Continuing With Life As Normal: Positive Psychological Outcomes Following Spinal Cord Injury

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Background: Research into the psychological sequelae of spinal cord injury (SCI) has focused on reports of psychological distress, despite the low prevalence rates of mental health difficulties. Positive psychological frameworks have begun to explore how some individuals do not report psychological distress, while appraisals have been posited as possible mediators of psychological outcome. Research into positive psychological outcomes in people with SCI is still in its infancy. **Objective:** To provide a description of the positive psychological outcomes experienced by people reporting low levels of psychological distress, to generate an understanding of how these individuals explain their positive outcomes, and to consider the implications for research, theory, and practice. **Method:** Six participants (2 female, 4 male) reporting low levels of psychological distress were interviewed using a semi-structured interview schedule exploring their experiences. Interpretative phenomenological analysis was used to analyze data. **Results:** Three superordinate themes were identified: "living a normal life, just doing things differently," "overcoming challenges: determination to succeed," and "using the resources available to me." The description and explanation of a positive psychological outcome was complex. For participants, positive psychological outcomes did not exclude experiencing psychological difficulty; moreover, they described an ability to overcome difficulty. Challenge-focused appraisals, social support, and meaningful activity were identified by participants as being important to psychological outcome. **Conclusions:** Positive psychological outcomes following SCI are complex, and research and theory need to better understand the experience of individuals following SCI in order to inform clinical practice. **Key words:** appraisals, posttraumatic growth, psychosocial outcomes, resilience, spinal cord injury

A spinal cord injury (SCI) can have a wide-ranging effect on the life of an individual, leading to major life adjustments.¹ SCI can lead to loss of mobility, altered daily activities, an inability to work,² and perceived cognitive impairments in the domains of memory, attention, and concentration.³ The health implications of an SCI are numerous; for example, chronic pain is common.⁴ Poor adjustment to SCI is linked to higher suicide rates,⁵ self-neglect, and substance misuse.⁶ Negative psychological sequelae can have an impact on individuals' motivation and ability to care for themselves, increasing the risk of physical health complications such as pressure sores.⁷ In addition to having an impact on quality of life, poor adjustment affects the cost to the health service.³ An understanding of psychosocial functioning in relation to this group of people is essential, given the well-documented interactions between psychological and physical health.

Emphasis traditionally has been placed on the less adaptive changes in psychosocial functioning that an individual may face, such as depression, low self-esteem,⁸ or anxiety.⁹ It is these more negative

aspects of experiencing a difficult life event that have typically informed theory and practice.¹⁰

However, despite the emphasis on less adaptive psychological outcomes following SCI, such outcomes are not inevitable.¹¹ Many people with SCI rate their quality of life highly,¹² with mood post injury being reported as similar to premorbid functioning.³ To date, research typically defines positive psychological outcome as an absence of distress.¹³ 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.

Accounting for Positive Psychological Outcomes

The benefits of a deeper understanding of how many individuals achieve positive psychological outcomes following SCI are clear. There has been

a paucity of research about the psychological profile of individuals who report positive psychological outcomes following SCI, with much of the research to date focused on identifying the presence of a positive outcome rather than describing or explaining it. Three major theories in positive psychology may be applied to individuals reporting low levels of distress following SCI: resilience, posttraumatic growth (PTG), and the stress appraisal and coping model.¹⁴ To further understand the experiences of this group of people, each theory will be examined.

Resilience

Resilience is poorly defined in the physical health literature, with definitions ranging from a stable equilibrium, where an individual's psychological functioning does not significantly decline,¹⁰ to successful coping following adversity.¹⁵ It may be that such individuals maintain a relatively stable trajectory of positive psychological functioning that does not significantly dip over time¹⁶ 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.¹⁷ How an individual achieves this resilient outcome is highly debated: Is resilience a personality trait, a cognitive style, a process, a behavior, or is it learned?¹⁸ No studies examine how individuals with low levels of distress may experience resilience following SCI.

Posttraumatic growth

PTG is defined as positive psychological change following a struggle with highly challenging life circumstances.¹⁹ PTG is distinct from other positive psychological outcomes as it requires individuals to actively undergo a meaning-making process in which they rebuild their beliefs about themselves, the world, and the future.²⁰ Early research into PTG highlighted 3 main areas where growth occurs: self-perception, personal relationships, and life philosophy.²¹ PTG may be distinct in that the model emphasizes an engagement in a meaning-making process,²² and PTG is seen to be qualitatively different from general improvement

over time.²⁰ This suggests that some individuals are able to make this meaning-making shift and others are not. The mechanisms behind this are unclear. PTG has been examined in people who have experienced SCI,²³ with participants reporting more meaningful family relationships, a greater recognition of strengths, and a greater appreciation of life.

Stress appraisal and coping model

One theory that has risen to prominence in accounting for psychological outcomes is the stress appraisal and coping model (SAC).¹⁴ This posits that adjustment is mediated by psychological processes, namely, appraisals. 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.²⁴ 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.²⁴ Coping may be defined as a method of alleviating and preventing negative change.²⁵ It is theorized 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.²⁶ Coping strategies may prove to be crucial in determining psychological outcome, as they may influence variance in outcomes such as depression¹¹ and participation in society.²⁶ Appraisals in relation to SCI have been studied by Dean and Kennedy who developed a scale aimed specifically at adult SCI populations to look at appraisal style.²⁷ The Appraisal of Disability: Primary and Secondary Scale (ADAPSS) was found to have a 6-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.²⁶ However, individuals who endorsed 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 and were less likely to experience negative symptomatology such as anxiety and depression.

Present Study

A deeper understanding of the process of positive psychological outcomes in SCI is essential in order to identify persons who may be at risk from mental health difficulties, to inform clinical practice in promoting positive psychological outcomes, and to improve therapeutic outcomes for individuals, whilst improving functional outcomes²⁷ and reducing the cost to the health service.

A number of problems exist in the current literature. Current measurement tools and research designs do not appear to adequately describe what a positive psychological outcome following SCI looks like, and they do not gauge the process of positive psychological outcome.¹³ Although positive psychological theories may be applied to individuals with SCI reporting lower levels of distress, it is not known how these theories apply to this group of people and what the subsequent impact is in terms of theory and practice. 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 positive appraisals on the ADAPPS,²⁷ 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 to examine the factors that may have influenced this process. It attempted to better understand the participants' experiences of positive psychological outcome and the process they have undergone through use of the

interpretative phenomenological analysis (IPA) method. The major research questions were, first, how do individuals describe their positive outcomes? Second, what processes do people go through in order to achieve these positive outcomes? The experiences of the individuals were considered in relation to the literature relating to positive psychological outcomes to gain further understanding of the application of current theory to individuals with SCI who report lower levels of distress.

Method

Participants

Participants were selected from an existing sample of 237 individuals who had experienced SCI and had participated in the Dean and Kennedy study.²⁷ Participants were selected on the basis that they reported lower levels of distress, as indicated by scoring in the lowest quartile for both anxiety and depression scores on the HADS²⁸ and endorsing the most items on the Growth and Resilience and Personal Agency subscales of the ADAPPS.²⁷ Based on previous research selection criteria, this group of participants was considered to have shown positive psychological outcomes post SCI. Participants were between 2 and 11 years post injury, which captured individuals in the longer term of their injury. Eleven participants met these criteria, 6 of whom responded and participated in the study (4 male, 2 female). Ages of participants ranged from mid-20s to mid-60s, and injury level varied from incomplete paraplegia to complete tetraplegia. Six participants are recommended as being within the range of optimal sample size for an IPA study.²⁹

Design, measures, and materials

The HADS²⁸ and the ADAPPS²⁷ 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.²⁹ Clinical staff at the recruiting hospital reviewed the questions to ensure their appropriateness. Examples of questions include the following: How did you come to terms with your injury? Can you tell me how you coped with your injury? What were your initial thoughts/feelings in relation to your injury? Did these change? Do you think the injury has changed you as a person? If so, in what way?

To capture the participants' subjective views, semi-structured interviews were analyzed with IPA. IPA attempts to understand the individual's subjective experience of a phenomenon and allows for an in-depth account of the participants' experiences.

Procedure

Participants who met inclusion criteria were identified and contacted by a member of the research team. Informed consent was obtained. 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 1 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 analyzed using IPA. The aim of IPA is to aid understanding of how an individual makes sense of his or her personal and social world,²⁹ creating a subjective account of the individual's experience. Human experience is dynamic and subjective,³⁰ and IPA views this as being central in the research process. The interview 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. This process was undertaken in accordance with the 6-step process as outlined by Smith and colleagues.³¹ This involved reading and re-reading the transcripts; initial

coding of key aspects of the experience, linguistic, and conceptual notes; developing emergent themes; searching for connections of emergent themes within a transcript; repeating the process with each transcript; and looking for connections across participants' transcripts. Themes were then grouped together in a way that aimed to make most sense of the participants' experiences. Credibility of the research was considered in a number of ways. Discussion occurred with the research supervisor, research tutor, an external expert in IPA, and an independent researcher and through discussion with a support group consisting of other researchers conducting IPA research. At all stages, examples of transcripts were analyzed and the final thematic structure was examined by independent research in relation to the original transcripts. Differing opinions on themes were discussed until agreement was reached.

Results

From analysis of the data, 3 superordinate themes emerged as important aspects of positive outcomes following SCI, each with several subthemes. Subthemes have been listed in order of prominence within the data. These themes can be seen in **Table 1** and will now be discussed in turn. Page number and line in relation to the transcript are included.

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

Subtheme 1: Getting back to normality

Subtheme 2: I'm the same person as before

Subtheme 3: Unchanged goals and values

Subtheme 4: Normal ups and downs of life

Subtheme 5: Different ways of doing things

This superordinate theme focused on the participants returning to their normal lives, which involved making practical changes in their lives and coping with transient difficulties. However, participants saw their identity as being unchanged following the injury, and it was important to them that others' perceptions also remained unchanged. These ideas were captured in the subthemes.

Table 1. Extracted themes

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

Subtheme 1: Getting back to normality. This theme captured the process involved in returning to normality post injury and getting through the initial worry and anxiety relating to what life would now look like. This, however, was transient for participants, who then set about the task of getting back to their lives, which was not without challenges.

"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)

Despite the challenges, participants felt that returning to normality was possible and that they had achieved this.

Subtheme 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.

"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)

It was also helpful that others viewed them as the same person.

"Daddy is still dad." (Joseph, 2:57)

Being the same person also meant not having their identities defined by the injury. The sense of self was essentially preserved for participants.

Subtheme 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.

"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." (Chris, 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.

"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)

This was evidenced by the fact that many of the participants engage in the same activities as

they did prior to the injury and that remained important to them.

Subtheme 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.

"Sometimes I get up in the morning and think, I just don't want to go to work...We all get days like that." (Joseph, 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. However, as participants became adjusted to the injury, these fluctuations in ability to cope were viewed as a normal part of life.

"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." (Victoria, 7:271)

Participants did not see themselves as different from their non-SCI peers in this respect.

Subtheme 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. Participants discussed that life would continue for them as normal, but that the practicalities of how this would happen had changed.

"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." (Victoria, 2:63)

Participants' accounts were inclusive of many of the different ways they had overcome the practicalities of their injury to continue with life.

Superordinate Theme 2: Overcoming Challenges: Determination to Succeed

Subtheme 1: Inner resources: personality and cognitive style

Subtheme 2: The injury as a tool to be used positively

Subtheme 3: Acceptance and change

Subtheme 4: Maturation, growth, and change

Participants recognized the severity and potentially life-threatening nature of their injury. However, they 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 recognized that this was a way of appraising the situation that was not the same for everyone who experiences SCI.

"When you have a spinal injury, you can either give up or go to the moon." (Grace, 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.

"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, 15:562)

The subthemes describe how participants were able to overcome the challenge of the injury and its impact on their life in relation to internal factors.

Subtheme 1: Inner resources: personality and cognitive 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.

"Being strong willed, I suppose. Strong minded." (Joseph, 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. 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.

"Changing the way I saw it, rather than seeing it as oh God, this is a nightmare." (Dan, 3:99)

It was also evident that participants viewed themselves as able to overcome the challenges they faced.

"I like overcoming challenges and I feel good about my ability to overcome them." (Victoria, 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 it.

Subtheme 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.

"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 sh** 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)

Seeing the injury as a positive, rather than a hindrance, allowed the participants to utilize the injury as a tool to aid their determination.

Subtheme 3: Acceptance and change. Many participants noted that acceptance was crucial in being able to deal with their injury.

"This is what I've got, I just have to get on with it, it's just the way it is." (Victoria, 19:770)

However, this acceptance was important only in relation to aspects of their life over which they felt they had no control 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.

"I wasn't angry...I wasn't annoyed either, it was just, how am I going to cope with this and make the best out of it?" (Martin, 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.

Subtheme 4: Maturation, growth, and change. Participants felt that some of the positive outcomes following their injury were attributable to general

psychological processes, such as developing over time and maturing as a person.

"It'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)

Superordinate Theme 3: Using the Resources Available to Me

Subtheme 1: Support from others

Subtheme 2: Meaningful activity

Subtheme 3: New skills

In addition to identifying their own internal processes through which positive outcomes are achieved, the participants identified external mechanisms that they felt they were able to utilize to cope, captured in the following subthemes.

Subtheme 1: Support from others. Support from others was overwhelmingly discussed as something that facilitated a positive outcome.

"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)

It was also useful for participants to meet other people with SCI.

"Meeting people who had been injured...it was a nice way to see that life goes on." (Chris, 9:346)

The support was encouraged individuals' belief in themselves and added to their sense that they could overcome their difficulties.

"All I ever got was encouragement. There was never a doubt expressed to me that I couldn't do it." (Victoria, 3:120)

This support had the effect of bolstering the individuals' sense that they could cope post injury.

Subtheme 2: Meaningful activity. Meaning and purpose in life were seen as being essential to participants in facilitating positive outcomes, and participants actively sought out external resources to facilitate participation in activity. For most of the participants, work was important in providing purpose, in addition to a wide range of interests, activities, and voluntary work. 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.

"It is important every day to achieve something." (Grace, 21:758).

Having this meaning and engagement in life was seen as being very important to participants.

Subtheme 3: New skills. Participants talked about new skills they had acquired, both before and after their injury, which they credited with 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 learned prior to the injury were helpful in coping following the injury. Participants were able to seek out new ways to facilitate positive outcomes following their injury.

"Dealing with frustration has been quite difficult. Because you can't just do it by physical exertion. I found meditation." (Dan, 10:365)

Participants were able to adequately recognize when they may need to access these skills and were able to utilize them effectively.

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.¹¹ The results will be discussed in relation to the research questions before considering the clinical and theoretical implications of the study, the directions for future research, and finally the limitations of this research.

How do individuals describe their positive outcomes?

It was clear that individuals who are doing well psychologically described a high quality of life and that postinjury levels of mood were consistent with preinjury levels, in keeping with previous research.¹² The superordinate theme "living a normal life, just doing things differently" 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. A positive outcome for participants meant continuing with their lives

and having the same goals and values, although how they went about their lives was affected by the practicalities of their injury.

It is important to note that participants reported some initial levels of distress in the acute phase of their injury. 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 reported such initial cognitions described that these were quickly overcome and replaced with what they described as more adaptive cognitions. To define positive outcomes purely in terms of an absence of distress¹³ may oversimplify the experiences of people who have had an SCI, as this sample of people who are doing well psychologically did indeed identify times when things were more difficult for them.

How do individuals explain their positive outcomes?

The individuals in this sample identified a wide range of internal and external factors that they felt accounted for the positive outcome, as described in superordinate themes 2 and 3. It seemed that time since injury played 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, as outlined in the maturation, growth, and time subtheme.

Participants identified that social support, appraisal style, and coping style were important factors in achieving a positive outcome, as in line with previous studies.² It seemed that the meaning of the SCI was crucial.²⁴ The SCI was described as not being threatening to the participants' sense of self or to their life goals, rather the SCI was framed as a challenge-focused appraisal. This then was linked to the appraisal style identified by participants. The cognitive aspect of coping was seen to be crucial, as outlined in the inner resources subtheme and shown 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 all participants viewed themselves as being able to overcome the difficulties that the SCI presented and able to access the resources to do so. This shows a secondary appraisal style that is conducive to adaptive coping and may reflect items on the Personal Agency subscale of the ADAPSS. This corroborates the results of the Dean and Kennedy study that found associations with challenge appraisal styles and lower levels of anxiety and depression.

Participants reported that they were very engaged in life, as evidenced by the 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.²⁶

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. Adopting a definition of resilience as stable functioning over time^{10,16} accurately reflected the trajectories described by participants and also reflected how participants themselves chose to define resilience. Generally, participants described their outcomes in terms of resilience, although they were keen to clarify that this did not mean they were fighting against their injury, but rather it was a challenge to be overcome. 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.

The notion that participants expressed in the 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 that participants were able to utilize 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 new skills can be learned to help 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 utilize resources (both internal and external) in adverse circumstances 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.

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.²⁰ However, individuals did report positive change following SCI, which was described as being different to the meaning-making process that defines PTG. This may have implications for defining positive outcomes that have qualitatively improved the lives of the individual, but where a meaning-making process does not occur. For the participants, the meaning making was crucially missing, despite the fact that they met the definition of identifying positive change following adverse life circumstances.¹⁹ The PTG model mainly emphasizes cognitions,²² whereas it was clear that behaviorally 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 the PTG model may want to consider adding the role of behavior to the theoretical framework.

Appraisal styles were crucial for the participants, with each participant displaying challenge-focused appraisals and a sense that they would be able to cope with difficult times by using a wide range of internal and external resources. Although this might be expected given that participants had been selected on the basis of identifying certain appraisal styles, it is interesting to note that the appraisals in this study were generated spontaneously by the participants and at some time after participation in the original study from which they were selected. This suggests that the individuals held an appraisal style that was stable over time and was spontaneously generated by the participants themselves. The stress appraisal coping model accurately reflected the experiences of the participants in explaining the relative absence of distress.

Theoretical and clinical implications

Positive outcomes following SCI are complex and cannot easily be defined by current conceptualizations of resilience and PTG. This research provides evidence for positive outcomes having a relatively stable trajectory of functioning, without excluding the presence of transient negative symptomatology and cognitions. What appears to be key is how the individuals appraise these dips in functioning and how they are able to overcome them successfully. The complex interplay of factors impacting 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 contributions to positive outcomes include cognitive, behavioral, personality, environmental, and interpersonal factors, suggesting that positive psychological outcomes are achieved through a complex interplay of these factors. This has implications for theoretical models of positive outcome following SCI.

On a clinical level, this research has implications for persons working with individuals both in the acute and longer term phases of SCI. This research provides an alternative account of the experiences of people experiencing SCI, namely that positive psychological outcomes are possible and are experienced. 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. Services and clinicians can use this narrative in innovative ways to provide a contrast to more negative perceptions of the experience of having an SCI. One example of this is the development of leaflets or DVDs describing individuals who experience lower levels of distress and how they achieved this. The use of such information has already been shown to be valuable to people who have experienced SCI.²⁶

The idea that positive outcomes can be achieved despite initial negative cognitions is something that may be important to those working with people with SCI in the acute phase, as it provides a normalizing 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.

Research supports the idea that preinjury 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 who 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 assess their appraisals. This would provide valuable

information for any therapeutic intervention that arose subsequently and ensure that services accurately target persons in need of psychological support. Both cognitive and behavioral aspects were highlighted as being important components of doing well psychologically, and this may have implications for the use of psychological support for those who need it.

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 opportunities for external support mechanisms. For example, interventions that address appraisal style may be relevant to individuals who experience higher levels of distress; these interventions could include the development of the individuals' range of accessible external coping resources. This supports previous research that highlights the importance of social participation as an important component of rehabilitation.

Limitations

Conclusions from this research are tentative, and it must be acknowledged that this research study reflects only the experiences of the 6 participants. Further research may focus on differences in demographic characteristics and reported outcomes, but this is difficult to examine within the sample of this study. This research may

be criticized on the grounds that participants essentially self-reported as showing lower levels of distress, a process that may be subject to social psychological processes such as social desirability. Owing to the methodology adopted, this study may lack generalizability to the population as a whole. Despite 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 that accounts for such outcomes. However, this research does provide some interesting questions that may be followed up in subsequent research.

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