be different manifestations of resilience, such as showing cognitive resilience, emotional resilience or behavioural resilience. For example, an absence of cognitive symptomatology (e.g. lack of distressing thoughts) may be different to behavioural changes (e.g. the ability to continue to work). Richardson's (2002) model of resilience suggests that adaptive outcomes involve activating behaviours which promote positive psychological outcomes, such as goal setting and accessing support. Agaibi and Wilson (2005) suggest that evaluating resilience in terms of a behavioural outcome is a current focus in the literature. It may be that a definition of resilience includes a behavioural component, such as a continued ability to fulfil personal and societal responsibilities (e.g. Kennedy et al., 2010), such as continuing to work or engaging in family life (Bonanno, 2005). Such behavioural outcomes could be advantageous to policy makers and commissioners when thinking about service provision, as providing services which address these areas could see better psychosocial and functional outcomes in people following physical health

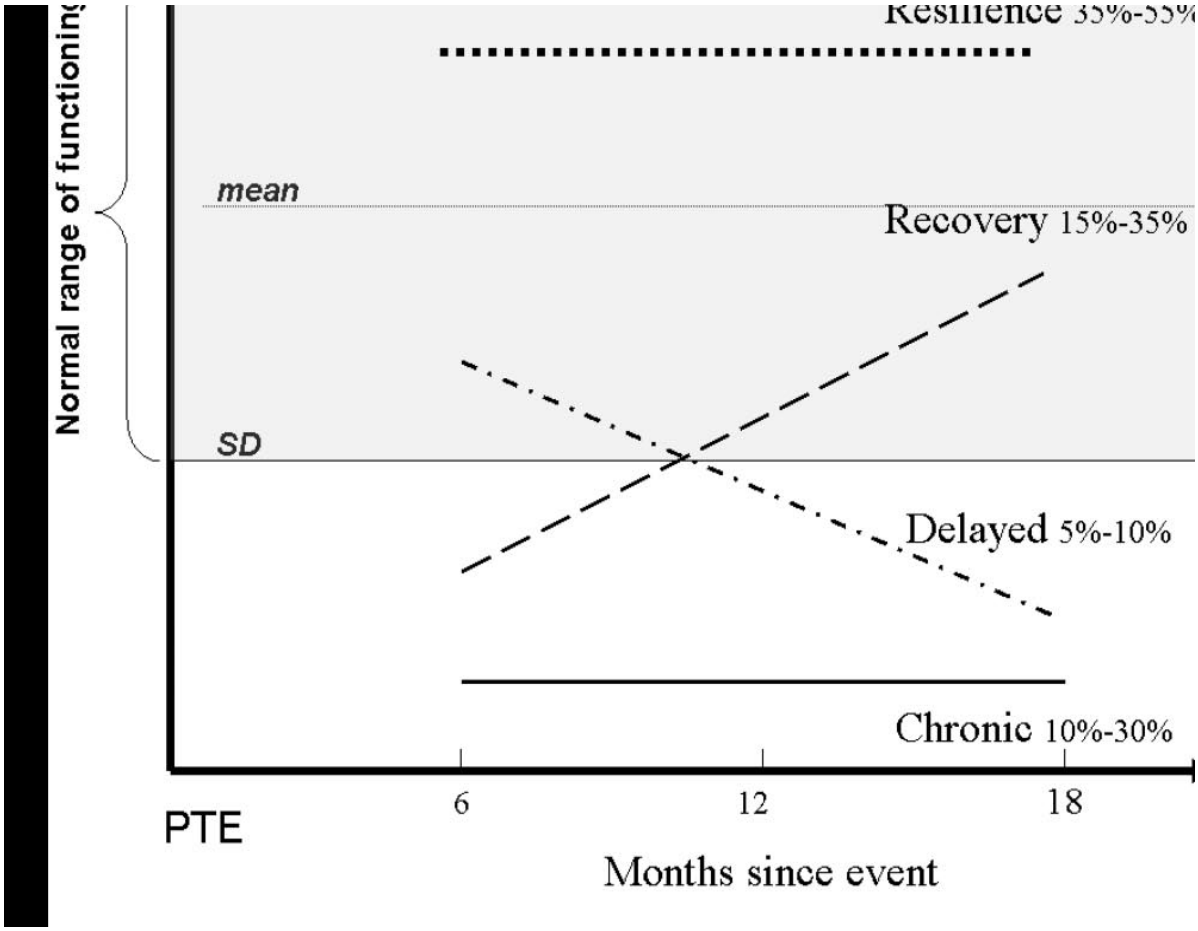
difficulties. When using a less well-defined definition of a resilient outcome, the conceptualisation could miss these different aspects of outcome, failing to differentiate between whether an individual is showing cognitive or behavioural outcomes, or both. The measures and method must then accurately be able to access the particular type of outcome that is of interest to the researcher, in order to accurately describe the experience of the individual.

Definitions such as these indicate an underlying *process* that individuals go through in order to achieve a resilient outcome, but stops short of expanding on what this might be. For example, Bonannos's definition (2004) that the individual has the *ability* to maintain a stable equilibrium does not expand upon how this ability comes about or what it consists of. That is, they do not attempt to explain *how* the individual achieves a resilient outcome. Utilising this approach runs the risk of resilience becoming a descriptive term for an individual that does not show negative psychological symptomatology (Leipold & Greve, 2009). Opting to use a definition based on an cognitive outcome such as lack of psychological distress or a behavioural outcome such as returning to work assumes the individual goes through a process that enables them to be functioning well psychologically and return to their level of functioning prior to having the physical health difficulty. Additionally and crucially, this definition presumes that one must lack negative psychological symptomatology in order to be resilient. This potentially excludes individuals whose pre-morbid functioning may include some levels of anxiety and depression, but these levels of anxiety and depression do not significantly decline following the onset of the physical health condition. At present, these individuals may be best conceptualised in the literature as showing "chronic" levels of psychological distress (Bonanno et al., 2008). An alternative way of considering this group may be conceptualising them as individuals who may exhibit a resilient outcome regardless of their ongoing negative psychological symptoms. However, current criteria for a resilient outcome may exclude this group, meaning that the process through which they manage to maintain their levels of functioning goes unexamined.

3.1 Trajectories of a Resilient Outcome

Recent interest has focused on the trajectories of outcome that could be plotted if an individual were to map their psychological functioning over time following trauma, with resilience being seen to have a distinct outcome trajectory to other outcomes where an individual does not present with PTSD (Bonanno, 2005). Proposed trajectories can be seen in Figure 1, and incorporate resilience, recovery, chronic distress and delayed distress. The resilient outcome trajectory (Figure 1), using the most common definition of resilience as an outcome, may then be seen to be a relatively stable line with only minor fluctuations. Bonanno (2005) defines this resilience trajectory in terms of stable healthy functioning. That is, an individual experiences only transient and minor dips in functioning, both before and after the physical health difficulty. If a resilient outcome is therefore a stable line over time, this does not exclude people whose functioning levels may be lower (and therefore showing some negative symptomatology), providing their trajectory of functioning does not dip significantly i.e. they symptoms do not significantly worsen. However, current outcome-based definitions would potentially exclude this group in research samples and possibly class them as showing chronic psychological distress as shown in Figure 1 (e.g. Bonanno et al., 2008).

Figure 1: Trajectories of Psychological Functioning Following Trauma (Bonanno et al., 2008).



Some definitions expand on the mere description of resilience as a stable outcome trajectory with only transient and minor dips. It may be that resilient individuals have shown a stable trajectory of functioning throughout their life (Bonanno, 2005), and may have dealt with prior stressors with little decline in psychological functioning. Other definitions suggest that resilience does not equate to *thriving* following an adverse situation (Hobfoll et al., 2009), so a resilient individual's outcome trajectory may not be expected to significantly rise. However, there has been some suggestion that resilient outcomes may show a trajectory characterised by an initial "recovery" period following a dip upon the initial diagnosis or accident (Hobfoll et al., 2009). Bonanno, Galea, Bucciarelli and Vlahov (2007) contest that a recovery trajectory is markedly different to a resilience trajectory in that recovery is characterised by observable increases in

psychological difficulty following the trauma, followed by a steady return to baseline functioning (Figure 1). It is debatable whether individuals who experience a risk or negative psychological symptomatology trajectory who then go on to recovery can be defined as being resilient (Atkinson, Martin & Rankin, 2009).

These trajectories can be applied to the psychological functioning of people experiencing physical health difficulties, in plotting their trajectories of psychological outcome across different transitional points during their physical health journey. Identification of key points on the trajectory where an individual may be more vulnerable is essential. To date little research has been conducted into resilience at these transitional points, for example from rehabilitation into the community (White et al., 2008), where there may be a decline in functional independence or increases in negative psychological symptomatology.

Plotting outcomes over time in this way is evidence that a resilient outcome following physical health difficulties may be conceptualised in different ways and more attention needs to be given to the trajectory of resilience. Specifically, what defines a resilient trajectory is not clear in the literature. Defining resilience purely in terms of a positive, or non-impeding, psychological outcome negates the role of psychological processes underpinning the eventual outcome, and excludes a group of people who may remain stable in functioning yet experience some negative psychological symptomatology such as anxiety or depression. Indeed, current definitions of resilience have been accused of having become a "boomerang" definition: if you do not do well, you are not resilient (Leipold & Greve, 2009). Much of the research neglects that a simple description of a positive psychological outcome being present could be equally explained by other psychological constructs, such as hardiness (Kobasa, 1979), sense of coherence (Antonovsky, 1979), and posttraumatic growth (Tedeschi & Calhoun, 2004). This crucially has implications for the validity of research claiming to measure and study resilience, where a definition is used that solely considers outcome.

3.2 Resilient Outcomes and Other Positive Psychological Outcomes

The difficulty in defining resilience purely in terms of an outcome lies in that many other positive psychological concepts may also define similar outcomes using different terms, such as hardiness, or thriving. Such concepts have also been examined in relation to individuals with physical health difficulties (e.g. Kobasa, 1979; Larsson & Kallenberg, 1996). Indeed, individuals who may be viewed to be thriving or having undergone significant meaning making processes also may lack negative symptomatology, but may be better described using an alternative model to resilience (Hobfoll et al., 2009), given that definitions of resilience do not generally incorporate meaning making or significant increases in psychological functioning. Just because an individual does not report distress, does not automatically make them resilient. One difficulty of defining resilience in terms of an outcome lies in that it gives little attention to the process involved (Leipold & Greve, 2009), something which is crucial not only to our understanding of resilience, but also to it's clinical application. Research into outcomes has not been theory-driven (Schroevers & Teo, 2009) and as such less is known about how such individuals come to occupy this resilient outcome. Other positive psychological theories have been proposed to also account for individuals who are functioning well psychologically. These alternative models will be discussed in relation to resilience later as they apply to other definitions.

3.3 Summary

Resilience as defined by a positive psychological outcome is alone currently overly descriptive and risks being used interchangeably with other positive psychological terms and concepts i.e. people who have gone through recovery will also be expected to score well on outcome measures of psychological functioning. The difficulty with this is that an absence of symptomatology may refer to a variety of psychological processes and to describe them interchangeably lacks an understanding as to how the outcome was achieved. It might be that a clearer way to conceptualise resilience in terms of outcome is to refer to an individual as showing a *resilient* outcome and to define what this constitutes and what it does not. It may be that this is best defined as a relatively stable trajectory of functioning and not merely an absence of negative

psychological symptomatology, and ensure that the research design adequately reflects this. Researchers also need to consider whether a resilient outcome relates only to behaviours, or whether it incorporates cognitive and emotional aspects too. Clarification within the literature is necessary. Researchers must carefully consider what construct it is that they are examining and whether simply selecting participants on the basis of an absence of symptomatology is evidence for the ascribed construct. In attempting to produce a more meaningful and coherent concept of resilience, however, it may be that going beyond an outcome-focused definition is necessary.

4. Resilience as a personality characteristic

If resilient outcomes (distinct from other positive psychological processes) are possible, it must be examined how the individual achieves them. One answer is that the person just *is* resilient. That is, they possess resilient personality characteristics, which lend themselves to obtaining a resilient outcome, as championed by Block and Block (1980). Theoretically, the links between personality, physical health and psychological well being have been documented for centuries (Smith, 2006). This empirically takes the form of a number of personality characteristics as being synonymous with a resilient outcome, or indeed that resilience itself is a personality characteristic (Block & Block, 1980). A wide range of research into the links between personality and physical health have identified an array of personality traits purported to be risk or resilience factors in relation to physical health (Smith, 2006). This is a traditional view of resilience, seeing the resilience itself as a personality trait (Agaibi & Wilson, 2005) and consequently that resilience is an innate quality (Bonnano, 2005). Resilience as a personality trait is still a prominent idea in research into adverse childhood experiences (Bonanno, 2004). The idea that resilience is either a cluster of traits that foster a resilient outcome or that resilience itself is a distinct trait will now be discussed.

Resilient personalities have been defined in terms of flexibility in response to changing situational demands and the ability to bounce back from negative emotional experiences (Block & Block, 1980), suggesting there is something about the individuals' personality which enables

them to bounce back. A number of personality traits have been equated with being resilient, including curiosity and mastery (Block & Kremen, 1996), strong, extroverted personality, self-esteem, assertiveness, the capacity to mobilize resources (Wilson & Agaibi, 2006) and being hopeful (Snyder, Lehman, Kluck & Monsson, 2006). Optimism as a trait has been associated with resilient outcomes such as good health and well being in a number of studies (e.g. Scheier & Carver, 1985) and associated with a better prognosis following heart surgery (Scheier at al., 1999). Other studies have used personality trait *composites* to describe resilience. For example, Chan, Lai and Wong (2006) used a composite of optimism, self-esteem and perceived control to describe personal resilience, and found that individuals high in these traits showed better health outcomes following coronary artery disease. Conversely, people scoring high on measures of neuroticism with cardiovascular were likely to have higher levels of anxiety and depression (e.g. Suls & Bunde, 2005), indicators which may not be linked to resilience. Other theorists have argued that having a resilient personality can have an impact on emotional expression which further enhances resilience. For example, positive emotion may broaden individuals' experiences, leading to creativity, flexibility and attention, all of which are associated with resilient outcomes (Frederickson, 2001). Individuals who are have resilient personalities may use positive emotions to their benefit to help overcome stressful situations (Tugade & Frederickson, 2004), whereas those exhibiting positive emotion may increase their social support network and facilitate a resilient environment (Bonanno, 2005). Such personality traits have not only been linked to successful coping following physical health difficulties, but also greater longevity (Giltay, Kamphuis, Kalmijin, Zitman, & Kromhout, 2006) and better prognosis following heart surgery (Scheier et al., 1999).

Personality theories of resilience may suggest that resilience is a stable construct (Bonanno, 2005). This might be important in distinguishing individuals who are truly resilient as opposed to being in denial or showing other superficial forms of adjustment (Bonanno, 2005). Researchers have begun to ascertain this by looking at pre-morbid levels of functioning (Bonanno, Field, Kovacevic & Kaltman, 2002). This would fit with an outcome-based definition of resilience as a stable trajectory of psychological functioning and with evidence suggesting that

those with good pre-morbid psychological health do better psychologically post health difficulty (e.g. following stem cell transplantation, Mosher, Redd, Rini, Birkhalter & DuHamel, 2009). Whether resilience is a stable trait linked to personality could be researched using longitudinal or retrospective studies, in order to ascertain how individuals dealt with other life stressors prior to their physical health difficulty. Indeed, the issue of whether resilience is a stable trait or an adaptive behaviour remains unanswered in the current literature (Agaibi & Wilson, 2005). If resilience is inherent in an individuals' personality, it may be that this has a clinical implications for the therapeutic approaches designed to foster resilience. Indeed, Luthar, Cicchetti and Becker (2000) posit that this explains why there are so few interventions aiming to foster resilience in rehabilitation following injury, as little is known about whether resilience can be learnt. This leaves the question unanswered regarding whether resilience is a trait that can be fostered in people who may lack it (Atkinson et al., 2009).

Theories that centre around the existence of a resilient personality aim to identify traits that are associated with better psychological outcomes, and then label these traits as resilient qualities (e.g. Campbell-Sils et al., 2006). The studies outlined above are such examples. It may be that personality theories of resilience are most usefully and accurately described as identifying a constellation of personality traits that make a resilient outcome more likely. Indeed, models of health behaviour (e.g. Transactional stress model; Smith, 2006) generally see personality as influencing behaviours and cognitions (which also may be influenced by many other factors, such as the environment), and this may be the link between personality and resilience (Smith, 2006). This would provide something of a compromise between personality traits being relatively stable, and resilience being able to be learnt. That is, personality predisposes the individual to behave and think in certain ways, but personality is not the only mediating factor in being resilient.

Research into resilience as a personality trait has been criticised on the predominantly self-report nature of studies (Atkinson et al., 2009). The primary methodology has been to use psychometric testing in order to identify associated characteristics (e.g. Connor & Davidson, 2003). Indeed, the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) was devised by drawing upon a number of theories, such as those of Kobasa (1979) into hardiness,

Rutter (2007) into childhood adversity and assessing an individual's ability to ensure strength and their reliance on factors such as "good luck" and spirituality. Researchers warn therefore of using the term *resiliency* to describe a resilient personality characteristic (e.g. Masten, 1994), given that much of the research focuses on constellations of personality traits that are associated with positive psychological outcomes.

4.1 Resilient Personality and Other Traits

In describing someone as having a resilient personality, care must be taken to consider whether it is actually resilience being described or another personality quality also associated with positive psychological outcome. This is linked with issues pertaining to definitions of resilience purely as an outcome that lacks distress, as this is where other personality traits may take on an explanatory role. This is problematic as other personality characteristics similar in their theoretical basis to resilience may also be associated with an absence of distress. To illustrate, the trait of hardiness may be used.

Hardiness (Kobasa, 1979) is defined as a personality trait seen to buffer against extreme stress (Bonanno, 2004) and linked to positive psychological adjustment (Orr & Westman, 1990). Hardiness is seen as a personality trait that predisposes an individual to adapt well following extreme stress, and is linked to one's likelihood to find meaning in events. Three characteristics have been associated with hardiness: commitment to finding meaning in life, belief that one can influence outcomes, and belief that one can grow from both positive and negative experiences. Kobasa (1979) believes that hardy individuals are less likely to exhibit negative psychological symptomatology as they are more likely to view negative experiences as something that can be challenged and overcome. Hardiness is also linked to not only to psychological health, but also to better physical health outcomes (Kobasa , Maddi & Zola, 1983). For example, hardiness was associated with lower levels of PTSD and lower levels of physical health difficulties in war veterans (Taft, Stern, King & King, 1999). It has not escaped theoretical commentators that

hardiness too could be seen as a personality trait that is defined in terms of a lack of negative psychological symptomatology (Funk, 1992).

Similar to a resilient personality, hardiness is associated with lower levels of distress. However, unlike resilience, hardiness is defined solely as a personality trait in its own right, along with a clear description of the characteristics that a person who is hardy might show. This offers some explanation as to how an individual with a hardy personality is able to achieve these positive outcomes associated with lower distress.

4.2 Summary

Personality trait theories see resilience as an inherent quality, or cluster of associated personality traits that one possesses. These traits are then equated to doing better psychologically following physical health difficulties, and the person is described as being resilient. However, research into personality characteristics and what is described as a resilient outcome shows only associations between clusters of traits and doing well psychologically (e.g. (Block & Block, 1980). Indeed, just because a person displays personality characteristics associated with resilience, does not mean they will necessarily show a resilient outcome. For example, studies often show associations between personality traits and outcomes, and cannot attribute cause (e.g. Snyder et al., 2006). Similarly, it is possible that a person may not show these characteristics and still maintain a stable outcome trajectory. The question remains, how does a person with the proposed characteristics of resilience then end up showing resilient outcomes following adversity (Atkinson et al., 2009)? It may be that the link between resilient outcomes and personality characteristics lay with the effect personality has on cognitive and behavioural aspects of an individual. That is, personality influences emotion, cognition and behaviour, and subsequently can influence health-related outcomes (Smith, 2006). This lends itself to a process-orientated description of resilience, which expands upon the links between personality and outcome by attempting to explain *how* the individual achieves a positive psychological outcome.

5. Resilience as a Process

Resilience has been described as both an outcome and as a personality trait. There lacks a coherent understanding of how individuals with these personality traits come to show what is defined as a resilient outcome. That is, *how* an individual achieves the outcome. Individuals who possess personality traits associated with resilient outcomes are often described as being more likely to engage in certain processes, often linked to cognitive and coping styles. It may be these processes that lead to individuals working towards a resilient outcomes.

5.1 Resilience as a Cognitive Process

Current theoretical emphasis lies with resilience as being a cognitive process (e.g. Westphal & Bonnano, 2007). Rutter (2007), for example, believes that resilience comes about through the individual processing adversity. Indeed, perhaps the most well known measure of resilience, the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) has a large component assessing cognitions. Little is known about the cognitive processing that is associated with a resilient outcome, and whether this cognitive processing style itself should be defined as resilient. People who are doing well psychologically may be seen to exhibit a number of cognitive processes which are associated with an absence of distress. Acceptance, for example, has been associated with lower levels of anxiety two months post-burn injury (Tedstone, Tarrier & Faragher, 1998) and better outcomes one year post breast cancer diagnosis (Stanton et al., 2002).

5.2 Resilience, Coping and Appraisals

The stress appraisal and coping model (Lazarus & Folkman, 1984) is built on the premise that psychological processes mediate adjustment following adverse situations. The individual initially makes an assessment of a situation as being a threat, a challenge or benign. They then

make an assessment of their ability to overcome the situation. This subsequently impacts on how the individual copes with the situation. With this in mind, the model could have implications for the concept of resilience. Given that coping may be defined as, "a method of alleviating and preventing negative change" (Sheikh, 2004), its link to resilience should be given some attention. If coping aims to promote psychological wellbeing, then the concept of resilience may affect coping, or vice versa. Indeed, the coping strategy used was able to predict 33% of variance in depressive symptomatology ten years post spinal cord injury (Pollard & Kennedy, 2007). This suggests that positive psychological outcomes such as resilience may be associated with cognitive and coping styles.

Stress is caused when the individual perceives their available resources to be insufficient in order to deal with the task at hand, which is perceived as threatening to the self (Lazarus & Folkman, 1984). It follows that resilient individuals are able to manage this stress more effectively, or indeed feel less stressed initially. Indeed, psychological competence is often linked to positive beliefs about one's own ability to deal with a task and to problem solve (Weisaeth, 1995). This can be seen as a cognitive mechanism, but it may also be linked to the personality traits that have been associated with resilience, such as mastery and an ability to utilise social resources (Cafo & Belaise, 2003).

If successful coping leads to better psychological outcomes, then it may be that resilient people utilise more successful coping strategies, or are more flexible in the coping strategies they adopt (Westphal & Bonanno, 2007). Indeed, resilient individuals have been noted to use coping strategies in the aftermath of a traumatic experience that would generally be considered maladaptive in general life situations (Westphal & Bonanno, 2007).

The debate around coping strategies being fixed or dynamic has direct relation to resilience. It may be that the coping style used in one situation is indicative of the coping style used in general (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986), in which case it may be that a resilient individual uses a particularly adaptive coping style. If personality theories of resilience and coping held true, it would follow that coping styles and being resilient would be relatively fixed and stable. However, although there is relatively little evidence available for the

stability question, the empirical evidence that is available does not lend itself to coping style stability across situations (Folkman et al., 1986), perhaps meaning that resilient individuals are able to successfully adapt their coping style to the demands of the situation (Leipold & Greve, 2009).

Folkman & Moskovitz (2000) identified different coping styles that resilient people may use in order to facilitate positive outcomes. These include positive reappraisals and the capacity to create meaning. These will be discussed in relation to resilience.

5.3 Resilience and Appraisal Style

An event may be perceived as stressful if the individual perceives that their capacity to cope with the demands of a situation will be exceeded (Folkman, 1984). Appraisals have been linked with moderating posttraumatic stress disorder responses (Lazarus & Folkman, 1984). Negative appraisals have been associated with depressive symptomatology following burns injury (Tedstone et al., 1998) whereas people with chronic illness have been reported to endorse feelings of worthlessness and the belief that one is not cared about (Lazarus, 1999). It follows then that there might be links between appraisals and resilient outcomes. Resilient outcomes may be associated with people who make positive appraisals, for example individuals who are less likely to appraise situations as threatening and who are more likely to have a positive appraisal of their ability to deal with it. This might be linked to research showing that individuals who indicate an internal locus of control show less PTSD symptomatology (Harel, et al., 1993); one might hypothesise that individual appraisals may involve viewing themselves as having some control over the situation and their ability to deal with it. Positive appraisals have been associated with better outcomes in a number of areas, for example, breast cancer survivors (Stanton et al., 2002), spinal cord injury (Dean & Kennedy, 2009). Possessing the traits associated with being resilient may be linked to the kind of appraisals that are made, specifically with threat appraisals (Westphal & Bonanno, 2007). Indeed, it may be that individuals with a propensity to use

challenge-focused appraisals therefore go through the cognitive processing necessary to achieve a resilient outcome (Rutter, 2007).

5.4 Resilience and Meaning-Making

Many of the cognitive processes outlined involve appraising or evaluating the ability of the available resources to cope with the physical injury. This aspect of processing has clearly been linked to resilient outcomes. A different component to cognitive processing is engagement in meaning making; that is making sense of the life threatening event. This may mean altering one's view about the self in relation to the world. It is unclear whether resilient individuals undergo this same meaning making process, or whether their appraisal and coping style used prior to the physical health difficulty is sufficient to promote successful adaptation and a positive psychological outcome. This question poses a real challenge to the study of resilience (Westphal & Bonanno, 2007).

Whether resilient individuals undergo this process is not clear; however, alternative psychological models have been proposed to explain how individuals who undergo a meaning making process achieve a positive psychological outcome similar to that of resilience. Posttraumatic growth is a construct which describes a process by which "change is experienced as the result of the struggle with highly challenging life circumstances" (Calhoun & Tedeschi, 1999). Tedeschi and Calhoun (2004) describe the individual as having to rebuild their sets of beliefs about themselves in relation to the world following a psychological crisis. The new beliefs that develop are qualitatively different to the old beliefs, leading to psychological growth. Although posttraumatic growth has an ascribed outcome, the process of undergoing growth is one of meaning making and is not generally seen as being an individual characteristic (Shroevers & Teo, 2008). Evidence of such growth has been shown in survivors of cancer (Mosher et al., 2008), individuals with HIV (Milam, 2004), spinal cord injury (Chun & Lee, 2008) and cancer (Bellizzi & Blank, 2006), sufferers of heart disease (Sheikh, 2004,) and visual impairment (Salik & Auerbach, 2006).

It may be that resilient individuals do not need to go through this meaning making process in the same way as those who report posttraumatic growth (Westphal & Bonanno, 2007). However, in the literature it is possible that some of the individuals who are used in resilience research may have undergone this process. For example, when studies have used selection criteria based solely upon an absence of psychopathology to define resilience they recruit people who have undergone the growth process and who have engaged in quite different cognitive processes. Conversely, it may be that some of the selection criterion applied to studies looking at growth may access individuals who may be better described as resilient. For example Chun & Lee (2008) used a selection criteria based on reported life satisfaction and evidence of achievement in life, such as being in employment, in a study with people with spinal cord injury. It seems this emphasis on the meaning-making process involved in growth would lead to quite a different trajectory to that of resilience, perhaps one that dips initially only to rise up to show growth. Such a trajectory has not yet been empirically tested as those identified in Figure 1. In comparison to an individual who is resilient, it may be that the outcome actually exceeds that of resilient individuals, posing the question is posttraumatic growth actually a more desirable outcome than a resilient one (Westphal & Bonanno, 2007)?

5.5 Summary

Cognitive processes such as appraisals have been linked to resilience. It may be that resilient outcomes are mediated by personality traits, but also by the cognitive processes an individual goes through. Individuals who appraise their physical health difficulties positively may adopt more adaptive coping strategies, which in turn may facilitate better psychological outcomes. The processes described may lead the individual to foster a more positive outlook and more positive interactions with others (Westphal & Bonanno, 2007). Whether these processes include a meaning making aspect as outlined in posttraumatic growth frameworks is debatable. If resilience is defined as a stable trajectory of functioning, then one would not expect this meaning making to occur, as it would not be necessary. Therefore the individual may be assumed to use

their typical, pre-health difficulty cognitive processing to deal with the changes in their world owing to the health difficulty, thus fostering a resilient outcome.

6. Defining Resilience: An integrative Theory

It may be that resilience cannot be defined purely in one category or another and an integrative theory of resilience is needed. Researchers who have begun to explore these complexities in defining resilience have begun to formulate definitions which address some of these questions. Wilson and Agaibi (2006) state that resilience is best conceptualised as an identifiable pattern of behaviour characterised by patterns of thinking, perceiving and decision making across different situations. This definition incorporates some of the issues raised in this paper; it acknowledges the behavioural outcomes often used in research into resilience, highlights the cognitive biases so inherent to theory on appraisals in resilience and suggests that there is some stability in these responses, highlighting a possible role for personality. Resilient outcomes may occur when associated with individuals with a resilient personality type who undergo processes that make them resilient. These processes then reinforce situations which foster resilience.

7. Implications:

7.1 Empirical

Researchers undertaking study into resilience need to take care in defining their terms and clarifying the constructs under investigation. It is essential that in measuring resilience, researchers ensure they do not tap into another psychological construct such as hardiness or posttraumatic growth, and distinction needs to be made between whether it is outcome, trait or process that is being examined. Methodologies that will adequately answer the many questions that remain in relation to resilience need to be employed, with consideration being given to issues

such as is resilience a stable construct that can be evidenced throughout an individual's life, and how best to examine this. This may involve using longitudinal methodologies (Agaibi & Wilson, 2005) to track the course of the individuals' psychological functioning and the processes they go through. Current research is mainly based on retrospective reports (Westphal & Bonanno, 2007), which may or may not be accurate reflections of the actual processes gone through. The literature's over-reliance on the use of self-report also needs to be challenged, in order to ascertain that reported positive psychological functioning is an accurate reflection of a healthy outcome (Bonanno, 2004). Researchers have begun to use more detailed clinical interviews and anonymous ratings from significant others in this field (e.g. Bonanno et al 2005). However, this retrospective and self reporting may be especially valuable when employing qualitative methods which place the emphasis on the meaning and importance of the individuals' subject account of events. In moving towards a more process-oriented account of resilience, research methods and strategies will need to become multidimensional and relating both to the individual and their environment (Cicchetti & Curtis, 2007).

Advancements in the literature has moved to a more process-focused approach that accounts not only for personality, but also for cognitive and behavioural aspects of resilience. Atkinson et al. (2009) suggest that a future way forward for resilience research may be to examine in detail the interaction between the behavioural and bioscientific aspects of resilience, which may be especially relevant to the area of physical health given the known interactions between psychological and physical health.

7.2 Theoretical

Given that theory and practice in mental health is often informed by those experiencing difficulty (Bonanno, 2004), it is essential that theoretical frameworks grounded in research into positive psychological outcomes such as resilience are better developed. Theoretical development needs to account not only for those who undergo meaning making experiences and psychological transitions, but also for those who go on about their lives with relatively little psychological

disruption (Westphal & Bonanno, 2007). Although research to date has been able to identify behavioural, personality and cognitive variations in those who are termed resilient, there is still little understanding regarding how these psychological processes interact with situational demands to achieve a resilient outcome (Agaibi & Wilson, 2005). Models are beginning to be developed which attempt to account for psychological resilience following trauma (e.g. Wilson, 2004), incorporating personality, cognitive and behavioural factors. However, these are still lacking in explaining the processes individuals go through and how these factors interact, and there are few specific frameworks relevant to resilience in people experiencing physical health difficulties.

7.3 Clinical

There is little written about the importance of resilience in clinical settings (Connor & Davidson, 2003). The goal of psychologists in physical health settings is to support the individual in coping and adapting (White et al., 2008). The role of resilience in clinical settings is still relatively under-researched (Connor & Davidson, 2003). It is essential that we learn from those who show positive outcomes; not only what these outcomes are but how they are achieved. This would put clinicians in a far better place to be delivering interventions to those who need intervention.

If we acknowledge that resilience is likely to be a combination of personality, cognitive and behavioural factors, this has implications for clinical work, with Richardson (2002) suggesting that resilience-training be accessible to those at risk as early on in the rehabilitation process as possible. Indeed, interventions in physical health settings have already begun to be developed. Kennedy et al. (2003) ran a coping effectiveness training group for people with spinal cord injury, based on available research into promoting adaptive coping. This was associated with lower levels of anxiety and depression in comparison to a control group. Strength-based interventions are popular with both practitioners and policy makers alike, although the theory and practice of these remains under-developed (Daniel & Wassell, 2005). Fostering resilience is

central to strengths-based clinical approaches, and may be crucial to other paradigms current in mental health, such as recovery (Atkinson et al., 2009).

If the concept of resilience is able to provide the basis of clinical practice, then difficulty lies in its measurement as an outcome. Given the outlined complexities in defining resilience, there is yet to be a measurement tool available that will provide adequate detail on resilience (Atkinson et al., 2009). This potentially could have an impact on approaches which claim to foster resilience, in addition to justifying the use of such approaches to commissioners in a time where evidence-based practice is so prominent.

8. Conclusion

Resilience is clearly an important concept in understanding the links between physical health and psychological well being. Presently, the lack of definitional and conceptual clarity within this field makes it difficult to ascertain what exactly resilience is, and how a resilient outcome is achieved. This has implications in distinguishing resilience from other associated constructs, both in terms of methodology and theoretical frameworks. Researchers investigating resilience must be clear in their definition, considering resilience as an outcome, trait or process. Cognitive and behavioural aspects of resilience must also be accounted for. Given that such positive psychological outcomes are associated with improved health outcomes, it is essential that empirical and theoretical attention on resilience continues, with the aim of informing clinical practice to foster resilience in those experiencing psychological distress.

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Appendix 1

Appendix 1: Instructions to Authors: Health Psychology Review

Introduction

Submission of a paper to ***Health Psychology Review*** will be taken to imply that it represents original work not previously published, that it is not being considered elsewhere for publication, and that if accepted for publication it will not be published elsewhere in the same form, in any language, without the consent of the editor and publisher.

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If you are unsure as to whether you, or one of your co-authors, has a competing interest please discuss it with the editorial office.

Authors' contributions

All authors are expected to have made substantive intellectual contributions to, and to have been involved in drafting or revising the manuscript. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. Acquisition of funding, collection of data, or general supervision of the research group, alone, does not justify authorship. With the submission of a manuscript, it is assumed that all authors have read and approved the final manuscript.

Acknowledgements
All contributors who do not meet the above criteria for authorship, should be listed in an acknowledgements section in accordance with the APA guidelines. The acknowledgements should be contained on the title page of the manuscript as making acknowledgements available to reviewers will compromise the masked peer-review process. Examples of those who might be acknowledged include those who provided general, technical, or writing assistance. Acknowledgement of funding/grants are also included in this section.

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Paper B: Continuing with life as normal: Positive psychological outcomes following spinal cord injury.

1. Abstract

Research into the psychological sequalae of spinal cord injury (SCI) has traditionally focused on individuals experiencing psychological distress, despite prevalence rates of mental health difficulties remaining low. Positive psychological frameworks such as resilience and posttraumatic growth (PTG) have begun to explore how some individuals do not report psychological distress, but research into people with SCI is still in its infancy. This research focused on individuals reporting lower levels of distress following SCI and their description and explanation of the positive psychological outcomes they experience. Six participants (two female, four male) were interviewed using a semi-structured interview schedule, focusing on their psychological journey before and after their injury. Interpretative phenomenological analysis was used to analyse the data, leading to the identification of three main themes: "Living a normal life, just doing things differently", "Overcoming challenges: Determination to succeed" and "Using the resources available to me". Results are discussed in relation to the theoretical and clinical implications for people who have experienced SCI.

2. Introduction

Experiencing a spinal cord injury (SCI) can have a wide-ranging effect on the life of an individual, leading to major life adjustments (Livneh & Antonak, 1994). A physical injury of this kind can lead to a loss of mobility, altered daily activities and an inability to work (Martz, 2005). Individuals may report perceived cognitive impairments in the domains of memory, attention and concentration (Murray et al., 2007). The health implications of experiencing SCI are numerous, with in increased risk of diabetes and heart disease (Manns & May, 2007) and chronic pain being common (Raichle, Hanley, Jensen & Cardenas, 2007). Understanding psychosocial functioning in

relation to this group of people is essential given the well documented interactions between psychological and physical health. Poor adjustment to SCI is linked to higher suicide rates, self neglect and substance misuse (Craig, Hancock & Dickson, 1999). Negative psychological sequelae can impact on the individual's motivation and ability to care for themselves, increasing the risk of physical health complications such as pressure sores (Herrick, Elliot & Crow, 1994). In addition to having an impact on the individual's quality of life, poor adjustment has an effect on the cost to the health service (Murray et al., 2007).

Emphasis traditionally has been placed on the less adaptive changes on psychosocial functioning that an individual may face, such as depression and low self-esteem (Driver, 2006), anxiety (Hancock, Craig, Dickson, Chang & Martin, 1993), a higher risk of suicide (DiVivo, Black, Richards & Stover, 1991). It is these more negative aspects of experiencing a difficult life event that have typically informed theory and practice (Bonanno, 2004).

However, despite an increased risk of negative symptomatology in people who have experienced SCI such outcomes are not inevitable (Pollard & Kennedy, 2007), with depression and anxiety estimates standing at around 30% (Hancock et al., 1993). It is only more recently that research and theory has turned its attention to positive outcomes following SCI, reflecting a general paradigm shift in the literature towards a more strengths-based approach (Richardson, 2002). Many people with SCI rate their quality of life highly (Whiteneck et al., 2006) with mood post-injury being reported as similar to pre-morbid functioning (Murray et al, 2007). To date, research typically defines positive psychological outcome as an absence of distress (e.g. Bonanno, Galea, Bucciarelli & Vlahov, 2007), as indicated primarily by clinician report or participant self-report on questionnaires, for example The Hospital Anxiety and Depression Scale (HADS, Zigmond & Snaith, 1983). Little is known, however, about what the outcome actually consists of in real life, its course, how the outcome has developed, and the process through which the individual arrived there.

2.1 Outcome Trajectories

One way to consider positive psychological outcome is to map the individuals' functioning both before and after their injury, in terms of a trajectory. Outcomes following physical injury are not static and may change over time. There has been less research into the longer-term outcomes of those experiencing a physical injury (Schnyder, Lehman, Kluck & Monsson, 2006), and given that negative symptomatology may reduce with time, it may be important to explore people's adjustment longer term post-injury (Sheffield et al., 1998). Little is known about how positive psychological outcomes following spinal cord injury manifest themselves, the process through which they are achieved, and their relationship with negative psychological sequalae. Reconstructing a world that makes sense following an event such as a SCI may result in both positive and negative psychological outcomes (Lustig, 2005), as the individual has to process the meaning of the event on their life and how it will impact on their daily functioning.

Two major theories in positive psychology may be applied to an absence of distress following SCI: resilience and posttraumatic growth (PTG). To date, no studies have specifically addressed resilience in SCI, while only recently has the concept of PTG been considered (Chun & Lee, 2008). There are gaps in the research pertaining to individuals who report lower levels of psychological distress, how these highly functioning individuals view their psychological outcome and how they explain the process, but rather, generally, attempts to identify the presence of a positive psychological outcome.

There is no clear definition of resilience within the physical health literature. One way of defining resilience may be in terms of a stable equilibrium, where an individual's psychological functioning does not significantly decline (Bonanno, 2004) or successful coping following adversity (Wilson & Drozdek, 2004). It may be that such individuals maintain a relatively stable trajectory of positive psychological functioning that does not significantly dip over time (Bonanno , Papa & O'Neill, 2001) and that functioning may be largely similar to functioning prior to the event. Therefore, an individual may be seen to score low on measures of anxiety and depression, or show successful adaptation or coping (Campbell-Sills, Cohan & Stein, 2006). How an individual achieves this resilient outcome is highly debated: is resilience a personality trait, a cognitive style, a process, a behaviour, or is it learnt (White, Driver & Warren, 2008). Resilience in specific relation to people

with SCI has not been researched. Where resilience has been examined in other physical health populations, outcome or coping styles are typically used as an indicator of resilience. Little attention is paid to the process of being resilient, whether individuals have always been resilient, whether individuals view themselves as resilient or how individuals come to be resilient. No studies examine how individuals showing low levels of distress may experience resilience following their traumatic event, such as a SCI.

PTG, conversely, is defined as positive psychological change following a struggle with highly challenging life circumstances (Calhoun & Tedeschi, 1999). PTG is distinct from other positive psychological outcomes as it actively involves the individual undergoing a meaning making process in which the individual re-builds their beliefs about themselves, the world, and the future (Tedeschi & Calhoun, 2004). Early research into PTG highlighted three main areas where growth occurs: a change in self perception, an improvement in personal relationships and a change in life philosophy (Tedecshi, Park & Calhoun, 1998). PTG may be distinct in that the model emphasises an engagement in a meaning making process (Westphal & Bonanno, 2007) and is qualitatively different to general improvement over time (Tedeschi & Calhoun, 2004). This model emphasises a shift in cognitions, rather than behaviour (Westphal & Bonanno, 2007) relating to the event and more generally, oneself. Simplistically, this means that the individual comes to a different way of thinking about the event, but this different mindset does not necessarily translate into a change in behaviour. This suggests that some individuals are able to make this meaning-making shift, and others are not. The mechanisms behind this are as yet unclear. PTG has been examined in people who have experienced SCI, with Chun & Lee (2008) using grounded theory to analyse the experiences of 15 individuals following SCI,. The interview schedule was designed to explore the identified aspects of PTG. This study reported evidence of PTG, with participants reporting more meaningful family relationships, greater recognition of strengths and a greater appreciation of life.

As theories based on resilience and posttraumatic growth show, positive psychological outcomes can be expressed in different ways. Merely an absence of distress seems to be an on overly simplistic way of describing the outcome and does not provide an account of how an

individual achieved this. For example, identified themes themes such as strength and resolve may be described as providing evidence for PTG (Turner & Cox, 2004), without consideration for alternate processes accounting for that same outcome (such as resilience). Indeed, the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996) does not specifically ask about pre-injury appraisals, cognitions or coping strategies, or does not examine the process of undergoing a seismic shift in outlook that individuals theoretically experience (Tedeschi & Calhoun, 2004). The measure focuses mainly on outcomes, many of which may be shared by resilient individuals. At present, research has not adequately tapped into which process is present, and how the individual has achieved it. Quantitative studies have been criticised for allowing the individual to over-estimate their levels of positive outcome by use of questionnaire measures (Bonanno, Field, Kovacevic & Kaltman, 2002). Less is known about which (if either) theory best fits an individual, and how they came to do well psychologically.

2.2 Factors Affecting Outcome

It is clear that positive psychological outcomes as defined in terms of an absence of distress, do exist within individuals with SCI. This positive psychological outcome may take the form of resilience, PTG or another construct. Less is known about factors that may mediate these positive psychological outcomes following SCI. Identified factors may include age, sex, self-esteem, appraisal style, coping strategy and social support (Martz, 2005). One theory that has risen to prominence in accounting for psychological outcomes is the stress appraisal and coping model (SAC, Lazarus & Folkman, 1984). This posits that adjustment is mediated by psychological processes; namely, appraisals. The individual is constantly appraising their relationship to the environment (Folkman & Greer, 2000). The system is activated following a change to the individual's concerns or goals, with the meaning of the event being crucial to both the appraisal process and the subsequent coping process (Folkman & Greer, 2000). The individual initially makes a primary appraisal of the stressful event; that is, whether it is a threat, a challenge or benign. A secondary appraisal then involves an examination of the individual's coping

resources to deal with the event. Combining these appraisals will determine how the individual views the changes and subsequently reacts to the event (Folkman & Greer, 2000). Coping may be defined as a method of alleviating and preventing negative change (Sheikh, 2004). It is theorised that appraisals subsequently influence the coping strategy used, with individuals who use challenge appraisals opting for more task-focused coping strategies and individuals who use threat appraisals using more emotion-focused strategies (Kennedy, Lude, Elfstrom & Smithson, 2010). Coping strategies may prove to be crucial in determining psychological outcome, as they may influence variance in outcomes such as depression (e.g. Pollard & Kennedy, 2007) and participation in society (Kennedy et al., 2010). Appraisals in relation to SCI have been studied by Dean and Kennedy (2009) who developed a scale aimed specific at adult SCI populations to look at appraisal style. The Appraisal of Disability: Primary and Secondary Scale (ADAPSS) was found to have a six factor structure: (1) Fearful Despondency; (2) Overwhelming Disbelief; (3) Determined Resolve; (4) Growth and Resilience; (5) Negative Perceptions of Disability; and (6) Personal Agency. Individuals who were more likely to endorse items on the Fearful Despondency, Overwhelming Disbelief and Negative Perceptions of Disability subscales were likely to endorse appraisals relating to threat and loss and report higher levels of anxiety and depression. It is possible that this appraisal style lends itself to lower levels of functional independence and less participation in society (Kennedy et al., 2010). However, individuals who endorse items on the Growth and Resilience, Determined Resolve and Personal Agency subscales were more likely to view the SCI as a challenge rather than a threat, are less likely to experience negative symptomatology such as anxiety and depression. Previous research has shown that appraisal style can be linked to PTSD symptomatology in other physical health populations such as burn injury (Willebrand, Andersson, Kildal & Ekselius, 2004; Tedstone, Tarrier & Faragher, 1998), and it would seem that an examination of appraisal style is therefore valuable. Little is known about what factors influence appraisals and how individuals come to appraise situations positively, although Duff and Kennedy (2003) propose that pre-injury factors such as past experiences, beliefs about disability, the self and the world, environmental and biological factors and social support are important influences on appraisals.

Relating appraisals to positive psychological outcomes, it may be that resilient individuals have shown a history of adaptive appraisal styles, which continue post injury and allow cognitive processing of the SCI relatively seamlessly. It may be that individuals who exhibit PTG may, as a result of the meaning making process, come to appraise their situation differently, with their appraisal style fundamentally altering to one that allows them to view the situation in a more adaptive manner. With appraisals potentially linked to coping and outcome, it is essential to examine this area more thoroughly and to consider its application to clinical practice.

2.3 The Need for Greater Understanding of Positive Psychological Outcomes Following SCI

Research into traumatic events must cover a variety of outcomes (Bonanno, 2004). A deeper understanding of the process of positive psychological outcomes in SCI is essential in order to identify those who may be at risk from mental health difficulties following SCI. A greater understanding will inform clinical practice in promoting positive psychological outcomes. An examination of the process is essential when attempting to dissect the mechanisms underlying different positive outcomes, with the ultimate aim of improving therapeutic outcomes for individuals experiencing SCI.

The goal of psychologists' work following a traumatic physical injury is often to support the individual in attaining adaptation and effective coping to the life changes that they may experience (White et al., 2008). Specifically, a central goal of rehabilitation following SCI is societal participation, such as returning to work and participating in the community (Ostir, Ottenbacher, Fried & Guralnik, 2007). Psychological functioning can clearly impact on such functional outcomes (Dean & Kennedy, 2009) and a greater examination of the mechanisms mediating psychological functioning is therefore essential. The concepts of resilience and PTG to rehabilitation psychology is therefore a potentially valuable concept when working with people who have experienced a physical injury, their families, and staff teams (White et al., 2008).

It is essential to examine how individuals who are reporting positive psychological outcomes experience the process of a SCI, and to ascertain which theoretical models can explain this phenomenon. Although resilience has formed the basis of therapeutic approaches (e.g. Padesky 2007; Chesney & Folkman, 1994; Kennedy, 2008), PTG has yet to be transferred into a coherent therapeutic approach for people with SCI.

2.4 Present Study

An understanding of what a positive psychological outcome looks like and how the individual achieves this is essential in promoting the well being of people with SCI, both psychologically and physically. A number of problems exist in the current literature. Current measurement tools and research designs do not appear to gauge the *process* of positive psychological outcome (e.g. Bonanno et al., 2007); moreover they are concerned primarily with identifying a positive psychological outcome with less distinction between these outcomes. Although undoubtedly incredibly valuable, this tells us little about the actual mediating factors associated with appraisals and coping that lead to a positive outcome, and how this fits with existing theory on positive psychological outcome. Resilience and PTG may be frameworks which can help us understand these high functioning individuals following adverse events, especially in relation to potential mediating factors such as appraisals. However, resilience as a construct is still poorly defined and understood, and PTG research is still in its infancy. Little is known about the relationship between the two, and what the course of a positive outcome looks like. This study aimed to investigate the experiences of people with SCI in the longer term post injury who have been identified as showing positive psychological outcomes as defined by lower levels of self-reported distress and endorsing positive appraisals on the ADAPPS (Dean & Kennedy, 2009), as measured in a previous study. The study aimed to produce a qualitative, in depth understanding of the positive psychological outcomes experienced by this cohort, and aimed to examine the factors that may have influenced this process. It attempted to better understand their experiences of positive psychological outcome, and the process they have undergone. The major research questions were

firstly, how do individuals describe their positive outcomes? Secondly, what processes do people go through in order to achieve these positive outcomes? Finally, how do these experiences relate to the literature on positive outcomes?

3. Method

3.1 Participants

Participants were selected from an existing sample of 237 individuals who had experienced SCI and had participated in the Dean and Kennedy (2009) study. Participants were selected on the basis that the reported lower levels of distress, as indicated by scoring in the lowest quartile for both anxiety and depression scores on the HADS (Zigmond & Snaith, 1983) and endorsing the most items on the Growth and Resilience and Personal Agency subscales of the ADAPPS (Dean & Kennedy, 2009) during their participation in a previous study. Based on previous research selection criteria, this group of participants were considered to having shown positive psychological outcomes post SCI. Participants were between two and eleven years post injury, in order to capture individuals in the longer term of their injury. Eleven participants were selected who met this criteria, six of whom responded and participated in the study (four male, two female). Demographic information relating to participants can be seen in Appendix 1. This follows Smith's (2003) recommendations about optimal sample size for an IPA study.

3.2 Design

In order to capture in depth the participants' subjective views, semi-structured interviews analysed using Interpretive Phenomenological Analysis (IPA) were used. The interview schedule can be seen in Appendix 2. Bryant (1996) highlights the importance of understanding the meaning that is attached to an event or concept as being crucial, as opposed to factual or physical information. Using IPA offered this opportunity owing to its emphasis on attempting to understand

the individual's subjective experience of a phenomenon . No quantitative measures during the study were used. This is owing to the small number of participants and to the described difficulties with current measurement tools for positive psychological outcomes. Semi-structured interviews were constructed following a review of the literature. Clinical staff at the recruiting hospital reviewed the questions to ensure their appropriateness. IPA was used in order to further understand the meaning attached to the event (Bryant, 1996). A discussion of the theoretical underpinnings of IPA and consideration of the research in relation to IPA can be found in Appendix 3.

3.3 Procedure

Participants were identified by a research assistant who had ethical approval to access information to the Dean and Kennedy (2009) study. Participants were selected according to the outlined inclusion and exclusion criteria and were approached initially by letter, including a study information sheet. The participant invitation letter and study information sheet can be seen in Appendix 4 and Appendix 5 respectively. Participants were invited to opt into the study. A reminder letter was sent after three weeks, and no further contact was made with non-respondents. Participants who expressed an interest in the study were given the opportunity to discuss participation with the researcher. Further information relating to obtaining informed consent is provided in Appendix 6. Participants were asked to provide written consent (Appendix 7). Interviews were conducted at the participants' home or at the hospital setting. Participants were interviewed according to the interview schedule, although participants had the freedom to discuss issues that they felt were pertinent. Interviews lasted approximately one hour and participants were fully debriefed following the interview and given the researcher's contact details should they require further support. Interviews were audiotaped and transcribed.

In order to acknowledge the researcher as an active participant in the research process (Gough & Finlay, 2003), a reflexive journal was kept and can be seen in Appendix 8. The aim of this was to acknowledge and reflect upon the researcher's construction of the experience and how the researcher may interpret the participants interpreting their own experiences. In order to provide

some background information that may be relevant to the reader in understanding the position of the researcher, a profile of the researcher can be found in Appendix 9. It is acknowledged that in being subjective, another researcher will experience a different construction of the same material. Participants will be sent a letter thanking them for their participation in the research (Appendix 10) and a summary of the research (Appendix 11).

3.4 Measures and Materials

The HADS (Zigmond & Snaith, 1983) and the ADAPPS (Dean & Kennedy, 2009) were used to identify potential participants for the study.

A semi-structured interview schedule was constructed from a review of the literature and in line with the research questions. The semi-structured interview allowed the researcher to ask questions pertinent to the study's research questions, but allowed participants the freedom to discuss issues that were important to them, which is in line with IPA philosophy (Smith, 2003).

An audio-recording device was used to record interviews for transcription.

3.5 Analysis

Interviews were analysed using Interpretative Phenomenological Analysis (IPA). Please refer to Appendix 12 for a detailed account of the process of analysis. The aim of IPA is to aid understanding of how an individual makes sense of their personal and social world (Smith, 2003), creating a subjective account of the individual's experience. IPA also considers not only the content of what the participant says, but also the words chosen and way in which their views are expressed. Hayes (1997) points out that human experience is dynamic and subjective, and IPA views this as being central also in the research process. As such, IPA considers the researcher's role in the process, and highlights that although the approach is phenomenological, the researcher's interpretation is only one approach to the data collected. The researcher's reflective diary (Appendix 8) and profile (Appendix 9) may be helpful in understanding the position of the

researcher. Additionally, Hayes (1997) points out that the experience is also subject to many psychological processes, such as those affecting memory, emotion and cognition, and the social norms and expectations of the participant. It follows that the account given by the participant, then, is experienced as it is remembered and reported. The transcript therefore forms a basis for interpretation and the placement of an individual's experience within a psychological framework.

In line with IPA, audiotapes were transcribed and themes were extracted systematically. An example of an annotated transcript can be found in Appendix 13. Themes were checked by an independent researcher in order to ensure credibility. Themes were agreed to be an accurate reflection of the data, and additional points were discussed between the researchers until agreement was reached. Additional information relating to credibility checks can be found in Appendix 14.

3.6 Ethical Approval

Ethical Approval for the study was provided by the Isle of Wight, Hampshire, Southampton and Portsmouth Research Ethics Committee (See Appendix 15).

4. Results

From analysis of the data, three superordinate themes emerged as important aspects of positive outcomes following SCI, each with several sub themes. These themes can be seen in Figure 1 and will now be discussed in turn. Page number and line in relation to the transcript are included. A full table of quotes supporting each theme can be seen in Appendix 16.

Figure 1. Extracted Themes.

Superordinate theme 1: Living a normal life, just doing things differently.	**Sub theme 1:** Getting back to normality
	Sub theme 2: I'm the same person as before
	Sub theme 3: Unchanged goals and values
	Sub theme 4: Normal ups and downs of life
	Sub theme 5: Different ways of doing things
Superordinate theme 2: Overcoming challenges: Determination to succeed.	**Sub theme 1:** Inner resources
	Sub theme 2: The injury as a tool to be used positively
	Sub theme 3: Acceptance and change
	Sub theme 4: Maturation, growth and time
Superordinate theme 3: Using the resources available to me	**Sub theme 1:** Support from others
	Sub theme 2: Meaningful activity
	Sub theme 3: New skills

4.1 Superordinate Theme 1: Living a Normal Life, Just Doing Things Differently

All participants viewed their lives as carrying on as normal; they saw themselves as ordinary people, getting on with their life in the same way as they would have done without the injury. This did not mean that their injury had not led to changes in their lives, but rather these changes were viewed as just a different way of meeting the same end. Participants saw their fundamental personality as unchanged following the injury and it was important to them that others' perceptions also remained unchanged. These ideas were captured in the sub themes, "Getting back to normality", "I'm the same person as before", "Unchanged goals and values", "Normal ups and downs of life" and "Different ways of doing things".

4.1.1 Sub theme 1: Getting back to normality. Getting back to normal life was not straight forward for all of the participants, and initially involved some anxiety and worry about what their life post-injury would be like. Joseph explains that *"I was upset at the time, you know, you think oh my God, life's ended"* (1:22). This, however, was transient for participants, who then set about the task of getting back to their lives. Dan outlined the challenges faced in returning to normal life: *"Dealing with the physical aspect, the physical changes to your being. Dealing with psychological and psychosocial difficulties, so how do the physical changes impact on you as a person, and your environment, how does that all fit together"* (14: 557). Despite the challenges, participants felt that returning to normality was possible and that they had achieved this.

4.1.2 Sub theme 2: I'm the same person as before. Participants felt that they could return to normal life as they viewed themselves as the same person as before the injury. Martin said, *"Sure enough there was a very serious injury going on here, but the person who is injured is essentially still the same"* (3:89). It was also helpful that others viewed them as the same person. Joseph described that to his children, things have continued as normal: *"Daddy is still dad"* (2:57). Being the same person also meant not having their identities defined by the injury. Victoria describes how

it was important to return to her pre-injury sense of self: *"Going back to being Doctor, as opposed to this poor disabled person"* (8:309). The sense of self was essentially preserved.

4.1.3 Sub theme 3: Unchanged goals and values. Part of normality was retaining a sense of direction in life, and participants described that they retained the same goals and values in life following the injury. Having the same goals and values was crucial in motivating participants to get on with their lives. Chris explains: *"You've got to remember why you are doing it and why you are living a life and got to realise you can still do all the stuff in your chair as well"* (3:105). While for some there was an initial worry that their goals would have been interrupted, this was transient and was replaced with a sense that their goals remained intact. Dan explains how he saw his goals and values pre and post injury: *"It was always about getting a job, it was always about being financially independent, and living a life which I would have lived anyway, according to my values"* (6: 219). This was evidenced by the fact that many of the participants engage in the same activities as they did prior to the injury, that remained important to them.

4.1.4 Sub theme 4: Normal ups and downs of life. Participants felt that they coped with their injury as they coped with life in general; it was thought of as a contributory factor to having bad days, but that was appraised as part of normal life. Joseph said, *"Sometimes I get up in the morning and think, I just don't want to go to work...We all get days like that"* (10: 344). It was reported that all participants had days when they were able to cope with the demands of their injuries better than others. In the acute and rehabilitation phases of the injury, the physical and psychological impact of the injury was seen as being a greater challenge to overcome. However, as participants became adjusted to the injury, these fluctuations in ability to cope were viewed as a normal part of life. Victoria explains that coping with the injury is dynamic and not universally positive: *"I'm sure there are other times when I, and of course, like anyone who has a big life event, there have been times when I have been very low and there have been times when it has been very difficult"* (7: 271). Participants did not see themselves as different to their non-SCI peers in this respect.

4.1.5 Sub theme 5: Different ways of doing things. A large part of continuing with normal life involved finding ways to continue to pursue their goals and values, despite the physical limitations of the injury. Chris noted that this was important in continuing with life*: "Realising that you can do all these things, there's always a way round it"* (1:9). Overwhelmingly, participants discussed that life would continue for them as normal, but that the practicalities of how this happened had changed. For some participants, these changes were not viewed as fundamentally changing one's life. Victoria explains the impact of the injury on her life: *"In one way, of course, it changed my life completely, in that everything was different and I had to do things differently. But in another way, practically in terms of what I was doing, it didn't change my life as much as you might think. I still continued to do that same job, have the same friends"* (2:63). Participants' accounts were inclusive of many of the different ways they had overcome the practicalities of their injury in order to continue with life.

4.2 Superordinate Theme 2: Overcoming Challenges: Determination to Succeed

Participants recognised the severity and potentially life-threatening nature of their injury, and indeed that was described by many of the participants. However, participants tended not to dwell on this aspect of their experience and allocated little time to discussing this. The injury was very much seen as a challenge that needed to and could be overcome, and participants recognised that this was a way of appraising the situation which was not the same for everyone who experiences SCI. Grace explains, *"When you have a spinal injury, you can either give up or go to the moon"* (5:177). Participants felt that they had coped well with their injury, and attributed part of this to their own internal ways of dealing with life stressors in general. Martin explains, *"It's like piling up water, you can pour more water on, momentarily it will pile on, but...whatever happens happens, and I will end up back level again"* (15: 562). This theme describes how participants were able to overcome the challenge of the injury and its impact on their life in relation to internal

factors, including “Inner resources: personality and cognitive style”, “The injury as a tool to be used positively”, “Acceptance and change” and “Maturation, growth and time”.

4.2.1 Sub theme 1: Inner resources: Personality and cognitive style. The inner resources described by participants can be broadly categorised into two main areas: personality style and coping style. Participants generally used words such as determination and drive to describe how they dealt with the challenges post injury, and many participants saw these qualities in themselves prior to the injury. Grace says of her inner determination, *“I won’t let anything beat me”* (15: 511) and Joseph explains his positive outcomes in terms of his personality: *“Being strong willed, I suppose. Strong minded”* (9:20). Participants felt that these qualities had been present during other challenges in their life, and some reported that they had increased in these qualities post-injury.

Participants also described that their “mindset” was helpful in overcoming the challenges presented. Indeed, “challenge” was a word used frequently to describe how the participants viewed difficulties in their life, both relating to the SCI and to other events. Participants said that the way they thought about their injury was crucial. Dan explains how he dealt with the injury: *“Changing the way I saw it, rather than seeing it as oh God, this is a nightmare”* (3:99). It was also evident that participants viewed themselves as able to overcome the challenges faced. Victoria explains this: “*I like overcoming challenges and I feel good about my ability to overcome them”* (12: 471). Participants not only thought about their injury as a challenge to overcome, but also held the belief that they were capable of overcoming them.

It seemed that many of the internal resources described by participants were not just related to coping with their injury. Participants described ways in which they coped generally, which they felt contributed to successful adjustment post injury. Some participants felt that their coping post injury reflected the inner resources they had used to cope with other adverse events. However, this was not true for all participants, some of whom identified experiences before and after their injury which they felt they had not coped so well with.

4.2.2 Sub theme 2: The injury as a tool to be used positively. Part of overcoming the challenges of the injury was to appraise the injury as offering new positive opportunities and experiences. Victoria described how she appraised the injury as offering her positive experiences: *"I've had the opportunity to have some really amazing experiences through that, really rewarding, emotional"* (11: 439). Participants acknowledged that this is something that is up to them to utilise, with Chris explaining, *"I've made that decision that my accident was a shit thing to happen, but it's given me new opportunities in that it's given me new doors and I've taken them"* (5:176). Seeing the injury as a positive, rather than a hindrance, allowed the participants to utilise the injury as a tool to aid their determination.

4.2.3 Sub theme 3: Acceptance and change. Many participants noted that acceptance was crucial in being able to deal with their injury. Victoria said, *"This is what I've got, I just have to get on with it, it's just the way it is"* (19: 770). However, this acceptance was important only in relation to aspects of their life which they felt they had no control over or could not change, such as the extent of the injury. It was important for participants to be able to effect change in areas where this was possible. Martin explains how acceptance of the situation was coupled with a drive to make changes where it would be possible: *"I wasnt angry...I wasnt annoyed either, it was just, how am I going to cope with this and make the best out of it?"* (9:307). Participants felt that they were determined to make changes to their life where they could and where they needed to; this was crucial in achieving their goals.

4.2.4 Sub theme 4: Maturation, growth and change. Participants felt that some of the positive outcomes following their injury were attributable to general psychological processes, such as development over time and maturing as a person. These changes were helpful in overcoming some of the challenges related to the injury. Dan said how he thinks that some of the changes in him would have happened anyway*: "It's not necessarily the injury, it's getting older as well...you grow up and become more comfortable in your own skin"* (7: 266). Martin talked about how it was

important to recognise that the situation is constantly changing, and that in time things would improve. For him it was about *"accepting who you are now, but not accepting it's always going to stay the same"* (14: 501).

4.3 Superordinate Theme 3: Using the Resources Available to Me.

In addition to identifying their own internal processes through which positive outcomes are achieved, the participants identified external mechanisms which they felt they were able to utilise to cope. These were divided into the subthemes of "Support from others", "Meaningful activities" and "new skills". For the participants, there was a recognition that they had actively engaged with activities and support systems that had a reciprocal effect on how they managed life post injury.

4.3.1 Sub theme 1: Support from others. Support from others was overwhelmingly discussed as something that facilitated a positive outcome. There were many sources of this support identified, as Dan describes: *"Family and friends, the peers around me. And the staff. Just the entire social support really. You know, talking about it, seeing the psychologist was really helpful"* (3: 109). It was also useful for participants to meet other people with SCI. Chris said that *"Meeting people who had been injured...it was a nice way to see that life goes on"* (9: 346). What was important in the support was that it encouraged a sense of belief in the individual, and added to their sense that they could overcome their difficulties. Victoria explained the function of the support: *"All I ever got was encouragement. There was never a doubt expressed to me that I couldn't do it"* (3: 120). This support had the effect of bolstering the individuals' sense that they could cope post-injury, in a reciprocal manner.

4.3.2 Sub theme 2: Meaningful activity. Meaning and purpose in life was seen as essential to participants in facilitating positive outcomes. For most of the participants, work was important in providing purpose, in addition to a wide range of interests, activities and voluntary work undertaken. There was a sense that the actual activity itself was unimportant, but it was the meaning

attached and the effect that it had on the individual that was important. Grace said, "*It is important everyday to achieve something"* (21: 758), highlighting the need to keep working towards goals and achieving a sense of value. For other participants, activity was important in staving off boredom and was also reflective of pre-injury interests. Martin talked about the importance of keeping himself busy with activities that are meaningful to him: "*I've got to do something to engage my brain. I couldnt just sit around and gawp at the television"* (7, 253). Having this meaning and engagagement in life was seen as very important to participants.

4.3.3 Sub theme 3: New skills. Participants talked about new skills they had acquired, both before and after their injury, which they attributed to helping them achieve a positive outcome. These ranged from meditation, reiki, increased emotional expression, workshops related to psychological healing, psychological techniques and complementary therapies. Skills learnt prior to the injury were helpful in coping following the injury. Martin explains how meditation was helpful: *"Every time a sound went off, it's just a sound to relax even more. So if you say that sort of thing to yourself while you're lying in a hospital ward, you can just sort of end up deeply relaxed"* (8:290). However, it was not just skills learnt prior to the injury that were helpful. Participants were able to seek out new ways to facilitate positive outcomes following their injury. Dan explains how he learnt new coping strategies post injury to help him overcome difficulties presented by the injury: *"Dealing with frustration has been quite difficult. Because you can't just do it by physical exertion. I found meditation"* (10: 365). Participants recognised that they were able to adequately recognise when they may need to access these skills and were able to utilise them effectively.

5. Discussion:

Using a sample of people who showed lower levels of psychological distress, this research further highlights that positive psychological outcome can be achieved following SCI (e.g. Pollard & Kennedy, 2007). The results will now be discussed in relation to the three research

questions, before going on to consider the clinical and theoretical implications of the study, the directions for future research and finally the limitations of this piece of research.

5.1 How Do Individuals Describe Their Positive Outcomes?

This section describes how the participants in this study who were identified as showing lower levels of anxiety and depression following SCI described these outcomes. It was clear that individuals who are doing well psychologically described a high quality of life, and that post-injury levels of mood were consistent with pre-injury levels, in keeping with previous research (Whiteneck et al., 2006; Murray et al., 2007). The "Living a normal life, just doing things differently" superordinate theme provided a description of the participants' positive outcomes. These were described as continuing with life as normal, although the actual practicalities of going about life may have changed. To participants who were doing well psychologically, a positive outcome meant continuing with their lives, having the same goals and values, although how they went about their life was affected by the practicalities of their injury.

Participants reported that they were very engaged in life, as evidenced by the third superordinate theme, "Using the resources available to me". Part of the positive outcome was engaging in meaningful relationships and activities, and continuing to learn and develop as a person. This is in line with previous research showing that social participation is an important component of recovery following SCI (Kennedy et al., 2010).

However, it is important to note that participants reported some initial levels of distress in the acute phase of their injury, which was transient. For some people, this may have taken the form of appraisals such as those on the "Overwhelming Disbelief" subscale of the ADAPSS. However, participants who did report such initial cognitions described that these were quickly overcome and replaced with what they described as more adaptive cognitions. Indeed, it was notable that the narrative of the participants did not dwell on the negative aspects of their experience. In terms of describing a positive outcome, then, to define positive outcomes purely in terms of an absence of distress (e.g. Bonanno et al., 2007), may serve to oversimplify the

experiences of people who have had a SCI, as this sample of people who are doing well psychologically did indeed identify times when things were more difficult for them.

This distress appeared to be temporary, and participants were able to return to their previous levels of functioning. However, the fact that many participants reported that they sometimes found it harder to cope with their injury than others supports the notion that outcomes are not static following injury. Participants felt that this was part of the everyday fluctuations experienced by many people; that this was normal and expected and not solely attributable to their injury.

Generally, participants described their outcomes in terms of resilience, although they were keen to clarify that this did not meant they were fighting against their injury, but rather it was a challenge to be overcome. Participants were less likely to endorse that experiencing the SCI had lead to a meaning-making process in their lives, although positive changes to their life were reported.

5.2 How Do Individuals Explain Their Positive Outcomes?

The individuals in this sample who showed low levels of anxiety and depression following SCI identified a wide range of both internal and external factors which they felt accounted for the positive outcome. It seemed that time since injury did play a part in facilitating adjustment (Sheffield et al., 1998), with participants reporting that they grew more comfortable with themselves and became more accustomed to different ways of doing things.

Participants identified that social support, appraisal style and coping style were important factors in achieving a positive outcome, as in line with previous studies (Martz et al., 2005). It seemed that the meaning of the SCI was crucial (Folkman & Greer, 2000). The SCI was described as not being threatening to the participants' sense of self or to their life goals, as outlined in the superordinate theme, "Living a normal life, just doing things differently". As the participants were able to retain their sense of self identity, the meaning of the SCI was not a threat to them. This then was linked to the appraisal style identified by participants, with the cognitive aspect of

coping seen to be crucial, as outlined in the "Inner Resources" subtheme and with positive appraisals consistently reported throughout the interviews.

The primary appraisal style of participants seemed to be challenge or benign, with threat appraisals reported only in the acute phase of the injury if at all. Participants used a high number of statements that could be labelled as challenge-appraisals. Indeed, the superordinate theme "Overcoming Challenges: Determination to Succeed" could be seen to map onto the Determined Resolve subscale of the ADAPSS, providing support for this subscale in identifying individuals who show positive psychological outcomes. It was clear that participants all viewed themselves as able to overcome the difficulties that the SCI presented, that they were able to access the resources to do so. This shows a secondary appraisal style which is conducive to adaptive coping and may reflect items on the Personal Agency subscale of the ADAPPS. This corroborates the results of the Dean and Kennedy (2009) study which found associations with challenge appraisal styles and lower levels of anxiety and depression and more generally other studies associating appraisal style with levels of PTSD symptomatology (e.g. Willebrand et al., 2004; Tedstone et al., 1998). Participants identified that these appraisals were linked to factors such as previous experience with disability, for example through family stories and having a pre-injury positive view of the self, providing support for Duff and Kennedy's model (2003).

5.3 How Does This Fit With Current Theory On Positive Outcomes?

By using an approach that accessed the experiences of individuals selected on the basis of positive psychological outcomes, it was possible to assess their experiences in relation to current theoretical knowledge about different positive outcomes. It would seem that adopting a definition of resilience as stable functioning over time (Bonanno, 2004; Bonanno et al., 2001) accurately reflected the trajectories described by participants, and also reflected how participants themselves chose to define resilience. However, it is essential to note that participants did not exclude negative feelings and mood in their description of their positive outcome, and this may have

implications for defining resilience in this sample, and it is important that in defining resilience and positive outcomes we do not oversimplify the experiences of individuals.

In relation to defining posttraumatic growth, the participants in this study did not express that they had undergone a meaning-making process that is crucial to defining a PTG outcome (Tedeschi & Calhoun, 2004). However, individuals did report positive change following SCI. This may have implications for defining positive outcomes that come are in addition to a return to pre-injury psychological functioning, but where a meaning making process does not occur. It seems that for the participants, the meaning making was crucially missing, despite them meeting the definition of identifying positive change following adverse life circumstances (Calhoun & Tedeschi, 1999). Participants generally did not report a major change in their self perception, although they acknowledged that some aspects of their personalities had developed following the SCI, such as becoming more determined. Regarding interpersonal relationships, for many participants these were strong prior to the injury and a significant support factor, and as such participants did not feel that this had undergone a major change. In terms of life philosophy, although participants in some ways altered their outlook on life (e.g. being less money orientated), the general feel was that participants continued to live their lives according to their pre-injury values and goals. Some of these findings overlap with those of the Chun and Lee (2008) study, although this study will not define them in terms of PTG. Despite some aspects of Tedeschi et al.'s (1999) triad of criteria being met, this may not be sufficient to conclude evidence of PTG. For example, some participants noted an increase in the importance of the relationship with their family or a slightly altered worldview. The PTG model mainly emphasises cognitions (Westphal & Bonanno, 2007), whereas it was clear that behaviourally participants were effecting change by continuing to engage in meaningful activity and in some cases doing so with greater frequency than prior to the injury. This may suggest that PTG definitions may want to consider the role of behaviour in the theoretical framework.

The notion that participants expressed in superordinate theme "Living a normal life, just doing things differently" provides evidence for stability in functioning pre and post injury, suggesting that resilience may be defined in terms of a stable trajectory of functioning. The

explanatory factors outlined by participants, in terms of cognitive and personality factors (superordinate theme, "Overcoming challenges: determination to succeed") suggest also that for participants, they were able to utilise internal resources they had prior to their injury, to facilitate positive outcomes, again supporting resilience theories pointing to stable trajectories of functioning. However, crucially, the "new skills" subtheme is evidence that helpful new skills can be learnt to cope with difficulties, both before and after the injury. It may be that resilient individuals are better equipped to acquire these new skills.

The notion that resilience was being able to utilise resources (both internal and external) in adverse circumstances expressed by participants has implications for defining what actually makes someone resilient and highlights the importance of the third superordinate theme, "Using the resources available to me" in achieving a positive outcome. Participants were clear that it was essential to use the external resources available; it may be that these individuals are predisposed to seek out external resources and use them effectively, or it may be that a reciprocal relationship exists whereby people who are doing well psychologically are able to sustain supportive relationships more readily.

5.4 Theoretical Implications

Positive outcomes following SCI are complex, and cannot easily be defined by current conceptualisations of resilience and PTG. This research provides evidence for positive outcomes having a relatively stable trajectory of functioning (Bonanno, 2004), without excluding the presence of transient negative symptomatology and cognitions. What appears to be key is how the individual appraises these dips in functioning (Lazarus & Folkman, 1984), and how they are able to overcome them successfully. Individuals in this study generally rejected the notion of a meaning-making process, seen to be crucial in achieving PTG (Tedeschi & Calhoun, 2004), despite showing growth and development in some areas of their life. The complex interplay of factors impacting on outcome is clear from the participants' accounts of their positive outcomes. This suggests that theoretical models need to be mindful of taking an overly simplistic approach

to understanding people who show less distress following SCI. Important factors contributing to positive outcomes include cognitive, behavioural, personality, environmental and interpersonal factors, suggesting that positive psychological outcomes are achieved through a complex interplay of factors. This has implications for theoretical models of positive outcome following SCI.

5.5 Clinical Implications

On a clinical level, this research has implications for those working with individuals both in the acute and longer term phases of SCI. This research first and foremost provides an account of people experiencing SCI, namely that positive psychological outcomes are possible and are experienced. Although many people who experience SCI do not show clinically diagnosable levels of distress, this has not been reflected in the research into psychological outcomes following SCI until more recently. This provides an important narrative that can be used clinically with people who are showing higher levels of psychological distress following SCI and who may not be coping effectively, and it may be that services and clinicians can use this narrative in innovative ways in order to provide a contrast to more negative perceptions of having an SCI. The use of such information has already been shown to be valuable to people who have experienced SCI (Kennedy & Smithson 2010).

The idea that positive outcomes can be achieved despite initial negative cognitions is something that may important to those working with people with SCI in the acute phase, as it provides a normalising framework for understanding initial distress and evidence that despite this, individuals do go on to achieve positive psychological outcomes. Given that the individuals in this study initially experienced some distress and may have appraised the situation negatively, it is essential to highlight to people experiencing SCI that these feelings and thoughts are often transient and positive psychological outcomes can be achieved. The use of clinical material and empirically based information may be particularly crucial at this stage.

The research also provides a greater understanding of what may be important during the rehabilitation process to facilitate positive psychological outcomes. The combination of inner resources plus external factors such as social support and learning new skills has implications for service provision to people during the rehabilitation phase and beyond, in providing them with resources to access their inner resilience and to be provided with opportunities for external support mechanisms. This supports previous research which highlights the importance of social participation as an important component of rehabilitation.

Given that the research supports the idea that pre-injury psychological functioning may be reflected post-injury, this may have implications for the psychological assessment and formulation of individuals following SCI. The role of appraisals in achieving positive outcomes was highlighted, providing support for the use of appraisal measure such as the ADAPSS to identify those that may be at risk. This could involve administering screening questionnaires to individuals during the rehabilitation process and beyond, in order to monitor the individuals' mood and access their appraisals. This would provide valuable information for any therapeutic intervention that arose subsequently and ensure that services accurately target those in need of psychological support. Given that both cognitive and behavioural aspects were highlighted as being important components of doing well psychologically, this may have implications for the use of psychological support provided to those who need it, highlighting the need to address these aspects of the individual. Clinically, it may be important to develop interventions that focus on appraisal style.

In summary, this research lends support for the development of an assessment and intervention process which assesses the appraisals of the individual in the immediate aftermath of SCI. This will allow identification of those showing appraisal styles which are likely to be conducive to an increased risk of showing psychological distress. The research is also useful in developing interventions which may aid individuals with less adaptive appraisal styles, by focusing on reappraisal processes in addition to the supportive external mechanisms highlighted as useful by participants.

5.6 Future Research

Future research needs to be mindful of the theoretical differences underpinning positive psychological outcomes, and ensuring that definitions adopted accurately describe the phenomenon being studied. Future research could focus on comparing people showing different types of positive outcomes and people who have not shown positive outcomes following SCI to further understand the processes involved. This would lead to a better theoretical understanding of positive outcomes following SCI. Future research could further examine the links between people who do well psychologically and their appraisal style, in particular what predisposes such individuals to appraise events such as SCI positively. The themes found in this research could be examined in relation to individuals experiencing psychological difficulty following SCI. This could lend itself to exploration of therapeutic techniques that aim to foster adaptive appraisal styles following SCI.

5.7 Limitations

Conclusions from this research are tentative and it must be acknowledged that this research study reflects only the experiences of the six participants who took part. This research may be criticised on the grounds that participants essentially self-reported as showing lower levels of distress, a process which may be subject to social psychological processes such as social desirability. It may be that accessing participants through another selection process such as clinician judgement may have aided this.

Owing to the methodology adopted, this study may lack generalisibility to the population as a whole. Given that the participants were identified as showing positive psychological outcomes and lower levels of distress, it may be that the results cannot be merely inverted and applied to those individuals who do not.

Despite clearly having implications for theories relating to positive psychological outcomes following SCI, the methodology does not allow for this piece of research to generate a

theoretical model which accounts for such outcomes. However, this research does provide some interesting questions which may be followed up in subsequent research.

6. Conclusions

Tentative yet important conclusions can be drawn from this study. The journey of individuals who show positive psychological outcomes following SCI are complex and dynamic, and not without difficulties psychologically. However, it seems that these difficulties may be transient and the individuals feel confident in their abilities to overcome them and continue with their lives according to pre-injury goals and values. Participants view their ability to do this as being a combination of internal and external factors, with appraisal style and social support notably being important to participants. This has both theoretical and clinical implications. Theoretically, this research provides a greater understanding of what a positive outcome looks like to individuals described as achieving it, which can impact upon definitions and frameworks used. Clinically, this study provides a greater understanding of what facilitates a positive outcome which may be useful to professionals working in this field, to provide a normalising and positive narrative of individuals who have been able to adjust psychologically following SCI. It is essential that the literature continues to learn from individuals who show these positive outcomes, in order develop more effective ways of identifying and treating those individuals who do not.

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Appendix 1

Appendix 1: Participant Demographic Information

Participant	Gender	Age	Type of injury	Time since injury	Employment status
1	Female	34	Complete paraplegia	10.6	Employed full time
2	Female	65	Incomplete tetraplegia	3.1	Retired
3	Male	53	Incomplete paraplegia	6.4	Employed part time
4	Male	30	Incomplete tetraplegia	10.4	Employed full time
5	Male	25	Incomplete paraplegia	5.6	Employed full time
6	Male	37	Complete paraplegia	2.4	Employed full time

To protect participant anonymity, the participant demographic information has not been matched up to the quotations used in the study.

Appendix 2

Appendix 2: Interview Schedule

Interview Schedule:

A semi-structured interview schedule will be used, in order to cover the main areas of interest while allowing participants to express themselves. Prompts and example questions as outlined will be used as appropriate. The interview schedule is not rigid and may be used flexibly by the researcher.

The interview aims to capture a sense of the trajectory experienced by the individual, as may be explained by resilience and posttraumatic growth theory. It also aims to seek out the appraisals used by the individuals so that this may be compared to theories on positive psychological outcomes. This aims to generate an understanding of the experiences of people who have indicated positive psychologcial outcomes and associated appraisals.

Questions to elicit the individual's understanding of their injury and it's general effect on their life:

Can you tell me about your injury?

Prompts: Thoughts, feelings and behaviour relating to the SCI?

Can you tell me about how the injury has effected your life?

Prompts: Have there been any positive changes to your life since your injury?

How did you make sense of your injury?

Prompts: How did you come to terms with your injury?

Questions to elicit appraisals about the self relating to their views of how they have managed their injury:

Can you describe how you coped with your inury?

How well do you think you have coped with your injury?

Prompts: In what ways do you think you have coped well?

What do you think the challenges are for someone with SCI?

Prompts: How have these challenges been different for you compared to other people with SCI? How do you think you differ from how other people may cope with a SCI? Do you think you have coped better or worse than others?

What is the alternative to managing it well?

Prompts: How else could you have coped with the injury?

Questions relating to pre-injury capacity and capability to deal with stressors:

Did you have much experience dealing with stressful or difficult life events before your injury?

Prompts: How did you manage previous life events that were challenging?

How do you think generally you cope with life stressors?

Prompts: What helped/hindered you coping with life stressors before your injury?

Did your ability to manage the SCI match up to your ability to cope with difficult events before your injury?

Prompts: In what ways was your ability different or the same?

Questiong relating to managing during the acute phase of the injury:

How did you initially make sense of your injury?

Prompts: What did your injury initially mean to you?

How did you manage your injury during the rehabilitation stage?

Prompts: Thoughts, feelings and behaviour?

How did you manage your injury post-discharge?

Prompts: Thoughts, feelings and behaviour?

Questions related to longer term management of the injury:

e.g.

How have you make sense of the injury that you experienced?

Do you think the injury has changed you as a person?

Has your injury affected your relationships with others?

Has your injury affected your life philosophy?

Has your injury affected your spiritual/religious beliefs?

How have any changes affected your life? Do you do things differently? Do you feel differently?

Has your sense of self changed since your injury?

What do you attribute any changes in yourself to?

What do you think has helped you manage your injury?

What do you think may hinder people's management of their injury?

How would you describe your personality? Do you think this has changed throughout the course of managing your injury?

Resilience is a word often used to describe people who don't experience significant distress following a traumatic event and are able to function well psychologically generally. Would you describe yourself as resilient?

What does being resilient mean to you? What made you resilient? Have you always been resilient?

Some people experience a big change in the way they view life and themselves following a trauma. They may go through a period of thinking about their beliefs about the world and these may change radically. Would you say this applied to you?

General prompts relating to all time points:

Cognitive Questions:

What were your thoughts about your self or your injury at this point?

Has the way you think about your injury changed?

Behavioural Questions:

What kind of things were you doing at this point?

Have you noticed changes in the things you do following your injury, other than anything that may be restricted because of physical injury?

Has your desire to engage in activities altered in any way?

Can you tell me about any changes in your interests you may have experienced since your injury?

Affective questions:

What kind of feelings did you have?

Have you noticed changes in your mood in the period since your injury?

At the end of the interview:

- Thank participants for their input
- Gain consent for the content of the interview to be used
- Provide details of support available should they need it
- Provide contact details of researcher
- Offer the opportunity for a transcript of the interview and a copy of the results

Appendix 3

Appendix 3: Research Methodology: Additional Information

Qualitative methodology aims to develop an understanding of a phenomenon through accessing the thoughts and experiences expressed by individuals. Such approaches may attempt to access the meaning that is ascribed by an individual to an experience (Bryant, 1996). The research is exploratory and investigative and may be suited to areas of research where there is little available current evidence. Qualitative research may gain data through a variety of methods, both oral and through mediums such as writing.

Interpretative Phenomenological Analysis

The aim of IPA is to understand how individuals make sense of their personal and social world (Smith, 2003), creating a subjective account of individual experience. The main concepts in IPA are phenomenology and symbolic interactionism (Smith, 1996). Willig (2001) describes phenomenology as the process through which humans gain knowledge of the world around them, whereas symbolic interactionism is based on the idea that the meaning that is ascribed to experience is subjective and based on the individual's interpretation (Smith, 1996).

IPA aims to explore the experiences of individuals in relation to specific events. The interpretation of the individual will also be influenced by the research process itself, and the researcher themselves will add another layer of interpretation to the data that is collected. IPA aims to present the individual's understanding of their experience, this will inevitably be affected by the researcher's own background, experiences, beliefs and culture. The data collected using this methodology will also be subject to psychological processes such as those involving memory and cognition, social norms, and the expectations of the individual (Hayes, 1997). The raw data therefore forms the basis for the researcher to interpret the participant's experience and place it within appropriate psychological frameworks.

IPA does not attempt to create a generalised or objective account of experience (Smith & Osborn, 2003) and therefore a limitation of this approach is that the data can only specifically be

applied to the individual participants. However, the researcher can make comparisons to current theory and evidence, without claiming generalisibility.

IPA as a technique is still in development and as such, the exact method of the approach can offer some flexibility and creativity.

IPA and the Current Study

IPA was selected as the methodology of choice for this study owing to the exploratory nature of the research questions. The research aimed to understand at a phenomenological level how individuals described and experienced their positive psychological outcomes, at a level of detail which is rich and can provide an understanding of the processes involved in achieving this outcome. Qualitative research, therefore was deemed to be more suitable, and IPA in particular.

Additional References:

Smith, J. A. (1996). Beyond the divide between cognition and discourse: using interpretative phenomenological analysis in health psychology *Psychology & Health, 11,* 261-71.

Smith, J.A. & Osborn, M., (2003) Interpretative phenomenological analysis. In J. A. Smith (Ed.) *Qualitative Psychology*. London: Sage.

Willig, C. (2001). *Introducing Qualitative Research in Psychology: Adventures in Theory and Method*. Buckingham: Open University Press.

Appendix 4:

Study Invitation Letter

Appendix 5:

Study Information Sheet

Appendix 6

Appendix 6: Procedure for Obtaining Informed Consent

Research participants were sent out an information sheet with the participant invitation letter. Participants who opted to receive further information regarding the study were given the opportunity for discussion over the telephone or email. If participants were still happy to meet with the researcher, the study information sheet was discussed, and the participant was taken through the consent process. It was highlighted that the participant could terminate the interview or withdraw from the study at any time without having to give a reason. Confidentiality was revisited at the beginning of the interview, with participants reminded that direct quotes would be used in the write up, but this would not identify them personally. Their decision to participate would have no effect on their care. All participants gave written consent to participate. A copy of this consent form is included as an Appendix.

Appendix 7:

Consent Form

Appendix 8

Appendix 8: Reflective Journal: Excerpts from reflective diary

June 2nd (Year 2): Today we had a lecture by George Bonanno. It struck me that many of the studies assume a trajectory can be explained by a single phenomenon – eg recovery. But I was thinking that the recovery trajectory can be explained by other processes, PTG, repressive coping styles etc. Determining which is the best explanatory factor is difficult and I dont think outcomes should all be lumped together without consideration for the process. I think this is what I want to capture in my study and this will impact on my interview schedule. I really want to make sure that my study captures the journey and experience that the participants have been on, both before and after their injury. This reinforces the methodology I have chosen as being appropriate.

Bonanno also talked about PTG as being not grounded in evidence. He felt that there was no empirical studies supporting any tangible effects of such a process. By this I assume he means outcome data showing the effects of PTG cognitions on behaviour and mood. My understanding is that there is evidence of self-reported PTG-style cognitions – ie people say things that fit with the PTG framework. I guess from a CBT model, if they are having the cognitions then it may be reasonably be expected that this would impact on their mood and behaviour. Another explanation may be illusory mental health – these PTG congitions are illusions or socially desirable statements. However, from my MSc study I'm not sure this is the case – there is evidence of people saying how rubbish their lives have been – obviously I guess not everyone is effected equally by processed of social psychology! I want to make sure I am including thoughts and feelings and behaviours to take into account this point.

June 8th (Year 2): I got approval conditionally for my proposal today – this was great news! I found a lot more stuff to read on related concepts which will be useful to my paper A, however, I dont want to get too bogged down with using it all in paper B interview schedule as it could go on forever! Many of the concepts seem to relate to personality traits e.g. hardiness, optimism, which I am not really looking to include in this study – I am more interested in the

focus on process issues. This is having a knock on effect on my interview schedule, I want to keep questions as open and process focused as possible, and not use specific leading questions from any particular scale.

I have been reading a lot about positive emotion and the effect on health today. The literature seems to implicity suggest that expression of positive emotion may be a personality trait and that may predict outcome. However, it could be that an expression of positive emotion may be indicative of good things having happened to you – e.g. in diary studies where positive emotion predicts longevity of life. An interesting analysis would be to look at positive life events for each person.

March 5th (Year 3): I have started the process of transcribing today. It has made me reflect on my interviewing style both as a researcher and as a clinician; the differences between the two and how my style has been more clinical throughout the interviews. This surprised me as I felt during the interviews I was mindful of this. I know IPA is about the participant talking about what is important to them, and I think it is telling the way some of the particpants chose to focus on certain topics and refer to these in their answers to a variety of questions. I also made the mistake of thinking that just becuase an area had been touched upon, that I didnt have to ask the question. This may have been avoided had I transcribed the interviews a bit at a time. I can start to see themes emerging but am getting too caught up in the obvious themes. It struck me today that having a dominant story in iteself could be a theme, that participants keep going back to the same topic eg the journey, hobbies etc.

March 31st (Year 3): Epoche: I am wondering how, being so immersed in the literature, it is going to be possible for me to suspend all of my judgements etc when performing the analysis! I have always based my thinking on that individuals can never truely be objective, which is what epoche asks of us? Or does it merely want us to acknowledge our biases and reflect upon them? I guess this is why I am keeping this diary. Phenomenological reduction appears to map onto my research question of how are the positive psychological outcomes experienced, ie a

descriptive account. Imaginative variation, ie the how are these experienced map onto my second research question of how/process issues. I was hearteneed by Moustakas (1994) experience of participants not fully being able to express themselves in the way that was asked f them in the interview, as I felt this is also my experience with my participants. I think the contents of the schedule were too jargony and psychological and participants failed to fully understand the concepts I was aking them about.

April 2nd (Year 3): Analysis. I was worried reading through the transcripts that some people had gone totally off topic and I had let them. Though when I read more about analysis and considered that they are talking about what is important to them, I wondered if this was a reflection of them not wanting to be defined by their injury. That it was more important for them to be a good storyteller, to entertain, to talk about their passions in life, than to talk about themselves as being defined by their injury. This was very interesting, and I thought about this in relation to clients I have seen where whole sessions have been entirely problem-focused and I have struggled to move them away onto other subjects or indeed to draw out positive and exceptions. I almost didnt have to ask explicitly about positives in this sample, they gave them to me easily! I wonder how this relates to more positive-focused therapy such as solution focused?

I was considering writing up the paper and how I was going to have to be cautious in my wording of it. I didnt want to make negative comparisons between the people in my study and the people who werent doing well psychologically, and had to be mindful of that.

April 3rd (Year 3): Analysis. I am struggling to see how all of the richness can be condensed into one paper! I will be missing out so much. It seems to me that having a positive outcome doesnt mean negative emotions arent present, and struggles are ongoing. People dont view their lives as free of misery or hardships, and people are still striving towards their goals. But what seems to be evident is that the narrative is not problem focused, it is strength focused and laden with positive appraisals. There is an overwhelming sense that yes life can be hard, but there is the belief that these are challenges to be overcome. This is reflected not only in terms of

the SCI but in a wide range of life events. The personality factors therefore appear to be stable and coping strategies generally are stable. Particpants seem to generally have a positive self image, both about themselves in general and in their abilities to cope.

April 5th (Year 3): In terms of themes, I am learning that a characteristic doesnt have to be a theme i.e. all participants are determined. Moreover it canbe things like, participants explained their positive outcomes in terms of personality characteristics. It strikes me as though most people pre-injury had "resilient" personality types and coped well in general with stressors, prositively appraising things as challenges to be overcome. However, this did not exclude dips in functioning and a flexibility in learning new ways of coping, and applying these as necesary – implications for resilience based clinical interventions. All participants discussed a willingness to better themselves psychologically, as evidenced by a willingness to explore and use alternative coping strategies.

April 14th (Year 3): IPA teaching – I didnt realised actually how much counted as validity / credibility checks...literature review, careful consideration of the data, discussion with ML, PK, AR, other trainees etc. Idea about putting context info is useful too, ie where the study came from. Good idea to start with themes. Tried to come up with a higher level of analysis too early – need to keep themes open at an early level and then go more interpretative, then theoretical. Helpful to ask, what is important to this person, what are they telling me about what this means to them?

Themes around control over a situation vs not having a choice, marrying having an internal locus of control with accepting what there is no control over. Mixture of the two – appraisals!! Living a normal life but doing things differently. SCI as non-defining. Ups and downs as normal life. Maturation, growing, dealing with life. Changing perceptions: of own view of disability, of self? Others view of them? SCI as not focal point of life.

April 19th (Year 3): Meeting to discuss themes. Got me thinking about choosing theme titles. I really wanted to ensure my analysis stuck closely to what the participant says, as I feel quite strongly about the ethos of the research and the methodology and what I am trying to achieve with the study. I think therefore I want to keep my theme titles close to the participant's experience, and add the layer of theoretical interpretation and labels in the discussion.

Additional References

Moustakas, C. E. (1994). Phenomenological Research Methods. New York: Sage.

Appendix 9

Appendix 9: Background Profile of Researcher

Given that the researcher will interpret the transcripts and therefore offers another layer of meaning making to the words of the participants, it is essential that the background of the researcher is considered. This section will outline relevant background information that will aid the reader in understanding the perspective of the researcher.

I am a third year Trainee Clinical Psychologist. My interests generally have always been within the links between physical and psychological health, and I completed a Masters dissertation looking at posttraumatic growth following burns injury. I am very keen to follow the emerging paradigms of positive psychology, and in terms of my clinical practice I am very influenced by strength-based work. My specialist year has been working in paediatric services, with children and their families who have experienced physical illness. This has allowed me to utilise models of positive psychology and ideas about resilience and growth in my work, and I am very much interested in clinical interventions based on such frameworks. I hope to continue researching areas linking psychological and physical wellbeing in the future, and applying the theory and evidence to my practice.

On a personal level, I have experienced a traumatic injury myself and my mother has experienced a relatively minor spinal cord injury. I think these experiences have taught me a lot about dealing with physical difficulties and also the impact such an event can have on life, both in psychological and practical terms. I think I have had a lot of experiences which have made me extremely compassionate as a person, and I think this has influenced the areas that I have subsequently gone on to work in and research.

I have previously conducted an IPA study, although this was several years ago and there is a far wider literature on the methodology and many more examples of pieces of work using IPA.

Appendix 10

Appendix 10: Letter to Participants

Draft Copy

Dear Participant,

Thank you once again for your recent participation in my study, exploring the experiences of people who show positive psychological outcomes following spinal cord injury. I have now completed my study and have submitted a full write up, as part of the fulfilment of the requirements of the Oxford Doctoral Course in Clinical Psychology.

I very much enjoyed conducting this piece of research, and I feel it will have important implications for the psychological care of people following spinal cord injury. I hope that this research will contribute to an understanding of the mechanisms through which individuals are able to overcome the challenges faced by experiencing a spinal cord injury, and this will inform clinical interventions for individuals who experience difficulty.

I have enclosed a summary of my submitted report, along with a copy of your individual transcript, if you requested one. I hope you will enjoy reading these. I have tried to present an accurate account of your individual experiences through drawing on common themes between your stories. If you are interested in reading the full report (around 10,000 words), please let me know and I can forward you a copy of this.

I hope that I will be able to submit this research for publication in a journal related to the area of spinal cord injury, and aim to present the findings to staff at Stoke Mandeville Hospital.

Once again, thank you for your participation in this study. Please do not hesitate to contact me if you have any questions or comments.

Yours Sincerely,

Helen Griffiths

Trainee Clinical Psychologist

Appendix 11

Appendix 11: Summary of Study

Draft Copy

Introduction

Experiencing a spinal cord injury (SCI) can have a wide-ranging effect on the life of an individual, leading to major life adjustments. Understanding psychosocial functioning in relation to this group of people is essential given the well documented interactions between psychological and physical health. Although some individuals experience psychological distress following SCI, a large proportion of people are able to continue with their daily lives and report little or no levels of psychological difficulty. Research historically has focused on individuals who show psychological distress, and only more recently has research and theory turned to those who do well psychologically. It is essential to further understand the experiences of people who report low levels of psychological distress; how they describe their psychological outcomes and how they explain the process through which such outcomes were achieved. This study aimed to investigate the experiences of individuals who report low levels of psychological distress, with the hope that a greater understanding will be clinically beneficial in identifying and treating those experiencing distress.

Method

Participants

Participants were selected from an existing sample of individuals who had experienced SCI and had participated in the Dean & Kennedy (2009) study. Participants were selected on the basis that the reported lower levels of distress during their participation in a previous study. Participants were sent out study information sheets and asked to opt in to the study.

Participants were between two and eleven years post injury, in order to capture individuals in the longer term of their injury. Two females and four males participated in this study. six of whom responded and participated in the study (four male, two female).

Design

In order to capture in depth the participants' subjective views, semi-structured interviews were used. Semi-structured interviews were constructed following a review of the literature. Clinical staff at Stoke Mandeville Hospital reviewed the questions to ensure their appropriateness.

Procedure

Participants who expressed an interest in the study were given the opportunity to discuss participation with the researcher. Interviews were conducted at the participants' home or at Stoke Mandeville Hospital. Interviews lasted approximately one hour and participants were fully debriefed following the interview and given the researcher's contact details should they require further support. Interviews were audiotaped and transcribed.

Analysis

Interviews were analysed using Interpretative Phenomenological Analysis (IPA). The aim of IPA is to aid understanding of how an individual makes sense of their personal and social world (Smith, 2003), creating a subjective account of the individual's experience.

Ethical Approval

Ethical Approval for the study was provided by the Isle of Wight, Hampshire, Southampton and Portsmouth Research Ethics Committee.

Results

From analysis of the data, three superordinate themes emerged as important aspects of positive outcomes following SCI, each with several sub themes. These themes can be seen in Figure 1 and will now be discussed in turn. Page number and line in relation to the transcript are included.

Figure 1. Extracted Themes.

Superordinate theme 1: Living a normal life, just doing things differently.	**Sub theme 1:** Getting back to normality
	Sub theme 2: I'm the same person as before
	Sub theme 3: Unchanged goals and values
	Sub theme 4: Normal ups and downs of life
	Sub theme 5: Different ways of doing things
Superordinate theme 2: Overcoming challenges: Determination to succeed.	**Sub theme 1:** Inner resources
	Sub theme 2: The injury as a tool to be used positively
	Sub theme 3: Acceptance and change
	Sub theme 4: Maturation, growth and time
Superordinate theme 3: Using the resources available to me	**Sub theme 1:** Support from others
	Sub theme 2: Meaningful activity
	Sub theme 3: New skills

4.1 Superordinate Theme 1: Living a Normal Life, Just Doing Things Differently

All participants viewed their lives as carrying on as normal; they saw themselves as ordinary people, getting on with their life in the same way as they would have done without the injury. This did not mean that their injury had not led to changes in their lives, but rather these changes were viewed as just a different way of meeting the same end. Participants saw their fundamental personality as unchanged following the injury and it was important to them that others' perceptions also remained unchanged. These ideas were captured in the sub themes, "Getting back to normality", "I'm the same person as before", "Unchanged goals and values", "Normal ups and downs of life" and "Different ways of doing things".

4.1.1 Sub theme 1: Getting back to normality. Getting back to normal life was not straight forward for all of the participants, and initially involved some anxiety and worry about what their life post-injury would be like. Joseph explains that *"I was upset at the time, you know, you think oh my God, life's ended"* (1:22). This, however, was transient for participants, who then set about the task of getting back to their lives. Dan outlined the challenges faced in returning to normal life: *"Dealing with the physical aspect, the physical changes to your being. Dealing with psychological and psychosocial difficulties, so how do the physical changes impact on you as a person, and your environment, how does that all fit together"* (14: 557). Despite the challenges, participants felt that returning to normality was possible and that they had achieved this.

4.1.2 Sub theme 2: I'm the same person as before. Participants felt that they could return to normal life as they viewed themselves as the same person as before the injury. Martin said, *"Sure enough there was a very serious injury going on here, but the person who is injured is essentially still the same"* (3:89). It was also helpful that others viewed them as the same person. Joseph described that to his children, things have continued as normal: *"Daddy is still dad"* (2:57). Being the same person also meant not having their identities defined by the injury. Victoria describes how

it was important to return to her pre-injury sense of self: *"Going back to being Doctor, as opposed to this poor disabled person"* (8:309). The sense of self was essentially preserved.

4.1.3 Sub theme 3: Unchanged goals and values. Part of normality was retaining a sense of direction in life, and participants described that they retained the same goals and values in life following the injury. Having the same goals and values was crucial in motivating participants to get on with their lives. Chris explains: *"You've got to remember why you are doing it and why you are living a life and got to realise you can still do all the stuff in your chair as well"* (3:105). While for some there was an initial worry that their goals would have been interrupted, this was transient and was replaced with a sense that their goals remained intact. Dan explains how he saw his goals and values pre and post injury: *"It was always about getting a job, it was always about being financially independent, and living a life which I would have lived anyway, according to my values"* (6: 219). This was evidenced by the fact that many of the participants engage in the same activities as they did prior to the injury, that remained important to them.

4.1.4 Sub theme 4: Normal ups and downs of life. Participants felt that they coped with their injury as they coped with life in general; it was thought of as a contributory factor to having bad days, but that was appraised as part of normal life. Joseph said, *"Sometimes I get up in the morning and think, I just don't want to go to work...We all get days like that"* (10: 344). It was reported that all participants had days when they were able to cope with the demands of their injuries better than others. In the acute and rehabilitation phases of the injury, the physical and psychological impact of the injury was seen as being a greater challenge to overcome. However, as participants became adjusted to the injury, these fluctuations in ability to cope were viewed as a normal part of life. Victoria explains that coping with the injury is dynamic and not universally positive: *"I'm sure there are other times when I, and of course, like anyone who has a big life event, there have been times when I have been very low and there have been times when it has been very difficult"* (7: 271). Participants did not see themselves as different to their non-SCI peers in this respect.

4.1.5 Sub theme 5: Different ways of doing things. A large part of continuing with normal life involved finding ways to continue to pursue their goals and values, despite the physical limitations of the injury. Chris noted that this was important in continuing with life*: "Realising that you can do all these things, there's always a way round it"* (1:9). Overwhelmingly, participants discussed that life would continue for them as normal, but that the practicalities of how this happened had changed. For some participants, these changes were not viewed as fundamentally changing one's life. Victoria explains the impact of the injury on her life: *"In one way, of course, it changed my life completely, in that everything was different and I had to do things differently. But in another way, practically in terms of what I was doing, it didn't change my life as much as you might think. I still continued to do that same job, have the same friends"* (2:63). Participants' accounts were inclusive of many of the different ways they had overcome the practicalities of their injury in order to continue with life.

4.2 Superordinate Theme 2: Overcoming Challenges: Determination to Succeed

Participants recognised the severity and potentially life-threatening nature of their injury, and indeed that was described by many of the participants. However, participants tended not to dwell on this aspect of their experience and allocated little time to discussing this. The injury was very much seen as a challenge that needed to and could be overcome, and participants recognised that this was a way of appraising the situation which was not the same for everyone who experiences SCI. Grace explains, *"When you have a spinal injury, you can either give up or go to the moon"* (5:177). Participants felt that they had coped well with their injury, and attributed part of this to their own internal ways of dealing with life stressors in general. Martin explains*, "It's like piling up water, you can pour more water on, momentarily it will pile on, but...whatever happens happens, and I will end up back level again"* (15: 562). This theme describes how participants were able to overcome the challenge of the injury and its impact on their life in relation to internal

factors, including “Inner resources: personality and cognitive style”, “The injury as a tool to be used positively”, “Acceptance and change” and “Maturation, growth and time”.

4.2.1 Sub theme 1: Inner resources: Personality and cognitive style. The inner resources described by participants can be broadly categorised into two main areas: personality style and coping style. Participants generally used words such as determination and drive to describe how they dealt with the challenges post injury, and many participants saw these qualities in themselves prior to the injury. Grace says of her inner determination, *“I won’t let anything beat me”* (15: 511) and Joseph explains his positive outcomes in terms of his personality: *“Being strong willed, I suppose. Strong minded”* (9:20). Participants felt that these qualities had been present during other challenges in their life, and some reported that they had increased in these qualities post-injury.

Participants also described that their “mindset” was helpful in overcoming the challenges presented. Indeed, “challenge” was a word used frequently to describe how the participants viewed difficulties in their life, both relating to the SCI and to other events. Participants said that the way they thought about their injury was crucial. Dan explains how he dealt with the injury: *“Changing the way I saw it, rather than seeing it as oh God, this is a nightmare”* (3:99). It was also evident that participants viewed themselves as able to overcome the challenges faced. Victoria explains this: “*I like overcoming challenges and I feel good about my ability to overcome them”* (12: 471). Participants not only thought about their injury as a challenge to overcome, but also held the belief that they were capable of overcoming them.

It seemed that many of the internal resources described by participants were not just related to coping with their injury. Participants described ways in which they coped generally, which they felt contributed to successful adjustment post injury. Some participants felt that their coping post injury reflected the inner resources they had used to cope with other adverse events. However, this was not true for all participants, some of whom identified experiences before and after their injury which they felt they had not coped so well with.

4.2.2 Sub theme 2: The injury as a tool to be used positively. Part of overcoming the challenges of the injury was to appraise the injury as offering new positive opportunities and experiences. Victoria described how she appraised the injury as offering her positive experiences: *"I've had the opportunity to have some really amazing experiences through that, really rewarding, emotional"* (11: 439). Participants acknowledged that this is something that is up to them to utilise, with Chris explaining, *"I've made that decision that my accident was a shit thing to happen, but it's given me new opportunities in that it's given me new doors and I've taken them"* (5:176). Seeing the injury as a positive, rather than a hindrance, allowed the participants to utilise the injury as a tool to aid their determination.

4.2.3 Sub theme 3: Acceptance and change. Many participants noted that acceptance was crucial in being able to deal with their injury. Victoria said, *"This is what I've got, I just have to get on with it, it's just the way it is"* (19: 770). However, this acceptance was important only in relation to aspects of their life which they felt they had no control over or could not change, such as the extent of the injury. It was important for participants to be able to effect change in areas where this was possible. Martin explains how acceptance of the situation was coupled with a drive to make changes where it would be possible: *"I wasnt angry...I wasnt annoyed either, it was just, how am I going to cope with this and make the best out of it?"* (9:307). Participants felt that they were determined to make changes to their life where they could and where they needed to; this was crucial in achieving their goals.

4.2.4 Sub theme 4: Maturation, growth and change. Participants felt that some of the positive outcomes following their injury were attributable to general psychological processes, such as development over time and maturing as a person. These changes were helpful in overcoming some of the challenges related to the injury. Dan said how he thinks that some of the changes in him would have happened anyway*: "It's not necessarily the injury, it's getting older as well...you grow up and become more comfortable in your own skin"* (7: 266). Martin talked about how it was

important to recognise that the situation is constantly changing, and that in time things would improve. For him it was about *"accepting who you are now, but not accepting it's always going to stay the same"* (14: 501).

4.3 Superordinate Theme 3: Using the Resources Available to Me.

In addition to identifying their own internal processes through which positive outcomes are achieved, the participants identified external mechanisms which they felt they were able to utilise to cope. These were divided into the subthemes of "Support from others", "Meaningful activities" and "new skills". For the participants, there was a recognition that they had actively engaged with activities and support systems that had a reciprocal effect on how they managed life post injury.

4.3.1 Sub theme 1: Support from others. Support from others was overwhelmingly discussed as something that facilitated a positive outcome. There were many sources of this support identified, as Dan describes: *"Family and friends, the peers around me. And the staff. Just the entire social support really. You know, talking about it, seeing the psychologist was really helpful"* (3: 109). It was also useful for participants to meet other people with SCI. Chris said that *"Meeting people who had been injured...it was a nice way to see that life goes on"* (9: 346). What was important in the support was that it encouraged a sense of belief in the individual, and added to their sense that they could overcome their difficulties. Victoria explained the function of the support: *"All I ever got was encouragement. There was never a doubt expressed to me that I couldn't do it"* (3: 120). This support had the effect of bolstering the individuals' sense that they could cope post-injury, in a reciprocal manner.

4.3.2 Sub theme 2: Meaningful activity. Meaning and purpose in life was seen as essential to participants in facilitating positive outcomes. For most of the participants, work was important in providing purpose, in addition to a wide range of interests, activities and voluntary work undertaken. There was a sense that the actual activity itself was unimportant, but it was the meaning

attached and the effect that it had on the individual that was important. Grace said, "*It is important everyday to achieve something"* (21: 758), highlighting the need to keep working towards goals and achieving a sense of value. For other participants, activity was important in staving off boredom and was also reflective of pre-injury interests. Martin talked about the importance of keeping himself busy with activities that are meaningful to him: "*I've got to do something to engage my brain. I couldnt just sit around and gawp at the television"* (7, 253). Having this meaning and engagagement in life was seen as very important to participants.

4.3.3 Sub theme 3: New skills. Participants talked about new skills they had acquired, both before and after their injury, which they attributed to helping them achieve a positive outcome. These ranged from meditation, reiki, increased emotional expression, workshops related to psychological healing, psychological techniques and complementary therapies. Skills learnt prior to the injury were helpful in coping following the injury. Martin explains how meditation was helpful: *"Every time a sound went off, it's just a sound to relax even more. So if you say that sort of thing to yourself while you're lying in a hospital ward, you can just sort of end up deeply relaxed"* (8:290). However, it was not just skills learnt prior to the injury that were helpful. Participants were able to seek out new ways to facilitate positive outcomes following their injury. Dan explains how he learnt new coping strategies post injury to help him overcome difficulties presented by the injury: *"Dealing with frustration has been quite difficult. Because you can't just do it by physical exertion. I found meditation"* (10: 365). Participants recognised that they were able to adequately recognise when they may need to access these skills and were able to utilise them effectively.

Discussion:

How Do Individuals Describe Their Positive Outcomes?

Participants generally described their quality of life as high, and psychological functioning was consistent with pre-injury levels. Participants were described as continuing with

life as normal, although the actual practicalities of going about life may have changed. To participants who were doing well psychologically, a positive outcome meant continuing with their lives, having the same goals and values, although how they went about their life was affected by the practicalities of their injury.

However, it is important to note that participants reported some initial levels of distress in the acute phase of their injury, which was transient. This distress appeared to be temporary, and participants were able to return to their previous levels of functioning. However, the fact that many participants reported that they sometimes found it harder to cope with their injury than others supports the notion that outcomes are not static following injury. Participants felt that this was part of the everyday fluctuations experienced by many people; that this was normal and expected and not solely attributable to their injury.

How Do Individuals Explain Their Positive Outcomes?

It seemed that time since injury did play a part in facilitating adjustment, with participants reporting that they grew more comfortable with themselves and became more accustomed to different ways of doing things.

Participants identified that social support, appraisal style and coping style were important factors in achieving a positive outcome. It seemed that the meaning of the SCI was crucial. The SCI was described as not being threatening to the participants' sense of self or to their life goals. As the participants were able to retain their sense of self identity, the meaning of the SCI was not a threat to them. This then was linked to the appraisal style identified by participants, with the cognitive aspect of coping seen to be crucial. Participants generally viewed the SCI as a challenge to be overcome, rather than a threat. Participants were also able to view themselves as capable of overcoming the challenges presented in their life.

Theoretical Implications

Current theories accounting for positive psychological outcomes may not necessarily reflect the complexity and richness of experience as outlined by the participants in this study. Theoretical models need to be developed to accurately represent the explanatory factors identified by participants.

Clinical Implications

This study provides evidence of positive psychological outcomes which can be used clinically during the rehabilitation process following SCI. It provides examples of how individuals show positive outcomes and how they got there. It also provides a normalising frame for individuals who experience challenges and psychological dips following SCI. It may be that services can use such information to inform more creative ways of supporting individuals, in contrast to more negative perceptions of experiencing SCI.

The idea that positive outcomes can be achieved despite initial negative cognitions is something that may important to those working with people with SCI in the acute phase, as it provides a normalising framework for understanding initial distress and evidence that despite this, individuals do go on to achieve positive psychological outcomes. Given that the individuals in this study initially experienced some distress and may have appraised the situation negatively, it is essential to highlight to people experiencing SCI that these feelings and thoughts are often transient and positive psychological outcomes can be achieved. The use of clinical material and empirically based information may be particularly crucial at this stage.

The research also provides a greater understanding of what may be important during the rehabilitation process to facilitate positive psychological outcomes. The combination of inner resources plus external factors such as social support and learning new skills has implications for service provision to people during the rehabilitation phase and beyond, in providing them with resources to access their inner resilience and to be provided with opportunities for external support mechanisms. Given that appraisals play an important role in positive psychological

outcomes, it may be that appraisal measures can be used to screen those individuals who may be at risk of psychological distress.

Conclusions

This research shows that individuals experience a high quality of life and psychological functioning of a similar level to that prior to SCI. Individuals reported that psychological distress can occur, but this is transient and seen to be part of normal life. Individuals saw the SCI as a challenge to be overcome and one that they felt able to tackle. Participants identified the way they thought about their injury, their personality and external supports as being important in achieving a positive outcome. This research has theoretical, research and clinical implications for those people experiencing SCI.

Appendix 12

Appendix 12: Detailed Account of the Analysis Process

The focus of analysis in on the participants' attempts to make sense of their experiences (Smith, Flowers & Larkin, 2009). The principles of analysis are to move from individual experiences towards shared experiences, and to move from descriptive analysis to interpretative analysis (Reid, Flowers & Larkin, 2005). The process involves a line by line analysis of each participant's transcript, followed by individual identification of themes. Themes are then compared across participants. The research then opens up a dialogue between themselves, the data, and psychological knowledge, leading to a more interpretative account of experience (Smith et al., 2009). The step by step guidance provided by Smith et al., (2009) to completing analysis was followed in order to analyse the data collected.

Step 1: Reading and re-reading. Transcripts were initially read through individually, with the researcher trying to suspend their own a priori assumptions about the data, in order to become emmersed in the data and more fully enter the world of the participant.

Step 2: Initial coding. Data analysis was done on a transcript by transcript basis. The researcher intiially completed the left hand coding. Descriptions of what the participants said, such as identification of key aspects of the experience, was the most basic level of analysis. Linguistic comments aimed to identify key aspects of language used. Conceptual comments often involved questions about the meaning of what the participant said, which involved reflection on the part of the researcher and considering wider psychological concepts. This involved a detailed examination of what the participant actually says. This involved identifying what was important to participants and the meaning that was attached by participants to these experiences. More interpretative comments were also included at this stage, as appropriate.

Step 3: Developing emergent themes. This was then followed by right hand coding, which attempted to extract higher order themes from the left hand coding, thinking more about the theoretical frameworks which could be applied to the data. This aimed to maintain the complexity of the data but reduce the amount of detail present. This involved an examination of

the intial left hand notes, but also keeping in mind the overall data set collected from that participant. This generated emergent themes that aimed to capture what was important in the initial notes, and grounded in the raw data of the transcript. For each transcript, themes were listed in their entirity, along with quotes to support each theme. This was kept as broad and as exhaustive as possible, at the single transcript level.

Step 4: Searching for connections across emerent themes. This involves fitting the emergent themes together. This was done my methods of abstraction (grouping together clustering themes), subsumption (a theme taking on a super-ordinate role as it brings together other related themes), contextualization (identifying key contexual events of importance), and numeration (the frequency with which a theme occurs).

Step 5: Moving to the next case. The process as outlined above was repeated for each individual transcript, while trying to bracket off the ideas and themes emerging from previous transcripts.

Step 6: Looking for patterns across cases. This involved identifying connections between each transcripts' themes. This was done by using post it notes and moving them around to create clusters of emerging common themes. This attempted to create themes that had an interpretative element and not merely a descriptive element. These themes were then summarised in a table, with quotes from transctipts supporting each theme.

Additional References

Reid, K., Flowers, P., & Larkin, M. (2005). Exploring lived experience. *The Psychologist*, 18, 20-23. British Psychological Association. http://www.thepsychologist.org.uk/archive/archive_home.cfm?volumeID=18&editionID=114&ArticleID=798

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative Phenomenological Analysis*. London: Sage.

Appendix 13:

Annotated Excerpt of Transcript

Appendix 14

Appendix 14: Credibility Checks

Credibility of the research was considered in a number of ways. Discussion occurred with the dissertation supervisor, research tutor, an external expert in IPA, an independent researcher and through discussion with a support group consisting of other trainee clinical psychologists conducting IPA research.

Fidelity of the interview schedule to the literature was discussed with the research supervisor, research tutor and was given to clinical staff working with people with SCI. The interview schedule was agreed to be representative of the issues arising from the research questions, appropriate to the methodological design and coherent for the population.

The process of analysis was regularly discussed with other IPA researchers, in order to ensure that the research was being properly conducted and that IPA techniques were being correctly applied. This involved specific discussion around conducting interviews, fidelity to the interview schedule, and identifying themes. The process of analysis was also subject to examination during a workshop facilitated by an external expert in IPA, who examined the data and the method of analysis and provided helpful comments on how to continue the analytic process and how to select appropriate theme titles. Accuracy and validity of themes was examined by an independent researcher. Where there appeared to be information that what not incorporated in existing themes, discussion was held until agreement reached. This led to some rearranging of themes. A consideration of the themes in relation to existing literature showed that the themes extracted could reasonably be seen to be in line with previous research. Finally, a discussion of the themes with the research supervisor led to more discussion of theme titles which accurately reflected the data collected.

Appendix 15:

Letter of Ethical Approval

Appendix 16

Appendix 6: Table of Quotes to Support Themes

Superordinate Theme	Sub-Theme	Quote	Participant	Page	Line
Living a normal life, just doing things differently	Getting back to normality	The first day was a nightmare, it was like being abandoned...it was scary.	Grace	11	372
		Bloody scary...who's going to look after me? Where's the money going to come from?	Martin	7	227
		It was hard work, it was exhausting (the rehabilitation)	Martin	9	330
		It was all about small steps.	Dan	2	71
		It hadnt occurred to me that I would need somebody else to help me live my life independently.	Dan	2	75
		That stands out for me as some kind of psychological hurdle that I had to overcome, not only am I going to be not walking but I'm going to be dependent on someone else to help me do things.	Dan	2	85
		A massive anxiety for me was that I would never get to be employed in a rewarding, fulfilling, financially viable career.	Dan	6	243
		Dealing with the physical aspect, the physical changes to your being. Dealing with psychological and psychosocial difficulties, so how do the physical changes impact on you as a person, and your environment, how does that all fit together.	Dan	14	557
		I was upset at the time, you know, you think oh my God, life's ended.	Joseph	1	22
		I've just come back into normal life and carried on.	Joseph	8	272
		The initial feeling is like panic, how the hell am I going to deal with this.	Victoria	2	81

		For me it has been a steady just carry on as normal.	Chris	6	233
		I think when it first happened, it meant the end of my life as I knew it, not of my life but the way, how it had been, it meant change of life that way	Chris	9	341
	I'm the same person as before	I'm still helping old ladies off buses, done it all my life.	Grace	9	307
		There are others, I think, that see themselves as useless and worthless.	Grace	6	212
		If somebody says to me, there's a pike in there that's never been caught, I'm gonna catch it...I'll get it one day!	Grace	11	362
		I've probably realised a lot of things about myself.	Grace	13	457
		I feel proud of myself, because I have achieved something.	Grace	22	801
		Sure enough there was a very serious injury going on here, but the person who is injured is essentially still the same.	Martin	3	89
		My body is a bit of a wreck at the moment. I'm me and still here.	Martin	4	139
		Everybody just treated me as normal.	Martin	10	361
		I seem to have gone back to what I was doing before, instead of reassessing my life.	Martin	14	522
		I have still kept striving forward, driving forward, doing things.	Dan	6	213
		I'm still the same me.	Dan	8	315
		Daddy is still dad.	Joseph	2	57
		I dont think I feel anything different about myself. I'm still me.	Joseph	4	129
		My work colleagues dont see me as diabled.	Victoria	8	309
		Going back to being Doctor X, as opposed to this poor disabled person...I am educated to a very high standard, I'm managing a team.			

		Other people's opinions are very important to me...I don't want other people to see that I'm not coping.	Victoria	9	369
		I see myself as erm, the same guy I was before erm, you know and I still play lots of sports and stay active and I'm educated, I'm, I don't know, I just see myself as me.	Chris	2	58
		The way you see yourself and the way you think other people see you.	Chris	8	287
		I am the same person and if you want to do the same things.	Chris	10	353
	Unchanged goals and values	Right, I'm going to win it this year...Every year is a challenge (In relation to sporting competition).	Grace	6	189
		There's no reason why a wheelchair bound person cannot earn a living.	Grace	12	403
		I was never unemployed. I never left one job before I got another. I paid all my taxes all my life.	Grace	12	414
		I don't want to be beholden on anyone else, I don't want to sit at home in the corner.	Grace	16	570
		It was always about getting a job, it was always about being financially independent, and living a life which I would have lived anyway, according to my values.	Dan	6	219
		Definitely my goals and values were the same as before my injury.	Dan	7	247
		I've always known...what I've wanted for me and my family...even before. I dont think that's changed.	Joseph	5	142
		Being able to provide for the kids, making sure they have a good education, go to the right schools...Just normal things like that really.	Joseph	5	150

		It wasnt the end of my life sort of thing.	Victoria	1	41
		You've got to remember why you are doing it and why you are living a life and got to realise that you can still do all the stuff in your chair as well.	Chris	3	105
		I don't see myself as being disabled.	Chris	3	113
		I still want the same things, I still want to be happy in life, settled down, with a nice wife, kids, house, job.	Chris	11	422
	Normal ups and downs of life	Some days are better than others, I get the wobbles.	Grace	12	419
		It was just the anger and frustration, you know? Frustration because I had months of being in hospital ahead of me.	Grace	15	541
		I think anybody who has had that kind of accident is going to be...unhappy...in inverted commas.	Martin	17	637
		It was a blip.	Dan	11	434
		I think the dip would have come anyway...I think you could take the injury out of the equation and there would always have been a dip and a meaning making.	Dan	12	481
		We all had days where we just couldnt do it.	Joseph	8	249
		Sometimes I get up in the morning and think, I just dont want to go to work....we all get days like that.	Joseph	10	344
		It just doesn't feel difficult. Of course there are days where I find it a pain in the arse or...but it's always felt like a challenge that I'm up to.	Victoria	4	149
		I'm sure there are other times when I, and of course, like anyone who has a big life event, there have been times when I have been very low and	Victoria	7	271

		there have been times when it has been very difficult.			
		I have the propensity within me to become very negative and very low. And that's not related to my spinal injury.	Victoria	9	362
		There are some things that will floor me that might not floor other people.	Victoria	15	622
	Different ways of doing things	You've gotta work at it. Nothing in life's for free.	Grace	13	453
		If I am going to peel it, I think, now, how am I going to do this?	Grace	15	513
		I work out how I can do it.	Grace	15	521
		I still look at the computer like this, closing one eye, holding it open with one hand.	Martin	7	259
		It was just a matter of adjusting to a different manner of living independently.	Dan	3	92
		The physical rehabilitation was just a means towards getting to where I wanted to be, I suppose. That's the underlying thing.	Dan	7	249
		I do everything I want to do.	Joseph	11	385
		In one way, of course, it changed my life completely, in that everything was different and I had to do things differently. But in another way, practically in terms of what I was doing, it didn't change my life as much as you might think.	Victoria	2	63
		I still continued to do that same job, have the same friends.	Victoria	9	337
		I could still do everything I wanted to do, I just had to do it in a different way.	Chris	1	9
		Realising that you can do all these things, there's always a way around it.	Chris	7	255
		I see other challenges because I'm in a chair but not the chair itself.			

Overcoming challenges: determination to succeed	Inner resources	Never say never say never	Grace	4	124 177
		When you have a spinal injury, you can either give up or go to the moon.	Grace	5	236 273
		I wouldnt let anything hold me back	Grace	7	375
		You have to do it, in the moment. You can moan about it afterwards	Grace	8	386 422 511
		I thought, make yourself a cup of tea and get on with it girl.	Grace	11	564 719
		Sheer bloody mindedness Every day is a challenge.	Grace	11	727 791
		I wont let anything beat me.	Grace	12	53
		I always rise to a challenge. If somebody says you can't do it, then I do it.	Grace	15	172 176 349
		I'm like a warrior...I keep fighting and I wont give up.	Grace	16	484 562
		There is nothing you cant achieve, if you put your mind to it.	Grace	20	612 695
		You gotta keep going, you cant ever give up.	Grace	20	48 99
		You gotta keep going.	Grace	22	
		I've just gotta lie here and and get better and try and get on with things. Things will be back to normal.	Martin	2	142 203
		I must have some pretty strong survival skills in there somewhere.	Martin	5	436 447 36
		Sheer bloody mindedness.	Martin	5	62 80
		I'm going to damn well walk into this ward. I dont know why. I was just determined to walk into this ward.	Martin	10	203 290 547
		I just do not give up. I just beaver away at it gently, steadily.	Martin	13	74 111
		It's like piling up water, you can pour more water on, momentarily it will pile on, but...whatever happens happens, and I will end up back level again.	Martin	15	245 250 427 471 630
		I've always coped with	Martin	17	

		whatever's thrown at me.			
		Give me a situation and I will bounce back to where I was.	Martin	19	162
		I've always been quite positive from day one.	Dan	2	246
		Changing the way I saw it...rather than seeing it as oh God, this is a nightmare.			
		Having the mindset, I'm going to be positive.	Dan	3	
		Dragging yourself out of a hole, in a way. No one else is going to do it for you.			
		Mental attitude, behaviour and...that can really lessen the impact on a person's quality of life and thats what its all about for me.	Dan	4	
		I'm becoming more resilient all the time.	Dan	5	
		I feel like I've been gifted with a certain level of resilience.	Dan	11	
		A challenge. Never seen it as a threat.	Dan	12	
		I've always been very laid back and placid.	Joseph	1	
		It would take a lot to get me really wound up and stressed, to the point where it would affect me.	Joseph	2	
		You get challenges and you have to find your way	Joseph	3	
		through them. Find a new path.	Joseph	6	
		Being strong willed, I suppose. Strong minded.	Joseph	9	
		Keep your sense of humour.	Joseph	16	
		I dont ever remember a time, apart from maybe the first few days, where it felt completely insurmountable.	Victoria	2	
		There was never a feeling that I cant do this.	Victoria	3	
		(Someone said:) You are the most determined person I have ever met.	Victoria	6	
		If I want something to happen, I make it happen.	Victoria	6	
			Victoria	11	

		I'm pretty tough. I can handle stuff that's difficult.	Victoria	12	
		I like overcoming challenges and I feel good about my ability to overcome them.	Victoria	16	
		It doesn't mean that I don't respond to things and I don't feel depressed and I don't sruggle for a while, but I guess it means that I have quite good coping resources and I have quite strong faith in my ability to cope.			
		Do things the best you can and treat people like you want to be treated yourself.	Chris	5	
		I never really thought about it as being a fight like that, for me it has just been coping and just getting on.	Chris	7	
	The injury as a tool to be used positively	Sometimes I will just reach out and pick something up and think, oh I couldnt do that yesterday.	Grace	16	568
		It's just something that happened. It happened.	Martin	1	18
		Here's something to get through so your life carries on.	Martin	2	57
		The accident was a wake-up call. If you're not going to leave this job, we're gonna leave it for you.	Martin	6	220
		I suppose my whole injury in a way, well I like a challenge, so game on!	Dan	4	168
		After the injury there's not much you can do because people are looking at you. When I first came out of hospital and went down to the local shop it was actually quite amazing.	Dan	7	257
		I enjoyed it to be fair (the rehabilitation).	Joseph	7	244
		The way I've coped with my injury makes me feel good about myself.	Victoria	4	157
		The challenge for me with	Victoria	4	161

		my spinal injury has always built my self esteem.			
		I get a kick out of the fact that I suppose I challenge people's stereotypes of disability.	Victoria	8	318
		I've had the opportunity to have some really amazing experiences through that, really rewarding, emotional.	Victoria	11	439
		I've made that decision that my accident was a shit thing to happen but it's given me new opportunities in that it's given me new doors and I've taken them.	Chris	5	176
	Acceptance and change	You can either give up, or you can drive yourself. And I prefer to drive myself.	Grace	6	206
		I had no choice; I just put up with what was there.	Martin	1	5
		I just sort of coped with what was there.	Martin	1	11
		I wasnt angry...I wasnt annoyed either, it was just, how am I going to cope with this and make the best out of it?	Martin	9	307
		It's not something you can do anything about.	Dan	3	96
		Have to get used to it.	Victoria	14	548
		I worry about people who cant speak up for themselves.	Victoria	18	726
		There is a big thing for me about acceptance.	Victoria	19	770
		This is what I have got, I just have to get on with it, it's just the way it is.			
	Maturation, growth and time	Accepting who you are now, but not accepting it's always going to stay the same.	Martin	14	501
		That's not necessarily the injury, it's getting older as well...you grow up and become more comfortable in your own skin.	Dan	7	266
		I'm changing as a person...it might have	Dan	8	319

		happened anyway.			
		I don't think it's necessarily changed because of my injury, I think it's more of a lifestyle stage thing.	Victoria	6	226
		Is that because I'm spinally injured or would that have happened anyway? Actually i suspect it's just a life thing, not a spinal injury thing.	Victoria	10	410
		I don't know whether this is just because I'm in a chair now or I've got used to being active.	Chris	10	377
		It just becomes more natural the longer you do it.	Chris	12	439
Using the resources available to me	Support from others	It's no good people saying you can't do it.	Grace	6	195
		Family are very important to me.	Grace	10	338
		I talked to the clinical psychiatrist (psychologist) here, that certainly helped.	Grace	23	823
		I was surrounded by people who were helping me.	Martin	3	76
		She provided support at a totally different level.	Martin	3	97
		A bit of gentle bullying at the time. Whilst it's not very pelasant, it's constructive. It made me walk.	Martin	9	340
		He came to see me and walked in and said oh, hello. That was encouraging, to see that somebody else...	Martin	20	751
		Family and friends, the peers around me. And the staff. Just the entire social support really. You know, talking about it, seeing the psychologist was really helpful.	Dan	3	109
		You feel like you dont want to burden them or you dont wanna...I thought I'd rather talk about something positive	Dan	4	133

		rather than dive into the minutia of my coping.			
		There's always been that culture of resilience in the family.	Dan	12	453
		My wife and kids. Always there. And the children dont see the wheelchair.	Joseph	2	51
		If they thought you could do it, they wouldnt give you help anyhow.	Joseph	7	241
		I had so much incredible support.	Victoria	3	102
		All I ever got was encouragement. There was never a doubt expressed to me that I couldn't do it.	Victoria	3	120
		I just felt so looked after and supported that I really did feel that I could do anything.	Victoria	4	170
		If I am upset about something, people know about it and I get support. Whereas I think if you bottle it up and hide it, you dont get that support.	Victoria	5	194
		Other people being proud, and not wanting to let other people down.	Victoria	7	286
		One of my family stories probably is that stuff like that makes you strong and makes your relationships strong, and good things come out of adversity.	Victoria	21	842
		I consider myself very luck that I've had the support, the background, the education to cope with this.	Victoria	21	869
		Meeting people who had been injured. It was a nice way to see that life goes on.	Chris	9	346
	Meaningful activity	I am back at art classes, and I do pictures, frame them, give them away...and I'm making a wildlife film for kids.	Grace	5	170
		It's the main focus of my life, to give something (back).	Grace	19	671

		It is important everyday to achieve something.	Grace	21	758
		I started just going to some conferences, some free exhibitions in the field I used to be in.	Martin	7	241
		I've got to do something to engage my brain. I couldnt just sit around and gawp at the television.	Martin	7	253
		I could go back to what I was doing, and I had a real focus to get back to.	Victoria	1	17
		Had I not been busy, had a purpose.	Victoria	13	534
		I think people that don't...that just drift, and dont have anything...it has to be something.	Victoria	15	590
		I don't think I have some amazing resilience that keeps me not depressed.	Victoria	15	600
		I might be really low right now but I know that if I get myself up and get back to work, I will feel better. I need to get myself through the next hour when I feel a bit miserable, and then I'll be fine. So yeah, that kind of behavioural resilience.	Victoria	17	702
		It's given me something to aim for and achieve for and given me goals and I think thats helped me alot.	Chris	11	410
	New skills	Every time a sound went off, it's just a sound to relax even more. So if you say that sort of thing to yourself while you're lying in a hospital ward, you can just sort of end up deeply relaxed.	Martin	8	290
		Dealing with frustration has been quite difficult. Because you can't just do it by physical exertion. I found meditation.	Dan	10	365

Appendix 17

Appendix 17: Instructions to Authors

Rehabilitation Psychology:

Authors are urged to review the submission guidelines prior to submission. Manuscripts that do not conform to the submission guidelines may be returned without review.

Please consult APA's Instructions for All Authors for information regarding

- Manuscript Preparation
- Submitting Supplemental Materials
- Abstract and Keywords
- References
- Figures
- Permissions
- Publication Policies
- Ethical Principles

Submission

New and revised manuscripts are to be submitted electronically (.rtf and .pdf files are preferred) through the Manuscript Submission Portal.

General correspondence and express mail may be directed to

Timothy R. Elliott, PhD, Editor
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Masked Review Policy

Masked reviews are preferred, but it is incumbent upon authors who wish masked reviews to make every effort to see that the manuscript itself contains no clues to their identities. Authors' names, affiliations, and contact information should be included only in the cover letter.

Cover Letter

The cover letter accompanying the manuscript submission must include all authors' names and affiliations to avoid potential conflicts of interest in the review process. Addresses and phone numbers, as well as electronic mail addresses and fax numbers, if available, should be provided for all authors for possible use by the editorial office and later by the production office.

Authors should include in their submission letter

- a statement of compliance with APA ethical standards in the conduct of the work reported in the manuscript
- a statement that the manuscript or data have not been previously published and that they are not presently under consideration for publication elsewhere
- a statement that all listed authors have contributed significantly to the work submitted for consideration

Authors are required to submit copies of any papers under review, in press, or previously published whose content closely relates to that of the manuscript in question and that might be perceived as constituting duplicate publication.

Authors may also suggest qualified reviewers of the manuscript, but these are considered advisory only.

Style of Manuscripts

The journal considers theoretical, empirical, and commentary papers relevant to rehabilitation psychology. Brief reports are considered.

Brief Reports

This format may be appropriate for empirically sound studies that are limited in scope, contain novel or provocative findings that need further replication, or represent replications and extensions of prior published work. Brief Reports are intended to permit the publication of soundly designed studies of specialized interest that cannot be accepted as regular articles because of lack of space.

Brief Reports must use a 12-point Times New Roman type and 1-in. (2.54-cm) margins, and not exceed 265 lines of text plus references. These limits do not include the title page, abstract, author note, footnotes, tables, or figures.

Randomized Clinical Trials: Use of CONSORT Reporting Standards

Rehabilitation Psychology encourages the use of the CONSORT(Consolidated Standards of Reporting Trials) reporting standards (i.e., a checklist and flow diagram) for randomized clinical trials, consistent with the policy established by the Publications and Communications Board of the American Psychological Association.

CONSORT offers a standard way to improve the quality of such reports and to ensure that readers have the information necessary to evaluate the quality of a clinical trial.

Manuscripts that report randomized clinical trials are required to include a flow diagram of the progress through the phases of the trial and a checklist that identifies where in the manuscript the various criteria are addressed. (The checklist may be placed in an appendix of the manuscript for review purposes.)

When a study is not fully consistent with the CONSORT(Consolidated Standards of Reporting Trials) statement, the limitations should be acknowledged and discussed in the text of the manuscript.

Visit the CONSORT Statement Web site for more details and resources.

Nonrandomized Trials: Use of TREND Statement

Rehabilitation Psychology encourages the use of the most recent version of the TREND criteria (Transparent Reporting of Evaluations with Non-randomized Designs for nonrandomized designs that often are used in public health interventions; available from the TREND Web site).