



## Article

# Exploration of a Strengths-Based Rehabilitation Perspective with Adults Living with Multiple Sclerosis or Spinal Cord Injury

Samuel Turcotte <sup>1,2,\*</sup> , Catherine Vallée <sup>3</sup> and Claude Vincent <sup>2,3</sup><sup>1</sup> School of Rehabilitation, Faculty of Medicine, Université de Montréal, Montreal, QC H3N 1X7, Canada<sup>2</sup> Centre for Interdisciplinary Research in Rehabilitation and Social Integration (Cirris), Centre Intégré Universitaire en Santé et Services Sociaux de la Capitale-Nationale (CIUSSS-CN), Quebec City, QC G1M 2S8, Canada<sup>3</sup> School of Rehabilitation Sciences, Faculty of Medicine, Université Laval, Quebec City, QC G1V 0A6, Canada

\* Correspondence: samuel.turcotte.1@umontreal.ca

**Abstract:** *Introduction:* Rehabilitation practices that adopt a strengths-based perspective are known as transdisciplinary evidence-based practices. However, little is known about whether and how such a perspective is experienced by people living with a neurological condition during their rehabilitation. *Objective:* To explore how core components of a strengths-based rehabilitation perspective (i.e., hope, self-determination, and mobilization of personal strengths) are envisioned and experienced in outpatient-based rehabilitation by adults living with multiple sclerosis or spinal cord injury. *Methods:* A descriptive exploratory study with mixed data collection was conducted with adults living with spinal cord injury ( $n = 9$ ) or multiple sclerosis ( $n = 11$ ). Participants completed two semi-structured interviews and the Recovery Promoting Relationship Scale (RPRS). The qualitative analysis relied on a hybrid inductive and deductive approach. *Results:* Four themes depict a strengths-based rehabilitation perspective: (1) The mobilization of personal strengths (e.g., what a strengths-based perspective could offer); (2) hope (e.g., what hinders hope in rehabilitation); (3) accessing information for decision-making (e.g., navigating the system); and (4) exercising self-determination (e.g., influencing the length or intensity of rehabilitation services). *Conclusions:* Hope, self-determination, and the mobilization of personal strengths are of the utmost importance throughout the rehabilitation of adults living with multiple sclerosis and or spinal cord injury. This paper raises awareness about elements specific to the contexts in which services are offered or to the therapeutic relationships influencing how these three strength-based constructs are envisioned and experienced in rehabilitation.

**Keywords:** hope; self-determination; strengths-based; outpatient rehabilitation

**Citation:** Turcotte, S.; Vallée, C.; Vincent, C. Exploration of a Strengths-Based Rehabilitation Perspective with Adults Living with Multiple Sclerosis or Spinal Cord Injury. *Disabilities* **2023**, *3*, 352–366. <https://doi.org/10.3390/disabilities3030023>

Academic Editors: Nathan Wilson and Reinie Cordier

Received: 6 April 2023

Revised: 7 June 2023

Accepted: 28 June 2023

Published: 12 July 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Rehabilitation practices that adopt a strengths-based perspective (SBP) are known as transdisciplinary evidence-based practices [1–6]. SBPs focus on mobilizing personal strengths and community assets to build stronger support networks and facilitate community integration [1,2]. In a SBP, clinicians put an emphasis on cultivating hope and self-determination as well as enhancing personal strengths to achieve rehabilitation goals and enable community integration [2]. Hope [7–9], self-determination [10,11], and the mobilization of personal strengths [12] are key elements of rehabilitation processes for adults living with multiple sclerosis or spinal cord injury.

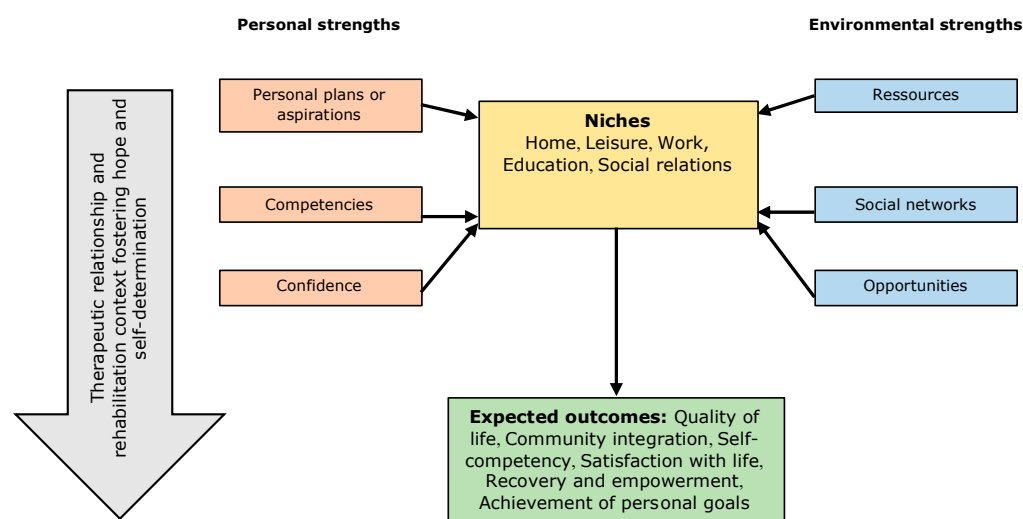
Hope can be defined as an individual's perception of their ability to conceptualize personal objectives, develop specific strategies to achieve them, and initiate and maintain the motivation to use these strategies [13,14]. Hope can lead to many positive outcomes when dealing with a neurological disorder. Hope can protect individuals from depression [15] and is significantly associated with a high degree of social support and self-esteem [16].

Hope is also an important protective resource for coping with the condition and its consequences; it also allows for positive psychological adjustment [17] and the expression of positive emotions [8]. Self-determination refers to “a combination of skills, knowledge and beliefs that allow an individual to engage independently in self-regulated behaviors that achieve personal goals” [18]. For adults with a neurological disorder, self-determination is significantly associated with subdomains of quality of life such as personal development and personal fulfillment [10]. It can also affect the use of assistive technology devices [19], enhance the experience of living [20], reduce stress [21] and foster community integration [22]. Personal strengths can take three forms: (1) Personal aspirations or a project planned without coercive force (e.g., wanting to be a writer); (2) competencies (e.g., being a good mother); and (3) self-confidence [1,2]. For several authors, the mobilization of these strengths is the driving force for achieving rehabilitation goals and securing a more satisfying life [1,2,23–25].

Despite the potential of strengths-based perspectives and the utmost importance of hope, self-determination, and personal strengths, no study has yet focused on a strengths-based rehabilitation perspective for adults living with multiple sclerosis or spinal cord injury.

### 1.1. The Strengths Model

Rapp and Goscha’s strengths model (SM) (2012) serves as the SBP of reference in this study due to its scientific robustness and presence in several psychosocial rehabilitation facilities in North America and elsewhere. The SM was created in response to the reality of individuals living with severe mental illness often marked by the dynamics of exclusion and oppression, social isolation, discrimination, and few opportunities for inclusion. In the SM, clinicians document an individual’s strengths (both personal and environmental) and accompany that individual—through supporting niches—toward achieving a personal, self-determined project by building on these strengths. Several studies attest to the positive impacts of SM on the daily lives of individuals with whom it is used [1–6]. This model supports community integration, contributes to improved quality of life, strengthens social support, and fosters hope in attaining a better future. Figure 1 shows the SM’s core variables and their interactions.



**Figure 1.** Strengths model’s core variables and their interactions, adapted from Rapp and Goscha, 2012 [2].

### 1.2. Objective

The present research project relies on the hypothesis that some individual core components of the SM (e.g., hope, self-determination, and the mobilization of personal strengths) are informally addressed in physical rehabilitation units. This hypothesis is based on an increasing number of studies over the last decade, illustrating the relevancy of these compo-

nents in rehabilitation [2,12,23–27]. Thus, the objective is to explore how those individual core components are envisioned and experienced in outpatient-based rehabilitation departments. This article presents some of the results of a larger-scale project, depicting each core component of a strengths-based rehabilitation perspective in an outpatient rehabilitation setting. A future paper will address the core social components of an SBP (e.g., mobilization of environmental strengths and community integration).

## 2. Materials and Methods

### 2.1. Study Design and Population

A descriptive exploratory study with mixed data collection (i.e., questionnaires and semi-structured interviews) was conducted since this method allows complex phenomena to be systematically and accurately portrayed [28,29]. Descriptive designs are most useful for exploring phenomena or events about which little is known [28,29]. Thus, given that this is the first study to explore a strengths-based rehabilitation perspective in physical rehabilitation, a descriptive study design is certainly appropriate. The study was carried out at a rehabilitation center located in an urban area in the province of Quebec, Canada, and approved by the ethics committee of the Centre for Interdisciplinary Research in Rehabilitation and Social Integration (CIRRS) under ethics approval number EMP-2015-438.

Adults living with spinal cord injury (SCI) or multiple sclerosis (MS) were selected because of the contrasts that characterize them. Firstly, adults with SCI benefit from much more intensive functional rehabilitation, but over a condensed period of time. Conversely, those living with MS are followed over many years, but with much less intensity. Lastly, the very nature of the pathologies (evolutive vs. non-evolutive) is likely to significantly influence the rehabilitation experience. The research team believes that it is through these two sub-populations that the contrasts will be the richest and most revealing, making it possible to consider the heterogeneity of rehabilitation services delivery. Moreover, the decision to recruit from outpatient-based services can be explained by the team's desire to document rehabilitation experiences where community integration was likely to be addressed as it is the main outcome of an SBP. It was in these departments that practices echoing SBP were most likely to be observed.

### 2.2. Sampling Strategy and Recruitment

Participants were recruited from three different outpatient rehabilitation programs at the same rehabilitation centre: The social integration support program (SISP), the SCI program (SCIP), and the MS rehabilitation clinic (MSRC) program. The SISP aims to protect people with physical disabilities from social isolation, strengthen their social support, and help people achieve personal goals related to social participation within their community. The SCIP aims to improve the health status of individuals with a spinal cord injury (SCI), optimize their autonomy, alleviate their impairments, and support their integration into the community. The MSRC program aims to treat symptoms, prevent relapse, improve functioning, and support the social integration of individuals living with MS. These three programs use individual and group interventions offered by a range of healthcare professionals, including occupational or physical therapists, nurses, psychologists, kinesiologists, and social workers. These programs strongly represent current rehabilitation services available to adults living with MS or SCI. As such, recruitment into these programs ensures a good cross-section of outpatient rehabilitation experiences.

The coordinators for all three programs asked participants for their permission to be contacted by the research team. Inclusion criteria included (1) being between 25 and 65 years of age; (2) having received outpatient rehabilitation services for a minimum of three months; and (3) currently living with MS or SCI. Exclusion criteria were not being able to provide informed consent and not being able to communicate in French or English. If the individuals agreed, they were referred to the first author. He contacted patients by phone to explain the voluntary nature of the study. Informed consent was obtained following a careful reading of the information and consent form with each participant.

Confidentiality was assured through the masking of information that could allow for identifying participants and the use of secure data storage.

### 2.3. Qualitative Interviews

Each participant participated in two semi-structured interviews. The first one was based on the individual core characteristics of the SM and allowed the mobilization of personal strengths, experiences of a therapeutic alliance, decision-making processes, attitudes, and interventions that foster hope and self-determination during rehabilitation process to be explored. There were seven open-ended questions, including can you tell me about your relationship with your rehabilitation therapists? Can you express yourself about the objectives being pursued? How did your therapists help you to maintain hope throughout your rehabilitation?

The second semi-structured interview focused on the core social components and expected effects of the SM (e.g., community integration, mobilization of community resources). There were 14 open-ended questions, such as what are the things that prevent you from doing things outside your home? How is this addressed by your therapists? How do you think it should have been addressed by your therapist? What would have been a good way to address this issue? What are the roles of your loved ones in your rehabilitation?

The semi-structured interviews were developed based on classic strengths-based texts [1,2] and on findings from a scoping review on the practice of rehabilitation professionals in supporting community integration of adult populations living with a neurological condition [30].

### 2.4. Quantitative Measures

The sociodemographic questionnaire included 12 nominal, ordinal, or dichotomic variables such as age, sex, education and income level, ethnicity, or marital status. The Recovery-Promoting Relationship Scale (RPRS) is a 24-item questionnaire. It employs a four-point Likert ordinal scale that measures the recovery-promoting competencies of healthcare providers, which echoes a strengths-based perspective. Since it is based on the service user's perception, it informs on the perceived quality and nature of the therapeutic relationship [31,32]. The RPRS documents two generic components: Core interpersonal skills (8 items) and skills in utilizing recovery-promoting strategies (16 items). In addition, Hope (8 items), Empowerment (5 items), and Self-acceptance (4 items) subscales are accessible through the completion of the RPRS. Total and subscale scores can be reported out of 100 to facilitate interpretation, and prescriptive norms are available for each score. [31] However, these norms were established for people living with psychiatric disabilities, therefore inferences must be made with care. Substantial evidence supports the psychometric properties of the RPRS [31–33]. Namely, this tool has a very high level of internal consistency, acceptable test–retest reliability, and good convergent validity [31]. Although the RPRS assesses the attitudes and skills of mental health workers, in the absence of a similar tool in physical health, the RPRS remains the best choice. Upon completion of the RPRS, participants were asked to provide an overall opinion of the rehabilitation professionals they met.

### 2.5. Procedures

Each participant had two meetings with the first author. A semi-structured interview was conducted during the first meeting. Following this meeting, participants completed a sociodemographic questionnaire and the Recovery-Promoting Relationship Scale (RPRS). A second semi-structured interview was also conducted during the second meeting and two other questionnaires were completed (Community Integration Measure [34] and Social Provision Scale [35]). The data collected from these two questionnaires, however, are the subject of another publication.

The two meetings occurred approximately one month apart to allow for preliminary analysis and synthesis of the data from the first interview. The length of the meetings varied

between 60 min and 90 min. Due to fatigue, data collection for three participants living with MS was spread over three meetings. The interviews were audiotaped. Most interviews were carried out at the participants' homes, but three participants were interviewed at the research center, at their own request.

### 2.6. Data Analysis

Descriptive statistics were run for sociodemographic data and RPRS scores such as totals, means, ranges, and frequencies. The digital audio files of the interviews were transcribed verbatim into separate MS Word files. The first author checked all interview transcripts against the original audio files for accuracy. The qualitative analysis relied on a hybrid process of inductive and deductive approaches [36]. Firstly, the deductive approach was based on the strengths model theory [1,2]. Secondly, given the exploratory nature of the study, an inductive approach was also used. Inductive codes that emerged from the participants' speeches were most useful in finding nuance or illustrating data from theory-driven themes. Since the objective of the study was structured around the core components of an SBP as defined by the SM, subthemes were then grouped into overarching theory-driven themes [36] (see Table 1). The software program Qualitative Data Analysis (QDA) Miner 5 (Provalis Research, Montreal, QC, Canada) was used to manage data.

**Table 1.** Theory-driven themes and subthemes.

Theory-Driven Themes	Subthemes
Mobilization of personal strength	Place for personal plans or aspirations Personal strengths or skills mobilized in rehabilitation What a strengths-based perspective could offer
Hope	Things supporting hope during rehabilitation Things hindering hope during rehabilitation
Accessing information for decision-making	Information needed Navigating the system Perceptions/understanding of therapists' roles Representation of rehabilitation mandate
Exercising self-determination	Goals, personal priorities, and rehabilitation objectives Preferences in interventions What can help exercising self-determination Influencing the length or intensity of rehabilitation services

## 3. Results

### 3.1. Sociodemographic Characteristics

Tables 2 and 3 show the sociodemographic characteristics of the participants. Those living with MS were older (average age: 54.4 years) than those living with SCI (average age: 42.6 years). More women were recruited ( $n = 13/20$ ). Participants living with SCI were diagnosed an average of 14.9 years ago and those living with MS, 9.3 years ago. Eight out of twenty participants were single or divorced and living alone. Ninety percent of the participants considered that they were dealing with a moderate or severe disability. Twelve participants had achieved a post-secondary level of education (technical school, undergraduate or graduate school degrees). Participants were distributed in the rehabilitation centre's programs as follows: Social integration support program ( $n = 7$  participants), SCI program ( $n = 7$  participants), and MS rehabilitation clinic ( $n = 6$  participants).

**Table 2.** Sociodemographic characteristics of the participants.

Population	Age (Year)	Gender (n)	Time Since Diagnosis (Year)	Marital Status (n)		Annual Family Income (CAD)		
	Mean [Range]	Women:Men	Mean [Range]	Single or Divorced	Married or Civil Union	<50 k	between 50 k and 100 k	>100 k
SCI (n = 9)	42.6 [28–65]	4:5	9.3 [1–40]	3	6	3	4	2
MS (n = 11)	54.4 [38–65]	9:2	14.9 [1–28]	5	6	6	5	0
Total (n = 20)	48.5 [28–65]	13:7	12.1 [1–40]	8	12	9	9	2

**Table 3.** Rehabilitation programs from which participants were recruited.

Rehabilitation Programs	Participant ID
Social integration support program (SISP)	12, 14, 15, 16, 17, 18, 19
Spinal cord injury program (SCIP)	1, 2, 5, 6, 7, 8, 13
MS rehabilitation clinic (MSRC)	3, 4, 9, 10, 11, 20

### 3.2. Recovery Promoting Relationship Scale (RPRS)

According to the participants, practitioners demonstrated a high level of skills based on each subscale and index. The participants perceived the therapeutic alliance as one that fostered hope (74.4/100), empowerment (79.4/100), and self-acceptance (83.7/100) during rehabilitation. The participants considered that clinicians established positive and solid relationships as shown by the core relationship index (94.3/100) and put forward recovery-promoting strategies during rehabilitation (recovery-promoting strategies index = 74.4/100). As observed in Table 4, ranges are greater among MS participants for the hope and self-acceptance scales, while the range of the empowerment scale is greater for SCI participants.

**Table 4.** Recovery-Promoting Relationship Scale (RPRS) scores (n = 20).

Population	Total Score (/100)	Indexes & Subscales (/100)				
		Core Relationship Index	Recovery-Promoting Strategies Index	Hope Subscale	Empowerment Subscale	Self-Acceptance Subscale
		Means [Ranges]				
SCI (n = 9)	75.4 [61–89]	91.2 [68–100]	75.1 [61–88]	81.9 [67–100]	80.3 [38–100]	81.9 [57–100]
MS (n = 11)	75 [52–100]	96.8 [65–100]	73.7 [44–100]	85.7 [43–100]	78.25 [41–100]	85.1 [42–100]
Total (n = 20)	75.2	94.3	74.4	84	79.4	83.7

### 3.3. Mobilization of Personal Strengths

A focus on personal aspirations is one of the facets of personal strengths in an SBP. Five participants (two living with MS and three living with SCI) mentioned that their aspirations were not fostered throughout the rehabilitation process. Individual qualities and skills are other facets of personal strengths in an SBP. However, within a sea of potential individual qualities, according to the narratives obtained, only perseverance and resilience appear to have been used by therapists to attain rehabilitation goals, as suggested hereafter:

*“Beyond the fact that I am hard working and that I like to train, to my knowledge, they did not use any of my other strengths or talents during my rehabilitation.”* (Participant 11; 52-year-old woman living with MS for 28 years)

*“For me, resilience is being able to ask for help and assuming that you cannot do it all alone. Resilience . . . I would say that I have plenty of it and that they put it to good use.”* (Participant 14; 54-year-old man living with MS for 20 years).

As for skills, those perceived as put forward by therapists are limited to physical abilities (e.g., being active, being performed manually) and intellectual cognitive or social skills are put aside. Little to no attention is devoted to supporting existing competencies and talents as suggested below:

*"They put the emphasis on everything that was physical, like . . . 'You have strong arms. Use them!' But... as for the rest, anything related to intellect, for example, no, we did not use that."* (Participant 1; 40-year-old man living with SCI for one year)

*"My active side, in physio... They adapted to my interest in sports. In OT, as I told you, we used Wii Sport and ping-pong because of that as well."* (Participant 13; 37-year-old man living with SCI for two years)

In addition, these individual strengths (e.g., individual qualities, personal skills, interests) are often left out of the rehabilitation equation according to the narratives obtained. In some cases, this results in frustration, incomprehension, discouragement, or anxiety. One woman living with MS even quit her community reintegration rehabilitation program because she felt it did not reflect her level of skills or aptitudes as is suggested in the following narrative:

*"I am still a nurse! I was in school long enough not to want to organize small metal pieces as a job! I want to leave home and be motivated to go to rehabilitation, not get frustrated."* (Participant 19; 38-year-old woman living with MS for 17 years).

At other times, these individual strengths were proposed in the choice of therapeutic activities, which allowed some participants to experience rehabilitation that was more in sync with their own identity. In summary, reducing deficits and impairments predominates over the willingness to expose and use one's strengths.

*"With the social worker, we went to see for the Farmers' Circle because I really like everything that is manual. And I am good at it. We explored participation opportunities there."* (Participant 17; 46-year-old woman living with SCI for 12 years)

Meanwhile, many participants alluded to having perceived effects of a strengths-based perspective. More precisely, the narratives revealed that SBP would allow adults living with MS or SCI to have more motivation, boost self-esteem, and stay better hooked on rehabilitation.

*"Working from someone's strengths is rewarding; it's encouraging. It's interesting! It can help with self-esteem. It encourages me to progress, to improve myself. It allows me to become aware of my skills, but also to develop them."* (Participant 12; 31-year-old man living with SCI for 17 years)

In addition, while some suggested that a focus on strengths would generate better rehab functional outcomes, others revealed that it would positively influence their well-being and encourage their personal integrity and sense of independence. Lastly, it would also allow some people to discover or rediscover their own values.

*"A focus on strengths brings a whole new dimension to rehabilitation. That's where one can get people's interest, it's going to get them motivated." You stick to rehabilitation; it's going to make you go further and have better results."* (Participant 13; 37-year-old man living with SCI for two years)

However, it is quite likely that these quotes are more reflective of unmet needs than of outcomes associated with a strengths-based perspective since these are only perceived effects and SBP is more or less present throughout participants' rehabilitation experiences.

### 3.4. Hope

All participants mentioned that experiencing success in therapy and being aware of their own abilities during treatment helped them to maintain hope, especially during the early rehabilitation phases. Actions or words from therapists can often reflect these successes or abilities as outlined in the following narratives:

*“My physiotherapist told me, ‘You get up and walk.’ I did it. And then you realize what you are capable of. I came out of there stunned, especially during the first treatments, every little detail you see that you can do . . . it’s really inspiring.”* (Participant 8; 28-year-old woman living with SCI for one year)

Recognizing progress in achieving function or ability is a driving force for hope during rehabilitation. This is one aspect that all participants can agree with. Seeing progress sustains hope as proposed below:

*“I was able to see progress every week. Progress in my rehabilitation, my abilities. Seeing that I was able to do more and always better. It was a source of motivation and hope.”* (Participant 13; 37-year-old man living with SCI for two years)

In addition, practitioners who encourage their clients to believe in their abilities also create better expectations for the future. Working toward meaningful aspiration also appears to be a hope-inducing practice:

*“Hope is complex and very personal, you know. I think the team is doing all they can . . . the PTs, the OTs. The fact that they encourage us, that they tell us that we will reach our personal goals... that we are moving forward. It helps.”* (Participant 15; 58-year-old woman living with MS for four years)

*“The rehabilitation team was talking to me about the results we got working on together toward my objectives. They supported my motivation. They showed me that there had been improvements regarding my personal goals.”* (Participant 11; 52-year-old woman living with MS for 28 years)

However, although participants living with SCI could work toward such goals during rehabilitation, those living with MS did not share stories that suggested they had this opportunity. Five participants mentioned having the feeling that their aspirations or personal goals (e.g., driving a car, being able to walk again someday, traveling around the world in a wheelchair, resuming a nursing career) were being questioned by the rehabilitation team, which greatly shattered hope.

*“At the beginning of the meetings with the PT, you set your objectives and you talk a lot. I mean, she never said to me that my goals were impossible or that I would never get there . . . but I still kind of perceived it [crying].”* (Participant 15; 58-year-old woman living with MS for four years)

Moreover, having little control over the rehabilitation process (e.g., accessibility issues for specialized programs, and limited duration of services) also inhibited hope. Those who had difficulty making their voice heard regarding their personal goals also had their hope crushed, especially among adults living with SCI:

*“You feel there is a wait. We wait for the six weeks to end, and we wait for the intervention plan before doing any action or making any change. We’re waiting for the 6-week program to finish. We’re going to do the same things instead of giving you hope and trying things.”* (Participant 2; 35-year-old man living with SCI for one year)

Lastly, some therapists did not stray from the structure of the program (e.g., the role of intervention plans, and mandatory assessments) and this had a negative influence on hope:

*“Everything is sequential. For example, my therapist told me that the driving program came after the physical program, which greatly lengthens the time you spend there. You get discouraged with the time it takes to get to the next step.”* (Participant 7; 54-year-old man living with SCI for two years)

### 3.5. Accessing Information for Decision-Making

To express self-determination, a combination of elements must come together (e.g., skills, key information, beliefs). This section focuses on access to information that may enable participants to exercise self-determination in making decisions that affect them. First, treatment planning sessions are designed for participants to meet with their multidisciplinary



rehabilitation team to establish a rehabilitation plan. In this regard, eight participants living with SCI reported a lack of preparation with respect to the treatment planning sessions, especially the first one. At times, this prevents participants from sharing their vision and needs. It was suggested that better preparation (e.g., receiving questions in advance, and having time to think about rehabilitation goals) would make these sessions more useful and relevant, and would enable participants (and their families) to adopt a stronger role during these meetings. Some narratives revealed that some participants living with SCI had limited knowledge about the purpose of such sessions.

*“First, you have to know... You have to understand the purpose of the sessions. At first, you do not know! You go in there and you do not know what the purpose is.”* (Participant 2; 35-year-old man living with SCI for one year)

*“It could have been in the social worker’s mandate to explain what was going to happen in these sessions . . . or what questions I would have to answer in order to be better prepared. If you are not prepared, your whole rehabilitation will be impacted.”* (Participant 13; 37-year-old man living with SCI for two years).

An interesting yet concerning point is that no participant living with MS mentioned having participated in any treatment planning session during their rehabilitation, which might reflect the less intensive nature of the services received.

Moreover, participants often do not know how to navigate the healthcare system. This was a reality shared by both populations, but more so by the participants living with MS. Not knowing where to go or on which door to knock to obtain services (e.g., public programs or psychological support) was associated with a problem regarding self-determination.

*“I would have liked information on how to get psychological help [...]. I found myself in a twilight zone in this regard I would have liked to have sessions that told me which doors to knock on to get this type of help... psychological help.”* (Participant 7; 54-year-old man living with SCI for two years)

*“If I knew what the crucial information was to make good decisions for my rehabilitation, I would probably still be doing rehabilitation right now. I imagine that you have to know your deficits and from there, know on which doors to knock in order to overcome them.”* (Participant 19; 38-year-old woman living with MS for 17 years).

Almost every participant wished that the professionals’ roles and what the professionals could provide would have been more detailed so that the participants could have better navigated the system.

*“It’s important to know the role of the different therapists and it’s complex; it always has been. You know, a PT, an OT... It’s difficult to navigate and we do not always know who to ask our questions to or who to address our requests to. Do I need an OT or PT?”* (Participant 15; 58-year-old woman living with MS for four years)

In addition, participants had limited knowledge of what rehabilitation could provide. For example, some participants did not share their social isolation issues with their practitioners, believing that it was not the practitioners’ job to address such concerns. Even two participants with previous rehabilitation experience said things that strongly suggest a lack of knowledge about what rehabilitation can provide.

*“I only spoke in neuropsychology about my social relations. [ . . . ] I wasn’t talking about this with my OT, for example . . . She will not help me at that level. It’s not her role.”* (Participant 12; 31-year-old man living with SCI for 17 years).

*“Nothing was done about my plan to walk outside a bit more . . . I do not know what exists or what they can offer me [...] The how and the who . . . I have no idea! I do not even know if there is any help for that. Is it offered at the rehabilitation centre?”* (Participant 19; 38-year-old woman living with MS for 17 years)

### 3.6. Exercising Self-Determination

In terms of expressing their personal priorities for rehabilitation, participants' voices were not always heard. While adults living with SCI had much to say about their personal aspirations and objectives, most participants living with MS did not as the citations below suggest:

*"The goals that I set for myself every month. That's what we do during the treatment planning sessions. Having goals and challenges, but also having a team that accompanies me helps. I am the master of my treatment planning sessions, the master of my rehabilitation."* (Participant 7; 54-year-old man living with SCI for two years)

*"I did not have a word to say in the choice of goals... I did not even know which goals I needed or even reached throughout rehabilitation. [...] What they expected from me . . . I was not told."* (Participant 10; 56-year-old woman living with MS for one year)

Many participants did not feel the need to share their aspirations or personal goals with the rehabilitation team, either because they felt they could achieve them on their own or because they believed that the rehabilitation team would not consider them. This is evident in the following quote:

*"My goal . . . It's almost my secret garden because of what I have heard from them about what we can achieve . . . I do not talk to them much and I dream, I dream."* (Participant 1; 40-year-old man living with SCI for one year)

As for their preferences in interventions, they were also variably considered in both populations. At times, participants felt like practitioners were open to suggestions and ideas from the participants.

*"In occupational therapy, I had seen some type of special clothespins and I wanted them at home so that I could work on my dexterity. They ordered them for me directly from the catalog. They really helped me find the means to address my needs."* (Participant 13; 37-year-old man living with SCI for two years)

Other times, practitioners were not receptive to participants' preferences for interventions. One participant even reported one of her therapists having a condescending attitude when she asked to try other exercises.

*"I wanted to do workshops, some manual work as therapy during my rehabilitation. My OT told me that she did not like it; that she had another approach. During vacation replacement, the same thing happened. I wanted to do some workshops, but she wanted to do Wii."* (Participant 5; 47-year-old woman living with SCI for eight years)

People with SCI ( $n = 2$ ) who had past or current experience in leadership (e.g., company administrator, leader of a sports team) did not share any issues regarding self-determination during rehabilitation. On the other hand, participants living with MS or SCI had hardly any influence on the intensity or length of services that focused on social participation or community integration.

*"I did not make the decision to end my rehabilitation. It was the PT who told me we had finished. She had brought me where she wanted to take me, so it was the end. Personally, I would have liked to continue. She told me that I could call back if I needed other exercises."* (Participant 9; 55-year-old man living with MS for eight years)

However, even though there was often an open-door policy for physical issues, participants felt that emotional, psychosocial, and social participation struggles were perceived as secondary issues by rehabilitation teams as the quote below suggests:

*"I was in the social integration program and for this, the question of exploring opportunities for participation, they clearly told me that it was over. No more services. I had no power over this. As for the physical aspect, there was an opening though."* (Participant 17; 46-year-old woman living with SCI for 12 years)

Lastly, five participants living with SCI felt pressure to end their rehabilitation to make room for other people on the waiting list, even if they had asked for more rehabilitation and expressed their needs and wishes. However, participants living with MS reported this situation.

*“What I realized was that at the center you are surrounded a lot, but when you get there, they already see the exit and they tell you about it.”* (Participant 5; 47-year-old woman living with SCI for eight years)

*“Currently, I sometimes feel that I should leave and make room for someone else when I’m not progressing.”* (Participant 1; 40-year-old man living with SCI for one year)

#### 4. Discussion

This paper has achieved its objective of exploring how individual core components of a strengths-based rehabilitation perspective (i.e., hope, self-determination, and the mobilization of personal strengths) are envisioned and experienced by adults living with MS or SCI using outpatient-based services. The results point out that few elements of the participants’ rehabilitation experiences reflect a strengths-based perspective. In fact, only a few personal strengths were encouraged and fostered by therapists (e.g., resilience), and personal plans were not always considered. In addition, elements specific to the context in which services are offered (e.g., silos, waiting lists, a system that is difficult to navigate) were perceived by participants as limiting their hope and self-determination, especially for adults living with MS. This situation is problematic considering that several scientific writings (from professional associations and academic settings) attest to the importance of rehabilitation professionals adopting an SBP in their practice [23–25,27,37]. What impediments could there be to adopting or implementing such perspectives?

Strengths-based practices are client-centred practices. The latter has been defined as collaborative interventions that demonstrate respect for clients, involve them in decisions, advocate with and for them, and recognize clients’ experiences, skills, and strengths [7]. There are several elements in the scientific literature that explain why adopting client-centred practices is a real challenge again today [9,38]. These might help clinicians understand why SBPs are not experienced or implemented in outpatient-based rehabilitation centres for adults living with neurological conditions. Challenges related to the implementation of client-centred practices may exist at the systematic or client level [9].

At the systemic level, the fact that some participants felt pressure to end their rehabilitation, could not have access to more services, or had to be put on waiting lists to access social participation programs are indicators of a lack of resources and time. A lack of resources can be sufficient on its own to impede the adoption of client-centred practices [9,26,38]. Moreover, this paucity of resources may play a role in explaining why exercising self-determination was difficult during rehabilitation. Some participants mentioned their difficulty in influencing services, echoing a certain rigidity in the programs they participated in. In this regard, program rigidity may be caused by a lack of resources that sometimes leaves practitioners with little latitude to meet the expectations and wishes of their clients in terms of service intensity [39]. On the other hand, the rigidity and fragmentation of programs offered in rehabilitation centres are recognized as a factor limiting self-determination [26,39]. Thus, what participants said about their poor ability to influence—and sometimes access—programs is a good illustration of this idea. A lack of resources can also make it more difficult to implement practical instructional workshops. This type of workshop could be recommended in order to compensate for participants’ lack of resource knowledge and awareness regarding rehabilitation services [40]. These workshops could make it easier for participants to navigate the health system, and having access to key information could enable them to actively participate in decision-making processes.

At the client level, people receiving services can be seen as a limitation to adopting or implementing client-centred practices [9]. Although this was not the case with the participants interviewed, someone could have wanted to receive rehabilitation services more

passively, limiting the possibility of creating a highly collaborative environment where the client is at the centre of decisions, and exercises self-determination to guide rehabilitation.

Nonetheless, hope is a core component of an SBP. The scientific literature supports the development or implementation of hope-inducing practice interventions throughout the physical rehabilitation process for adults living with MS [17,41] or SCI [42–45]. Such interventions can lead to better longer-term adjustment [43], improved mental health [8], well-being [45], and the use of successful and positive adaptative strategies [17,45]. The authors of those studies are largely advocating for what many of the participants had asked for during the interviews: A better place for psychosocial considerations in physical rehabilitation.

Lastly, when looking at the RPRS scores, there was some incoherence between the qualitative and quantitative results in relation to hope and self-determination. If the mean scores of the hope and empowerment subscales are high, the narratives might sometimes look like they are suggesting otherwise. However, it should be noted that the RPRS merely documented the therapeutic relationships and that the semi-structured interviews were intended to document participants' perspectives on their rehabilitation process. The intersection of quantitative and qualitative results in fact reveals that a positive therapeutic relationship supporting hope and self-determination is not enough to actually allow for a hope-filled rehabilitation experience where participants' voices are central and fully heard. A good therapeutic relationship is just not sufficient to achieve self-determined goals or a fully satisfying rehabilitation experience. Overall, while therapists' interpersonal skills were helpful, rehabilitation processes and contexts were less helpful to many of the participants.

#### *4.1. Strengths and Limitations*

This study provides a credible perspective of a complex phenomenon studied in accordance with classic strengths-based research [1,2]. Interview techniques maintained the true value (e.g., iterative questioning, encouragement to speak sincerely, reminders about confidentiality, or participants' right to withdraw at any time) [46]. The saturation of qualitative data was obtained with 16 participants (out of 20). Moreover, if the literature on the strengths model thoroughly guided the deductive thematic analyses, the combination of deductive and inductive approaches fostered a rich interpretation of the data. The definition of the codes and the coding of the data collected from the first four participants were performed in peer debriefing. All the interviews were conducted and analyzed in French. There was no back-and-forth translation, but preserving the original meaning of the narratives was an ultimate priority. Other stakeholders could have been interviewed (e.g., program coordinator, clinician, or family caregiver) as they may have provided different perspectives and ideas concerning strengths-based services.

#### *4.2. Futures Research*

To our knowledge, this study is the first to document the actual place of a strengths-based perspective in the rehabilitation of adults living with MS or SCI. Hence, more studies are needed to better understand the perspective of program coordinators, clinicians, or family caregivers. Future research is needed to better understand how therapeutic relationships and clinical *savoir-faire* can efficiently contribute to a care experience that fosters hope and self-determination, where the role of personal goals is salient, and where issues of identity, affiliation, and social participation are the object of direct interventions.

### **5. Conclusions**

Practices echoing a strengths-based rehabilitation perspective are recommended in the professional and scientific literature [2,12,23–27]. However, despite the presence of positive therapeutic relationships (as evidenced by RPRS scores), few elements of the participants' rehabilitation experiences reflect a strengths-based perspective. A focus on strengths rather than on impairments could improve the overall rehabilitation experience of adults living

with MS or SCI. This exploratory work highlights the efforts still needed to gradually shift from a deficit-based to a strength-based rehabilitation perspective.

**Author Contributions:** Conceptualization, S.T. and C.V. (Catherine Vallée); methodology, S.T. and C.V. (Catherine Vallée); software, S.T.; validation, S.T. and C.V. (Catherine Vallée); formal analysis, S.T. and C.V. (Catherine Vallée); investigation, S.T., C.V. (Catherine Vallée) and C.V. (Claude Vincent); data curation, S.T.; writing—original draft preparation, S.T.; writing—review and editing, S.T., C.V. (Catherine Vallée) and C.V. (Claude Vincent); supervision, C.V. (Catherine Vallée) and C.V. (Claude Vincent); project administration, S.T.; funding acquisition, S.T., C.V. (Catherine Vallée) and C.V. (Claude Vincent). All authors have read and agreed to the published version of the manuscript.

**Funding:** This work was supported by training scholarships from the Canadian Institutes of Health Research (CIHR) and the Fonds de recherche du Québec—Santé (FRQ-S) in collaboration with the Quebec Strategy for Patient-Oriented Research Support Unit (SPOR-SUPPORT Unit). This work was also supported by training scholarships from the Canadian Occupational Therapy Foundation (COTF) and from the Ordre des ergothérapeutes du Québec (OEQ).

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board of the Centre for Interdisciplinary Research in Rehabilitation and Social Integration (Cirris) under ethics approval number EMP-2015-438.

**Informed Consent Statement:** Informed consent was obtained from all participants involved in the study.

**Data Availability Statement:** Data are held in a confidential repository accessible to research study team members.

**Acknowledgments:** We would like to express our sincere gratitude to the research participants for sharing their rehabilitation experiences with us.

**Conflicts of Interest:** The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

## References

1. Rapp, C.A.; Goscha, R. *The Strengths Model: Case Management with People with Psychiatric Disabilities*, 2nd ed.; Oxford University Press: Oxford, UK; Toronto, ON, Canada, 2006.
2. Rapp, C.A.; Goscha, R. *The Strengths Model: A Recovery-Oriented Approach to Mental Health Services*, 3rd ed.; Oxford University Press: New York, NY, USA, 2012.
3. Björkman, T.H.; Sandlund, M.L. Outcome of case management based on the strengths model compared to standard care. A randomised controlled trial. *Soc. Psychiatry Psychiatr. Epidemiol.* **2002**, *37*, 147–152. [[CrossRef](#)]
4. Fukui, S.; Goscha, R.; Rapp, C.A.; Mabry, A.; Liddy, P.; Marty, D. Strengths Model Case Management Fidelity Score and Client Outcomes. *Psychiatr. Serv.* **2012**, *63*, 708–710. [[CrossRef](#)]
5. Stanard, R. The Effect of Training in a Strengths Model of Case Management on Client Outcomes in a Community Mental Health Center. *Community Ment. Health J.* **1999**, *35*, 169–179. [[CrossRef](#)]
6. Tse, S.; Tsoi, E.W.; Hamilton, B.; O'Hagan, M.; Shepherd, G.; Slade, M.; Whitley, R.; Petrakis, M. Uses of strength-based interventions for people with serious mental illness: A critical review. *Int. J. Soc. Psychol.* **2016**, *62*, 281–291. [[CrossRef](#)]
7. Law, M.; Baptiste, S.; Mills, J. Client-Centred Practice: What does it Mean and Does it Make a Difference? *Can. J. Occup. Ther.* **1995**, *62*, 250–257. [[CrossRef](#)]
8. Soundy, A.; Roskell, C.; Elder, T.; Collett, J.; Dawes, H. The psychological processes of adaptation and hope in patients with multiple sclerosis: A thematic synthesis. *Open J. Ther. Rehabil.* **2016**, *4*, 22–47. [[CrossRef](#)]
9. Wilkins, S.; Pollock, N.; Rochon, S.; Law, M. Implementing client-centred practice: Why is it so difficult to do? *Can. J. Occup. Ther.* **2001**, *68*, 70–79. [[CrossRef](#)]
10. McDougall, J.; Evans, J.; Baldwin, P. The importance of self-determination to perceived quality of life for youth and young adults with chronic conditions and disabilities. *Remedial Spec. Educ.* **2010**, *31*, 252–260. [[CrossRef](#)]
11. Wehmeyer, M.L. Self-determination and the empowerment of people with disabilities. *Am. Rehabil.* **2004**, *28*, 22–30.
12. Townsend, E.A.; Polatajko, H.J. *Enabling Occupation II: Advancing an Occupational Therapy Vision for Health, Well-Being & Justice through Occupation*; CAOT Publications ACE: Ottawa, ON, Canada, 2007; 418p.
13. Snyder, C.R. Hope Theory: Rainbows in the Mind. *Psychol. Inq.* **2002**, *13*, 249–275. [[CrossRef](#)]

14. Snyder, C.R.; Lopez, S.J.; Shorey, H.S.; Rand, K.L.; Feldman, D.B. Hope theory, measurements, and applications to school psychology. *Sch. Psychol. Q.* **2003**, *18*, 122–139. [[CrossRef](#)]
15. Lynch, S.G.; Kroencke, D.C.; Denney, D.R. The relationship between disability and depression in multiple sclerosis: The role of uncertainty, coping, and hope. *Mult. Scler. J.* **2001**, *7*, 411–416. [[CrossRef](#)]
16. Foote, A.W.; Piazza, D.; Holcombe, J.; Paul, P.; Daffin, P. Hope, self-esteem and social support in persons with multiple sclerosis. *J. Neurosci. Nurs. J. Am. Assoc. Neurosci. Nurses* **1990**, *22*, 155–159. [[CrossRef](#)]
17. Madan, S.; Pakenham, K.I. The stress-buffering effects of hope on changes in adjustment to caregiving in multiple sclerosis. *J. Health Psychol.* **2015**, *20*, 1207–1221. [[CrossRef](#)]
18. Field, S.; Martin, J.; Miller, R.; Ward, M.; Wehmeyer, M. *A Practical Guide for Teaching Self-Determination*; Council for Exceptional Children: Reston, VA, USA, 1998.
19. Scherer, M.J.; Craddock, G.; Mackeogh, T. The relationship of personal factors and subjective well-being to the use of assistive technology devices. *Disabil. Rehabil.* **2011**, *33*, 811–817. [[CrossRef](#)]
20. Hammell, K.R. Quality of life after spinal cord injury: A meta-synthesis of qualitative findings. *Spinal Cord* **2007**, *45*, 124–139. [[CrossRef](#)]
21. Peter, C.; Rauch, A.; Cieza, A.; Geyh, S. Stress, internal resources and functioning in a person with spinal cord disease. *NeuroRehabilitation* **2012**, *30*, 119–130. [[CrossRef](#)]
22. Haymes, L.K.; Cote, D.L.; Storey, K. Improving Community Integration and Participation. In *Advances in Exercise and Health for People with Mobility Limitations*; Hollard, D., Ed.; Springer: Cham, Switzerland, 2019; pp. 21–39.
23. Dunn, W. Strengths-based approaches: What if even the ‘bad’ things are good things? *Br. J. Occup. Ther.* **2017**, *80*, 395–396. [[CrossRef](#)]
24. Dunn, W.; Koenig, K.; Cox, J.; Sabata, D.; Pope, E.; Foster, L.; Blackwell, A. Harnessing strengths: Daring to celebrate everyone’s unique contributions (part I). *Dev. Disabil. Spec. Interest Sect. Q.* **2013**, *36*, 1–4.
25. Dunn, W.; Koenig, K.; Cox, J.; Sabata, D.; Pope, E.; Foster, L.; Blackwell, A. Harnessing strengths: Daring to celebrate everyone’s unique contributions (part II). *Dev. Disabil. Spec. Interest Sect. Q.* **2013**, *36*, 1–3.
26. Fredericks, S.; Lapum, J.; Schwind, J.; Beanlands, H.; Romaniuk, D.; McCay, E. Discussion of patient-centered care in health care organizations. *Qual. Manag. Health Care* **2012**, *21*, 127–134. [[CrossRef](#)]
27. Crawford, E.; Turpin, M.J. Intentional strengths interviewing in occupational justice research. *Scand. J. Occup. Ther.* **2017**, *25*, 1–9. [[CrossRef](#)]
28. Dulock, H. Research Design: Descriptive Research. *J. Pediatr. Oncol. Nurs.* **1993**, *10*, 154–157. [[CrossRef](#)] [[PubMed](#)]
29. Fortin, M.F.; Gagnon, J. *Fondements et Étapes du Processus de Recherche Méthodes Quantitatives et Qualitatives*, 3rd ed.; Chenelière Éducation: Montréal, QC, Canada, 2016.
30. Turcotte, S.; Vallée, C.; Vincent, C. Occupational therapy and community integration of adults with neurological conditions: A scoping review. *Can. J. Occup. Ther.* **2018**, *85*, 365–377. [[CrossRef](#)]
31. Russinova, Z.; Rogers, E.S.; Cook, K.F.; Ellison, M.L.; Lyass, A. Conceptualization and measurement of mental health providers’ recovery-promoting competence: The recovery promoting relationships scale (RPRS). *Psychiatr. Rehabil. J.* **2013**, *36*, 7–14. [[CrossRef](#)] [[PubMed](#)]
32. Russinova, Z.; Rogers, E.S.; Ellison, M.L.; Lyass, A. Recovery-promoting professional competencies: Perspectives of mental health consumers, consumer-providers and providers. *Psychiatr. Rehabil. J.* **2011**, *34*, 177–185. [[CrossRef](#)]
33. Wilrycx, G.; Croon, M.A.; van den Broek, A.; van Nieuwenhuizen, C. Psychometric properties of three instruments to measure recovery. *Scand. J. Caring Sci.* **2012**, *26*, 607–614. [[CrossRef](#)]
34. McColl, M.A.; Davies, D.; Carlson, P.; Johnston, J.; Minnes, P. The community integration measure: Development and preliminary validation. *Arch. Phys. Med. Rehabil.* **2001**, *82*, 429–434. [[CrossRef](#)]
35. Caron, J. L’Échelle de provisions sociales: Une validation québécoise. *Sante Ment. Que.* **1996**, *21*, 158–180. [[CrossRef](#)]
36. Fereday, J.; Muir-Cochrane, E. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *Int. J. Qual. Methods* **2006**, *5*, 80–92. [[CrossRef](#)]
37. Manthey, T.J.; Knowles, B.; Asher, D.; Wahab, S. Strengths-based practice and motivational interviewing. *Adv. Soc. Work.* **2011**, *12*, 126–151. [[CrossRef](#)]
38. Sumsion, T.; Lencucha, R. Balancing challenges and facilitating factors when implementing client-centred collaboration in a mental health setting. *Br. J. Occup. Ther.* **2007**, *70*, 513–520. [[CrossRef](#)]
39. Mumbardó-Adam, C.; Vicente Sánchez, E.; Simó-Pinatella, D.; Coma Roselló, T. Understanding practitioners’ needs in supporting self-determination in people with intellectual disability. *Prof. Psychol. Res. Pract.* **2020**, *51*, 341–351. [[CrossRef](#)]
40. Thoma, C.A.; Nathanson, R.; Baker, S.R.; Tamura, R. Self-determination: What do special educators know and where do they learn it? *Remedial Spec. Educ.* **2002**, *23*, 242–247. [[CrossRef](#)]
41. Soundy, A.; Smith, B.; Butler, M.; Minns Lowe, C.; Helen, D.; Winward, C.H. A qualitative study in neurological physiotherapy and hope: Beyond physical improvement. *Physiother. Theory Pract.* **2010**, *26*, 79–88. [[CrossRef](#)]
42. Blake, J.; Yaghmaian, R.; Brooks, J.; Fais, C.; Chan, F. Attachment, hope, and participation: Testing an expanded model of Snyder’s hope theory for prediction of participation for individuals with spinal cord injury. *Rehabil. Psychol.* **2018**, *63*, 230–239. [[CrossRef](#)]
43. Dorsett, P.; Geraghty, T.; Sinnott, A.; Acland, R. Hope, coping and psychosocial adjustment after spinal cord injury. *Spinal Cord Ser. Cases* **2017**, *3*, 17046. [[CrossRef](#)] [[PubMed](#)]

44. Phillips, B.N.; Smedema, S.M.; Fleming, A.R.; Sung, C.; Allen, M.G. Mediators of disability and hope for people with spinal cord injury. *Disabil. Rehabil.* **2016**, *38*, 1672–1683. [[CrossRef](#)]
45. Brazeau, H.; Davis, C.G. Hope and psychological health and well-being following spinal cord injury. *Rehabil. Psychol.* **2018**, *63*, 258–266. [[CrossRef](#)]
46. Shenton, A.K. Strategies for ensuring trustworthiness in qualitative research projects. *Educ. Inf.* **2004**, *22*, 63–75. [[CrossRef](#)]

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.