

# Learned Resourcefulness and the Long-Term Benefits of a Chronic Pain Management Program

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A concurrent mixed methods approach was used to understand how learned resourcefulness empowers individuals. After completing Rosenbaum's Self-Control Schedule (SCS) measuring resourcefulness, 16 past clients of a multimodal pain clinic were interviewed about the kinds of pain-coping strategies they were practicing from the program. Constant comparative analysis of the text-based data revealed striking differences in the type of pain management strategies used by high- and low-resourceful participants. A substantive theory is advanced, whereby introspection and emotion allow for acceptance, which in turn permits the constructive use of social supports and enactment of active, and sometimes creative, pain-coping strategies to engage in meaningful activities.

**Keywords:** *learned resourcefulness; coping strategies; pain intervention programs*

Adaptation to chronic illness is perhaps the critical greatest single challenge facing health care systems in developed countries. Chronic pain is of specific interest because it is a prevalent problem having a major impact on individuals' physical functioning, psychological health, and social well being. It also contributes to lost work productivity and increased health care expenditures (Green, Baker, Sato, Washington, & Smith, 2003). In the Canadian working population (25 to 64 years), 33% of females and 26% of males suffer from chronic pain (StatsCan, 1998). Programs have been developed by clinicians to help sufferers accept and proactively self-manage their pain (Haugli, Steen, Laerum, Nygard, & Finset, 2001; Jensen, Neilson, Turner, Romano, & Hill, 2003; Jensen, Turner, & Romano, 2001; McCracken & Eccleston, 2003; Sullivan et al., 2005). These programs, however, have variable success for participants, depending on such factors as the duration of pain and type of disability, as well as inconsistencies in outcome from study to study (Cano, 2004; Dehghani, Sharpe, & Nicholas, 2004; Edwards, Doleys, Lowery, & Fillingim, 2003; Green et al., 2003; Keogh, McCracken, & Eccleston, 2005). Even though our understanding on how to develop programs for chronic pain sufferers is improving, it remains incomplete.

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Outcome in therapy depends heavily on the client's personal attributes, and learned resourcefulness has been shown to be a valuable personal quality enhancing self-sufficiency in behavioral change (e.g., Rosenbaum, 1990, 2000). Our mixed methods study conceptualizes coping attitudes and skills as outcomes emerging out of resourcefulness through clients' participation in a self-management program. Taking a critical realist perspective informed by Rosenbaum's (1990, 2000) model of self-control, we combine a quantitative measure of learned resourcefulness with a qualitative text-based analysis to characterize the processes that come into play in the self-management of pain for high- and low-resourceful clients following a multimodal treatment-based pain program. We hoped that the study would enable practice, through the recognition of the role of resourcefulness in program outcome and further research to both quantify and qualify its impact.

## Learned Resourcefulness

Rosenbaum (1990, 2000) proposes that people's possession of a general repertoire of learned-resourceful skills is the key component for the self-management of relieving or preventing health problems. In the management of everyday life demands, resourceful individuals make use of positive self-instructions, apply problem-solving methods, delay immediate gratification, and recognize that it takes considerable effort to regulate and minimize the negative impact disruptive events have on their functioning. Resourcefulness has been shown to start developing in early childhood through one's interaction with parents, teachers, and significant others (Zauszniewski, Chung, Chang, & Krafcik, 2002) and to become stable by early adulthood (Kennett, 1994; Rosenbaum, 1990).

Although this skill base does not prevent people from developing bad habits or provide them with solutions to all problems, when motivated to make changes or adapt to adversities, they are more successful at achieving their goals either on their own or with the help of others. In fact, a considerable amount of research reveals that resourcefulness is an important and key predictor of adopting healthy lifestyle habits (Birkimer, Johnston, & Berry, 1993; Kennett & Nisbet, 1998; Levesque, Gauvin, & Desharnais, 2003), adhering to regimens for chronic illness (Rosenbaum & Palmon, 1984; White, Tata, & Burns, 1996; Zauszniewski & Chung, 2001), breaking bad habits (Kennett, Morris, & Bangs, 2006), and dealing with stress (Akgun & Ciarrochi, 2003; Kennett & Pettis, 2001; Rosenbaum & Cohen, 1999). Learned resourcefulness is unrelated to IQ, education level, and socioeconomic status in adults (Derry, Chovaz, McLachlan, & Cummings, 1993). Important to the current investigation, learned resourcefulness has been linked with coping with pain, both in acute laboratory conditions (Rosenbaum, 1980b) and in clinical settings (Ward, 2002).

Rosenbaum (1980b) conducted one of the first experiments relating resourcefulness to coping with pain using the cold pressor task. Prior to being asked to hold their hand in 2-degree Celsius water for as long as they could, participants were randomly assigned to an experimental group, in which they were given cognitive strategies to help them deal with the pain, or a control-group condition with no intervention. Regardless of grouping, the high-resourceful people spent more time in the cold pressor and reported devoting a greater proportion of control to thought diversion than did the low-resourceful people, demonstrating the importance of resourcefulness in the coping process.

As much as learned resourcefulness is essential for the execution of self-control when attempting to deal with chronic pain, Rosenbaum's (1990, 2000) model recognizes that whether or not one draws on this repertoire of well-learned skills depends on other factors. In particular, process-regulating cognitions (PRCs) precede any self-control behavior, whereby individuals assign meaning to events, monitor and evaluate their actions, attribute causality to events, and develop future self-efficacy expectancies. Process-regulating cognitions are also affected by physiological (e.g., one's pain tolerance level), situational (e.g., supporting family and friends), and personal (e.g., one's general repertoire of learned resourcefulness skills) variables that interact among each other and act on the individuals in distress, by either facilitating or preventing the use of self-control skills in that particular situation (e.g., the ability to employ specific pain self-regulatory strategies, such as stating to oneself that the thoughts of pain will go away by keeping busy). Ward (2002) examined the role that learned resourcefulness, as well as other components of the self-control model, played in the coping process for people suffering from recurrent pain (e.g., migraines), intractable benign pain (e.g., low-back pain), progressive pain (e.g., arthritis), or multiple pain types, on average, for the past 11 years. She found that pain type had no bearing on pain perception, daily functioning, or the type of coping strategies used. Low-resourceful individuals, however, had less belief in their ability to cope with their pain and were more likely to use catastrophizing as their main coping strategy, which has been shown to be associated with poor functional and affective outcome (e.g., Haythornthwaite, Menefee, Heinberg, & Clark, 1998). In contrast, the more highly resourceful participants drew on many coping strategies, not just one, to deal with their pain, such as diverting attention, reinterpreting pain, and coping self-statements. Moreover, Ward (2002) found that low-resourceful people scored twice as high on Beck's depression inventory than high-resourceful people. Thus, not only were low-resourceful people less effective at coping with pain, these same people also were dealing with higher levels of depression.

Learned resourcefulness has also been associated with program drop-out rates and outcomes. Kennett and Ackerman (1995), for instance, found that low-resourceful overweight women were more likely to drop out of a 5-week weight management program. Both the high- and low-resourceful women completing the program, though, benefited equally from the program in that they lost the same amount of weight. The main difference was maintenance. High-resourceful women continued to lose weight after the program, whereas the low-resourceful women gained their lost weight back. The authors suggest that low-resourceful people may need a longer term self-control counseling period to effect change. They note that neither learned resourcefulness nor self-reinforcement skills were enhanced for low-resourceful women as a result of this program, perhaps making it more difficult for them to implement problem-solving skills without a counselor there to reinforce their behavior.

A growing body of research is addressing the effectiveness of psychologically based treatment programs for the self-management of pain, whereby patients are asked to change the way they look at and cope with pain (Haugli et al., 2001; Jensen et al., 2001, 2003). Given the aim of pain management programs to add to or modify people's repertoire of coping skills, we need to determine to what extent personal qualities, such as learned resourcefulness, play a role in the long-term success of these programs, especially when these programs are relatively short in duration and are limited in the ongoing support they provide.

How is resourcefulness reflected in relation to self-management of pain in the experience of clients involved in a cognitive-behavioral chronic pain management program? Specifically, can learned resourcefulness distinguish client approaches to self-management? Furthermore, if it can, along what dimensions does resourcefulness influence the development of self-management skills, and how do these dimensions relate to the ultimate goal of programs to instill a sense of self-directedness in clients? With these specific questions in mind, we provide our view on how mixed methods research was used to address these questions and how this article contributes to the field of mixed methods research.

## Methods

### Mixed Methods Research and Our Study

Mixed methods research combines qualitative and quantitative methods to address a research question, with the broad purpose of providing breadth and depth of understanding beyond what would be gained by either method alone (Johnson, Onwuegbuzie, & Turner, 2007). It is valuable from a pragmatic perspective because it enables the study of issues related to real-world practice such as program evaluation (Morgan, 2007). However, for a number of reasons (e.g., nature of the audience, methodological preferences, structure of research projects, skill specialty), too often the qualitative and quantitative components are treated as separate domains (Bryman, 2007). To avoid this type of superficialness, Bryman (2007) cautions us “not to lose sight of the rationale for conducting mixed methods in the first place” (p. 20).

We reasoned that our research questions were well suited to a mixed methods approach, and that a “pure” mixed methods approach (Johnson et al., 2007), whereby the quantitative and qualitative components are given equal status, would provide the richest understanding of the role of learned resourcefulness in a practical setting. Although quantitative studies have demonstrated relationships between resourcefulness and program drop-out rates and outcomes, there is considerable uncertainty regarding the mechanisms contextualizing how learned resourcefulness empowers individuals in self-management programs. At a theoretical level, Rosenbaum (1990, 2000) portrays the self-control process as highly complex, and does not view the variables influencing coping and adaptation as static, cause and effect. Coping models and standardized coping scales subsume a particular theoretical perspective; hence, results from these scales are framed by the underlying theory of coping and thus restrict elaboration of the actual coping methods used. As such, a purely quantitative study is limited in its capacity to get at this complex and dynamic interplay of learned resourcefulness and coping. Qualitative research is the preferred method for intensive study of this nature (Creswell, 2003).

Conversely, characterizing a complex and long-developing construct such as resourcefulness would be difficult in the context of research interviews without the use of a well-standardized measure that taps into its multiple dimensions. In designing the study, we reasoned that a quantitative measure of resourcefulness would provide the foundation for a constant comparison of text-based interview data. We further reasoned that this would be a feasible and sound method of studying the influence of learned resourcefulness on the

acquisition of self-management strategies. In this case, a combination of the two research methods would permit elaboration of the relationship between these aspects of human functioning. Our goal was to develop a substantive theory of the role of learned resourcefulness in the acquisition of coping skills within the context of a cognitive-behavioral chronic pain management program. We are not aware of any other examples using this type of approach in the chronic pain rehabilitation literature and view our study as being unique.

## Assumptions and Paradigm

From a practical standpoint, we are interested in improving the quality and effectiveness of rehabilitation programs for pain sufferers. In rehabilitation programs, qualities of the programs and client interact to determine the benefit obtained (or lack thereof; Pawson & Tilley, 1997). The emphasis placed on empirical association is limited in its ability to provide in-depth understanding of phenomena, such as outcome from programs in complex contexts involving the interaction of patients with family, health care, insurance and workplaces. Similarly, relativistic and poststructural approaches of inquiry provide little direction in terms of understanding the mechanisms producing outcomes in these complex systems (Williams, 1999).

For these reasons, we felt that critical realism was a useful meta-theory on which to base our inquiry. Critical realism (CR) is based on the view that there is an objective, knowable reality that resides outside of our perception (Danermark, 2002). Reality is structured, stratified, and differentiated, and it is composed of intransitive (unchanging entities and objects and mechanisms) and transitive (theoretical, fallible, open to challenge) dimensions (Sayer, 2000). The explanatory program in CR is to find the structures and mechanisms that underlie and cut across (transfactual) events observed at the empirical level in particular contexts (Collier, 1994). Defining reproducible relationships between observed events or describing reality as constructed between or interpreted by individuals is insufficient to uncover these structures and mechanisms (Sayer, 2000). Generative mechanisms need to be identified by “developing propositions about what is in the program, which produces a reaction in the subjects” (Pawson & Tilley, 1997, p. 68).

Critical realism is variously situated between postpositivist (Ponterotto, 2005) and critical social paradigms. We view it as a critical theory in this study for a number of reasons. First, this research is challenging the status quo and direction of research in the area, which is focusing primarily on the social and cognitive determinants of self-management behaviors and largely ignoring the personal qualities of the clients that may be critical to the process. Second, expanded views of rigor call for social, catalytic, or consequential validity, all referring to the ability of the research to stimulate action and achieve social and political change (Morrow, 2005). We believe that this research has direct, practical implications for transforming practice in this area, enabling practitioners to change program components and structures in an evidence-based fashion to more effectively serve clients (Pawson & Tilley, 1997). Lastly, through its grounding in reality, CR provides a vehicle for transformation of practice in fields dominated by postpositivist thinking and limited theoretical perspective. Research will ultimately be judged by its “practical adequacy” in characterizing and explaining the process of adaptation to chronic illness (Sayer, 2000).

## Research Design

We used a concurrent mixed methods design (Creswell, 2003) to address these questions. This involved the simultaneous collection of a quantitative and qualitative data and the use of the theory of learned resourcefulness as the lens to shape the analysis of the qualitative text-based data. We attempted to achieve theoretical saturation by sampling a range of resourcefulness profiles within our client group. We analyzed the qualitative data using constant comparative methods with progressive coding from open to axial to selective coding, as our focus was on developing a substantive theory relating learned resourcefulness to the development of coping skills in the context of a specific program (Dey, 2004). Emerging themes were analyzed within and between participants to determine the interrelationships. Because the goal was to describe the expression of resourcefulness in substantive terms, we kept the level of abstraction close to the data. To verify our findings we used extensive peer debriefing, respondent data, and theoretical and source triangulation. We actively sought negative cases to challenge emerging themes.

Because we were working *a priori* from a theoretical perspective, the classic notion of grounded theory as a pure inductive process was not applied. Rather, looking at the expression of resourcefulness in these participants required a combination of inductive and deductive analysis, moving back and forth between extant theory and the data (Morgan, 2007). In summary, the research strategy was to obtain quantitative information, using a validated instrument to describe the participants' level of resourcefulness, and to use these data to permit comparison of the experience and perspectives of high- and low-resourceful participants in relation to the development of self-management strategies through their involvement in a rehabilitation program.

## Researcher as an Instrument

Reflexivity recognizes the central role of the researcher and the active interpretation of how knowledge is being constructed. It lies at the heart of qualitative inquiry in shaping the nature of study, interpretation of data, the ethical stance of the researcher, and ultimately the knowledge that is produced and how it is used (Finlay, 2002). The primary investigators (DK, FO) in this study work in the fields of applied psychology and rehabilitation. DK is a professor of psychology at Trent University who specializes in the field of applied learning and health; she has conducted qualitative and quantitative research that examines the role of learned resourcefulness in pain as well as outcomes of health and academic enhancement programs. FO is a "veteran" occupational rehabilitation practitioner (18 years) who specializes in the functional restoration of clients with chronic pain. He is also a PhD candidate at the University of Toronto, specializing in work disability prevention research and lecturing in health psychology. He has received training in the philosophical foundations and methods of qualitative inquiry as part of his graduate work. DC was an undergraduate student at the time that this research was conducted, and a portion of this project formed his honors thesis. DC had completed undergraduate training in qualitative methodology and, coming from a family of mental health professionals, was sensitized to clinical issues. DC was under the direct supervision of DK throughout the research process. Regular meetings, phone conversations, and e-mail correspondence ensured a cohesive research team.



Our perspective is that rehabilitation takes place on a number of levels (physical, psychological, social) and in a complex social and environmental context. Individuals can be guided to adopt more positive and adaptive coping styles and behaviors; however, the resources that individuals bring to the rehabilitative encounter are critical to the success of programs, and although programs can provide the context for adaptation, the client inevitably decides whether he or she is “ready, willing, and able” to adapt to a chronic pain problem.

## Participants

Our sample was taken from a multidisciplinary chronic pain management and functional restoration program in Ontario, Canada. It is staffed with a behavioral therapist (who also manages cases), an occupational therapist, a physiotherapist, a kinesiologist, and a psychologist. Medical support is provided where necessary. The program includes strategies for engagement, activation, empowerment, and social support. The program involves exercise, work simulation and projects, and cognitive-behavioral pain management. It includes workplace intervention for those individuals who remain job attached. Clients are referred to the program by family physicians, the Ontario Workers' Compensation Board, automobile and long-term disability insurers. Many of the clients are mandated to attend the program.

One of the researchers (FO) is one of the principals in this practice, enabling access. He did not have any direct contact with the participants during the course of data collection, and he was not privy to participant identities during the analysis phase. DC made contact with potential participants to review issues of consent and the extent of involvement in the study. DC conducted all of the interviews. DC and DK were involved with the first level of analysis of the data. FO was involved in secondary analysis and verification processes.

Because we were interested in the expression of resourcefulness through the participants' descriptions of their experience in the program and their adoption of the self-management strategies advocated, it was important to sample a range of resource profiles to ensure diversity in this respect (Kuzel, 1999). We also wished to achieve data saturation with the interviews to exhaust the perspectives of the participants in relation to their experience (Seale, 1999). Our goal was to achieve a sample of 20 participants, as these individuals were all exposed to the same program, and we attempted to ensure a range of resourcefulness in the participants through the measures outlined below.

For ethical reasons, we could not contact clients directly and had to rely on the Center's staff to make the initial contact. For this reason, we could not screen resourcefulness levels a priori. Administrative staff generated a roster of program clients who had completed the full program during the previous 30 months. A program therapist attempted to contact these individuals and was able to get in touch with 26. Of these, 19 agreed to be contacted by the third author, 4 were too busy as they had returned to work, and 3 were not interested. Of these 19 clients who agreed to be contacted, 16 finally agreed to participate in this study. Of the 3 declining to participate, 2 were involved with litigation relating to their injuries and decided not to participate, and the third client lost interest. This strategy generated a sample with a sufficient degree of variability in resourcefulness to enable a saturation of perspectives. Table 1 summarizes the characteristics of our final sample.

**Table 1**  
**Demographic Features of the Sample (N = 16)**

Average attendance	4.38 months ( <i>SD</i> = 3.63)
Average program discharge	9.87 months ( <i>SD</i> = 9.10)
Average age	46 years ( <i>SD</i> = 7.93)
Females	11
Ethnicity	
Caucasian	14
Asian	2
Marital status	
Married/common law	14
Single	2
Education	
Some high school	4
High school	8
Some postsecondary	2
Postsecondary degree	2
Working	8
Work injury	10
Auto accident injury	6

## Procedure

All aspects of the research received approval from Trent University's Research Ethics Committee. Based on participants' choice, half of the interviews were done in the participants' home environment, and half in a comfortable interview room at Trent University. The participants interviewed at the university were greeted in the parking area by the researcher (DC) and escorted to the interview area. Refreshments were provided. Prior to the interview, the nature and purpose of the study were described to the participants, who provided their informed consent and completed Rosenbaum's 36-item Self-Control Schedule (1980a), which measures learned resourcefulness. Interviews were 60 to 120 minutes long. Participants received a \$20 honorarium to cover any possible expenses. This was offered after they agreed to participate in the study.

Following completion of the interviews, DC recorded personal impressions of the interview, including participant behavior and response to the interview. These comments were included in the corpus of the data for analysis.

Interviews were recorded using a cassette recorder and table microphone. On completion, they were immediately transcribed verbatim by DC, capturing as much of the mood and nonverbal aspects of the interaction as possible. Text-based data were managed in the word processing program.

## Sources of Data

The Self-Control Schedule (SCS; Rosenbaum, 1980a) is used by researchers as a measure of learned resourcefulness. The SCS assesses one's use of positive self-statements to control emotional and physiological responses (e.g., "When I am feeling depressed, I try



to think about pleasant events”), problem-solving strategies (e.g., “When I am faced with a difficult problem, I try to approach it in a systematic way”), delay of gratification (e.g., “I prefer to finish a job that I have to do before I start doing things I really like”), and the recognition that self-change requires a lot of effort (e.g., “I [do not] need outside help to get rid of some of my bad habits”). Each item is ranked on a 6-point Likert scale ranging from *very characteristic* (+3) to *very uncharacteristic* (−3) of the individual. The possible range of scores is from −108 to +108, where a higher score represents the possession of a greater general repertoire of learned-resourcefulness skills. The reliability and validity of this measure have been well established, and the mean score is typically around 24 with a standard deviation of 25 (e.g., Rosenbaum, 1980a, 2000).

Semistructured, focused interviews were the primary data source, as they were believed to be the best vehicle to elicit information relating to participants’ experience in the program and their views of self-management of pain (Liamputtong & Ezzy, 2005). This was consistent with a CR perspective in recognizing the interpretive and constructed nature of social reality while attempting to understand how self-management emerges from involvement in the program in individuals with varying levels of resourcefulness. The interview guide contained five open-ended questions relating to the participants’ experience and understanding of pain, the self-management strategies that they employ, and how the program had an impact on their adoption of these strategies. The semistructured interview assessed pain experience when participants entered the pain clinic and its impact on their lives (e.g., “Describe the level of pain you remember when you entered [the clinic] . . . Describe the impact it had on your life then”). The interview also assessed what types of coping strategies they have used in the past and are still currently using (e.g., “What kinds of strategies are you using to deal with your pain? Which techniques from the program do you still practice today?”). The foundational questions were supplemented with numerous probes to fully elicit experience and perspective. The researcher was unaware of the participants’ level of resourcefulness during the interviews. The interview questions were grounded in the objective of inquiry as the experience of the participants based on our multifaceted understanding of pain and self-management.

## Data Analysis

Transcripts and accompanying field notes were printed for analysis. Analysis was paper based, and the researchers used highlighters and extensive margin notes to help with coding. An initial reading was performed to gain primary impressions, after which multiple readings were performed over the course of the interpretive phase of analysis. The SCS was scored following transcription of interviews, and the researchers were aware of the participants’ level of resourcefulness throughout the analysis, using it to contrast experiences between high- and low-resourceful participants.

DC and DK conducted the first level of analysis using constant comparative method (Seale, 1999) and contrasting participants with different levels of resourcefulness. Through this, themes were developed, the properties of which could be identified through comparison of participants with different levels of resourcefulness. Negative cases were sought to disconfirm these categorizations (Seale, 1999) by seeking the properties of the theme in participants with a resourcefulness level that would be inconsistent with that

response. The researchers cycled back and forth between the data and categorizations until all themes that were reflected by different levels of resourcefulness were derived.

Three strategies were used as a means of verification and further analysis. The transcripts and themes developed were reviewed by FO, and the findings were reviewed in debriefing sessions with DK. The researchers actively questioned the themes developed and discussed potential alternatives. The themes developed were also presented to the program team, whose response to the findings was elicited. Lastly, an in-depth interview was conducted with the program's behavior therapist. The feedback of the team and the therapist concurred with our analysis and depiction of the self-management of pain as viewed through the lens of learned resourcefulness.

## Results

### SCS Scores and Overview of Themes

Scores on the SCS ranged from  $-13$  to  $77$ , reflecting considerable variability in learned-resourcefulness skills. The mean was slightly higher than that typically reported ( $M = 30.37$  versus  $M = 24$  for the general population), but the standard deviation ( $SD = 26.61$ ) was within the normal range. Seven participants had SCS scores below the normative mean, ranging from  $-13$  to  $21$  and would thus be considered low in resourcefulness. Nine participants had SCS scores above  $24$ , ranging from  $30$  to  $77$  and would be considered high in resourcefulness. The SCS scores were unrelated to age, gender, ethnicity, working status, education, and months since discharge from the program ( $p$  values  $< .17$ ).

Analysis of the transcriptions from the semistructured interviews revealed four main themes that emerged, for the most part, on their own, and depicted the continuum of learned-resourcefulness skills: detail on techniques, introspection and emotions, support, and acceptance and moving on. In the following sections, we describe the expression of self-management that emerged through the theoretical lens of learned resourcefulness. The numbers in the brackets provide participants' SCS scores. Table 2 provides a conceptual overview of the themes, and Table 3 provides example excerpts from the interviews for participants scoring low and high in learned resourcefulness.

*Theme 1: Detail on techniques.* People scoring lower on the SCS had poverty of expression and difficulty contextualizing their situation and information. Specifically, they were unclear about the techniques they acquired from the pain program, were uncertain if they could complete the exercises on a long-term basis, and gave much shorter answers when asked for specifics. People scoring higher in resourcefulness, in contrast, fully grasped the underlying principles behind the techniques they learned at the pain clinic. As a result, their answers to questions were animated and filled with analogies and details about the techniques they gained from the clinic. One very high-resourceful person (66), for example, said

I was probably down in the two, three range [when I started at the pain clinic] when I left I was a nine or ten . . . . A one would be, say if it hurts stop it, and a ten . . . is where you just don't push it one too far, but you're still pushing . . . and you keep raising it . . . your tolerance.

**Table 2**  
**Themes Emerging From the Comparative Analysis of the Transcripts**  
**Contrasting the Talk of Low- and High-Resourceful Participants**

Theme	Description
Detail on techniques	Low-resourceful participants had poverty of expression and difficulty contextualizing their situation and information. The talk of the high-resourceful participants was animated, filled with analogies and details about the techniques they gained from the clinic, which suggests a better grasp of the underlying principles behind the techniques they learned at the clinic.
Introspection and emotions	The talk of the high-resourceful participants reflected a greater ability to examine inner thoughts, desires, and emotions and was used as a tool for acceptance and change. This type of talk was not as evident in the low-resourceful participants.
Use of support	The highly resourceful individuals looked for, created, and appreciated different forms of support, whereas the lower resourceful people wanted continued support from and became dependent on past sources, specifically the pain clinic.
Acceptance and moving on	Highly resourceful people were more accepting of their levels of pain, the limitations it brought to their lives, and the responsibility for self-management that it imposed. People scoring lower in resourcefulness had a more difficult time with self-reinforcement and discipline. In addition, lower resourceful individuals expected that someone else (i.e., doctors, surgery, etc.) would be there in the future to alleviate their pain.

**Table 3**  
**Example Quotations Contrasting High- and**  
**Low-Resourceful Participants for the Themes<sup>a</sup>**

Theme	Low	High
Detail on techniques	<p>–5 “At home one strategy was umm . . . to put on a relaxation tape. . . . If it gets that I can’t control it . . . I take ibuprofen or something mild.”</p> <p>13 “Trying to think what else I got from [the pain program] . . . like um . . . just exercise and ah the pain management that the therapist taught. . . . It’s hard to remember a lot of it now.”</p> <p>21 “What I took out of [the pain program] was to ignore it.”</p>	<p>52 “The therapist uh really went above and beyond his duty. . . . We came up with some pretty awesome exercises that helped me concentrate on those muscles [surrounding my injury], on my technique, on my posture, all kinds of different things.”</p> <p>66 “I do a lot of breathing. I stretch. I have a thoracic role . . . different things on the ball. . . . I do a few different exercises that wasn’t introduced [at the pain program] from reading, internet, and other people.”</p> <p>77 “And the next day, I would be stiff and sore [because of adding weights to the exercise equipment], and I would get on the treadmill, do a warm up. Suddenly, things would let go again, get looser, and I could do more and more all the time, because I got my confidence up, and I could do it.”</p>

(continued)

Table 3 (continued)

Theme	Low	High
Introspection and emotion	-13 "Why isn't what I'm doing helping? Like the exercise I'm doing. . . . What am I supposed to do? . . . So why isn't it getting better?"	39 "Probably expecting [from the pain program] that . . . they would fix everything that's wrong with me, but that wasn't the case. . . . I don't know how to describe it . . . they gave me a better awareness of what I should be doing to get stronger."
	0 "Umm, oh God, I can't lift anything over 5 lbs. I can't stand for any length of time. I can't sit for any length of time. There's days when I literally have to roll out of bed because my back is seizing. I can feel my lower back seizing, one minute it will be fine, the next minute you can just feel it."	69 "So I'll always be glad that I went to the program because uh psychologically it made me realize that . . . even though the pain was there, that I wasn't harming myself, if I continued to do a moderate level of exercise."
Use of supports	20 "I go sit quietly alone myself. . . . I finish my own work myself . . . in other words, just that talking to them [her family], like that is kind of up-setting, I can't handle."	30 "Listen, sometimes I might get depressed or something. I got a couple buddies to just rag on them for 20 minutes (laughs), to a half an hour and I feel better."
	21 "I said it's not much use talking to you [the therapist] because you're not gonna be here very long . . . number one occupation for suicide is psychiatrists and psychologists."	31 "I talk to [my daughter] . . . in my language and she understands . . . I'm so lucky because my husband and children they know . . . they are very helpful . . . make me feel better." 36 "It was a good feeling that they're there [staff at the pain program] to help you. . . . They dealt with what I had and understood."
Acceptance and moving on	9 "Like they . . . tell you how everything is working. To spend more time talking about how you're dealing with things . . . if you not really have a lot of family around you, you feel closed up, and blocked off from a lot."	41 "You have to learn to live with it, even have to cope with it. You're gonna have to learn different ways of getting around it."
	20 "I tried my best. . . . I tried hard . . . like some chiropractor after [the pain program], physiotherapist, relaxation . . . but it worsened."	69 "When I worked with angels of flight I saw . . . patients, who had paralysis, young people, a couple I will never forget. So I don't feel I have the right to go through woe is me, poor little me. . . . I think okay the pain is there. . . . Deal with it the best way that you can and get on with the program."
	21 "How would you like to go through life not knowing what the <i>hell</i> is causing the problem?"	77 "The fear of that pulling and sort of stiffness doesn't scare me anymore. The more I exercise, and stretching and working at all the ploys you can mentally to put it away, the better I am."

Note: Numbers preceding the quotations indicate the participant's Self-Control Schedule (Rosenbaum, 1980a) score.  
a. For a more detailed coverage of the quotations supporting the themes, contact the first author.

Whereas, a woman scoring lower on the SCS (0) stated

Umm, I use heat, a lot of heat. Umm, relaxing in the tub . . . umm and candles . . . I use a lot of scented candles.

And how does that help you with your pain?

Just the smell and its relaxation, aromatherapy.

It is important to note that a variety of strategies were used by individuals to cope with their pain, regardless of their SCS score. However, the more highly resourceful individuals predominantly focused on their use of active coping strategies (e.g., specific exercises, breathing techniques, cognitive strategies), whereas individuals scoring lower in resourcefulness reported using mainly passive coping strategies (e.g., ignoring, heat, and candles). For instance, one person scoring lower on the SCS (13) stated, "If I'm having a bad spell, I don't stretch or exercise or anything, I just let it hurt." Contrast this to a statement from a higher resourceful (69) individual:

When I was doing the treadmill, they had a really neat chart with all the muscle groups . . . . So when I was doing the bike I [imagined] up one side and down one side, you know. So mentally that helped me deal with the pain when I was exercising.

Through their ability to better internalize pain management techniques, the people scoring higher on the SCS generalized the strategies to other aspects of their lives. A highly resourceful man (52) recounted the following:

I've been challenging myself for different projects around the house just to build up my confidence and make me feel better about things . . . since [the pain clinic] I use those things to uh challenge myself . . . mentally it . . . makes me feel like I'm contributing to the family.

*Theme 2: Introspection and emotions.* The highly resourceful people, at the same time, developed a greater ability to examine their inner thoughts, desires, and emotions. For one woman (66), the first sentence of her interview revealed the level of self-examination she had done: "I couldn't do much. I became a homebody. I didn't realize I was as down as I was until I went to [the pain clinic]." One man (36) did not typically think highly of going for help, yet when he entered the clinic he described the experience as "a pleasant surprise." Another woman (77) learned to "look at the big picture," rather than obsessing on issues over which she had no control.

A different example of introspection is the self-talk that more highly resourceful people reported using as a driving force for change (36, 52, 66, 69, 77).

I could have just went there [the pain clinic] and closed my head . . . and stayed the same. But, I chose to get the heck out of that kinda emotional state . . . . I realized that it's only me that's going to change anything . . . . It's up to me to do it . . . . What kind of example am I showing them [family] if I'm self-pitying all the time, and feeling like crap? (52)

One of the greatest motivators was the formation of a goal through their introspection. One person (77), for instance, said "It takes work . . . . I guess I had a goal. I wanted to get

better, big time.” Where most highly resourceful people used an inner locus of control as a drive for dealing with their pain, some did mention using spirituality as a guiding force and described turning to God when coping was a problem (52, 69). For one woman (69), God was someone she could always turn to and discuss her inner feelings with, good or bad.

Surprisingly, emotion was a recurring aspect in many of the interviews. Without direct questioning, people scoring higher in resourcefulness expressed feelings of anger, depression, and especially fear (31, 41, 52, 66, 77). The anger and depression were mainly expressed when coping strategies had failed. One woman (41), when she felt she could not cope with her pain, would find ways to vent her anger, by slamming a cupboard door, for example. For another woman (31), her feelings of depression and worry came when she felt the sessions at the clinic did not relieve her pain. But, for her, simple explanations as to why her pain was persisting were enough to calm her fear.

For a few of the highly resourceful members, developing their pain-coping strategies while at the clinic lowered their levels of fear about their pain: “It started in the first week, the muscle started to relax, and I lost my fear of the pain” (77).

This acknowledgment and loss of fear enabled them to move beyond their pain.

No matter the cause or expression, higher resourceful people were more aware of their negative emotions and used them as a motivator to deal with their pain. Because they were putting a lot into actively coping with their pain, their fears and frustrations are justified. But, at the same time, being able to express their emotions allowed them to recognize that trial and error is associated with learning what “works best” for coping with their pain.

For many individuals, dealing with pain was described as a mind-set that one woman (66) reinstated as ‘your whole attitude.’ She further expanded on this thought:

If you don’t want to get better, you’re not going to get better. They’re not going to help you . . . in your mind, because you’re already got it set in your head, “I’m like this and nothing’s going to change this.

Where this mind-set had a large internal component for the more highly resourceful individuals, people scoring lower on the SCS viewed it differently. For them, although the program focused on mental aspects, it was simple explanations as to why pain occurs, “ya know, kind of learning that it is partially mental, that you can ignore it” (13). Thus, for the lower resourceful people, the understanding of the pain process was not as in-depth, and for them the focus of the pain program was to teach people how to ignore it. For them the mind-set of dealing with pain often began and ended with simply ignoring their pain (9, 13, 21).

It is interesting to note that clients are not instructed to ignore pain at this clinic. They are taught distraction techniques, among a multitude of other active coping strategies, which differ significantly from ignoring pain. Yet, of all the possible strategies available, people scoring lower on the SCS focused a lot on ignoring, whereas the more highly resourceful individuals, collectively, used a wide array of coping strategies and the majority of them did not focus on simply just one.

*Theme 3: Support.* Although there were no direct inquiries about social supports, it emerged as a theme that was different for the more highly resourceful individuals. The highly



resourceful individuals looked for, created, and appreciated different forms of support (30, 31, 36, 41, 66, 69), whereas the lower resourceful people wanted continued support from and became dependent on past sources, specifically the pain clinic (−13, 9, 13). Introspection and understanding of the need for support was often conveyed in the statements of the highly resourceful people: “Family is good . . . my husband . . . daughter . . . it’s reassuring, I don’t feel like I’m all by myself. I don’t feel lonely, at the end of my rope” (69).

Aside from revealing the support from family and friends, one highly resourceful woman (41) mentioned animals as aiding her with her pain: “The animals help sometimes. You know they’re a bit soothing . . . They seem to know that you’re suffering, they spend more attention to you. You’re concentrating on giving them a bit of love.”

For another highly resourceful individual (66), she recounted that she had remained in contact with a group of people who had attended the pain program with her more than a year ago: “We’re still all in contact, all of us. We phone each other at least once a month.”

In contrast, for people scoring lower in resourcefulness, their focus was on the fact that support had been withdrawn: “All of a sudden it’s over, and you’re on your own . . . All of a sudden the help’s not there anymore” (−13). Another individual (9) mentioned that she would have liked to have continued support from the clinic, possibly in the form of a drop-in program.

One woman (−5) stated that she had doubt about her ability to follow through on the exercises from the pain program on her own. She said that she needed to have someone there to make sure she was doing the exercises properly. On a similar vein, a man scoring low on the SCS (13) showed some introspection as to why he wanted continued help after the program:

I even mentioned to them, it’s too bad you don’t have a program where you can come once, twice a week, you know, even if I have to pay, just to keep up the exercises, because I don’t have the discipline to do them at home.

It was also evident that low-resourceful people were more self-absorbed. For one woman (−13), she questioned “Why isn’t what I’m doing helping? Like the exercise, I’m doing. What am I supposed to do?” Another man (21) conveyed that “because he [program therapist] was a guy, I played with his head,” and he also noted

There were some things that they set up has like fake work [i.e., work-related tasks that are designed to illustrate the correct and safe way to perform them and to prevent further injury]. Which I don’t do! Like this is foolishness, I’m not going to do that.

In contrast, it was evident in the utterances of people scoring higher in resourcefulness that they were aware of the supports afforded by the program and its staff. For example, one highly resourceful woman (77) recounted that “some of the others [people] I know were there for other things, and some similar to mine, and you could tell they weren’t doing the effort, and so I put my trust in them [the program therapists].”

From this theme as well as the theme of introspection, it becomes evident that highly resourceful people have the discipline to use coping strategies and are more accepting of their situation both while in the program and, especially, after the program. The subsequent theme addresses this latter issue.

*Theme 4: Acceptance and moving on.* The approach the more highly resourceful people take to dealing with and moving beyond their pain was another aspect that made them unique. Overall, they were accepting of their levels of pain, whereas people scoring lower in resourcefulness had a more difficult time with self-reinforcement and discipline. As well, lower resourceful individuals expected that someone else (i.e., doctors, surgery, etc.) would be there in the future to alleviate their pain.

The following excerpts reveal that the high SCS participants had come to terms with the challenges posed by their pain, and moreover, they had accepted them. One highly resourceful woman (69) stated "[The injury] has really changed my life, [but I think] okay, if I have to redirect my nursing, I just have to accept it." Another woman (66) revealed that "You're never going to have your old life back, it's just never going to be there. You can get close maybe, but it's never ever gonna come back 100%." In the transcription of the interview with a client whose SCS score was 41, she acknowledges that there is no cure for her, yet she states, "You have to learn to live with it, even have to cope with it. You're gonna have to learn different ways of getting around it." For another client with an SCS score of 77, the acceptance of pain in the recovery process was very important to her. She recognized that her level of pain now was lower than before the pain program. She saw her current pain level as a "gift" and realized that pain would never totally disappear. By her own report, she felt more comfortable and did not feel as afraid of her pain. Despite a language barrier, a client with an SCS score of 31 was able to convey her goal, "With my neck I think, it never gone, I think it will stay with me all my life. But I want to learn to deal with [it]." She specifically used her techniques toward that goal. She did her exercises on a regular basis with the knowledge that the benefits would not be immediate, but would, nonetheless, help her to regain some measure of her normal life. For one man (52), the pain could drive him insane, but stated that accepting it and praying were tools he used to help keep his mind. A client with an SCS score of 69 asked God to show her a miracle if she needed it, but in the meantime she said, "I'm just going to keep on with life."

For participants scoring lower on the SCS, some admitted that they did not have the proper amount of discipline to maintain the level of exercises on their own, as compared with when they had the help of staff at the clinic. One woman (-5), for example, stated, "I can't be given, 'here's your instructions, go home and do it' . . . I have to . . . know someone's there that can help me if I'm not doing the exercise properly."

The other vein of acceptance that low SCS people seemed to follow was their expectation that someone would come and take their pain away.

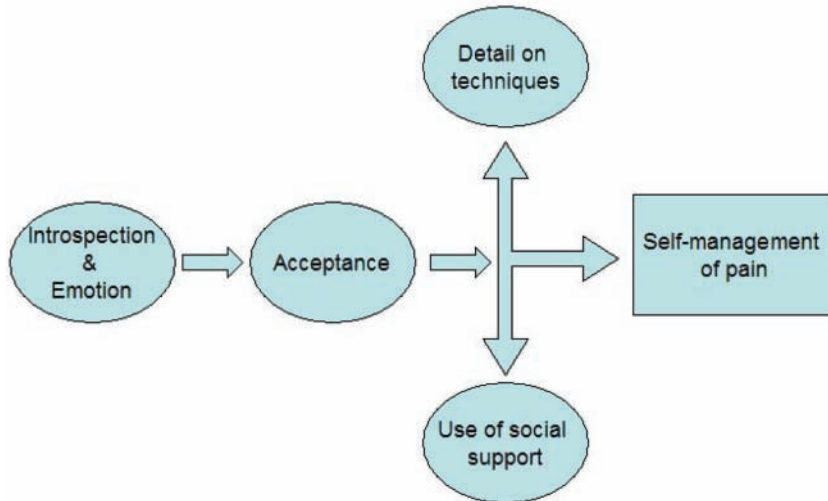
So do you see an end to your pain?

Oh yea hopefully, I'm not giving up hope that there will be an end . . . maybe there's something I'm not doing . . . something I have missed . . . I'm feeling out my options right now . . . because there is something we are missing. (-13)

It is important to note that this individual earlier stated that she had tried everything and her last resort was going to a rheumatologist with the notion that "Hopefully he can figure it out."

Before the pain clinic, one woman (-5) specifically mentioned surgery as a method she wanted to have done to get rid of her pain completely: "I wasn't getting any answers, I wasn't getting the answers I wanted, I wanted surgery to get rid of it completely" (-5).

**Figure 1**  
**A Substantive Model of the Self-Management of**  
**Pain as Viewed Through the Lens of Learned Resourcefulness**



### Connecting the Themes

Figure 1 portrays the manner in which the themes work together and how effective pain self-management skills are acquired. Specifically, introspection and emotion allow for acceptance, which in turn permits the constructive use of social support and the enactment of active, and sometimes creative, strategies to engage in meaningful activities. Without acceptance, effective self-management of pain via the use of effective coping strategies and social supports is unlikely. In our study, we found individuals having SCS scores of 30 points or higher were able to navigate through this framework intuitively on their own. They found it easier to attain the end product of this process, and throughout the interview conveyed an *only I can do it* stance. It was evident that they had grown as a result of their pain experience since their involvement in the pain program. In contrast, most of the individuals scoring below 30 on the SCS were still searching for answers and a cure and still struggling with emotional and acceptance issues. In addition, they had either forgotten or did not have the discipline to carry out the techniques they had learned from the program. Moreover, these people never mentioned meaningful relationships and activities in their daily lives, outside of those provided by the pain clinic. To what extent pain clinicians can explicitly direct a low resourceful client from the beginning to the end of the pain coping process depicted in Figure 1 is unknown, but warrants attention.

Although there were dramatic variations in resourcefulness, high satisfaction as a predictor of program outcome was not particular to high-resourceful people. Rather, the pain clinic provided highly resourceful participants with a foundation of skills, which they described using at the time of the interview and building on outside of the program.

In contrast, lower resourceful participants' satisfaction with the program was based on the interpersonal relationships with therapists and not on the content of the program.

It is important to note that there was one negative case (−5) or exception to the above depiction. Even though this woman's answers were often terse and lacked depth and detail, which was a striking feature among individuals scoring lower on the SCS, she was the only low-resourceful person to mention her daughter and husband as being supportive. She was also the only person scoring below 30 on the SCS to indicate that she knew how to deal with her pain, and although she was "losing the support and friends" that she made at the pain clinic, she was "leaving behind the people that needed the help." In her words, "I need to give them room to learn what I have learned."

## Discussion

In our investigation, the expression of self-management was viewed through the theoretical lens of learned resourcefulness. The description and elaboration in the words of participants allowed us to understand resourcefulness and self-management of pain in far more depth than that offered by purely quantitative approaches. The process and outcome for highly resourceful participants was colorful and complex, as their stories elucidated the subtle ways in which they mastered the self-management of pain. It is interesting to note that they did not use, verbatim, every skill taught to them by the pain clinic; instead, these people were creative and tailored techniques to suit their needs and lifestyle. Moreover, the highly resourceful participants were cognizant of family members, other pain sufferers, and the program's staff, as they spoke about how these social sources contributed to their skill development and self-management of pain. In addition, two highly resourceful participants mentioned that talking with God helped them considerably. Even though praying is thought of as a passive coping strategy, it is important to stress that these people were not asking God to alleviate their pain *per se*, rather they used the "higher powers that be" as a "sounding board" and to help them discover alternative ways to cope. Conversely, people scoring less than 30 points on the SCS were unable to describe in more than one- or two-word phrases the methods they were using to manage their pain. Instead of recounting the personal skills that evolved from the pain program as the higher resourceful people did, the lower resourceful people's narrative focused squarely on themselves and on the awfulness of their pain. When further probed about the skills acquired from the program, their answers described the interpersonal relationships (good and bad) that they had with the program's staff and not on the specific pain strategies demonstrated to them.

In accordance with Rosenbaum's (1980b) and Ward's (2002) quantitative findings, analysis of our interviews revealed that the more highly resourceful people selected from a wider array of coping strategies and put them to better use than the people scoring lower on the SCS. Furthermore, participants scoring lower on the SCS recounted primarily using the technique of ignoring their pain. Haythornwaite et al. (1998) found that ignoring pain often led to feelings of a loss of control and to increased pain levels, especially if pain itself is derived from activity.

Jensen et al. (2001) found that the more disabled participants felt by their pain, the greater their depressive symptoms and the lower was their beliefs in their ability to control

their pain. Only the individuals scoring lower on the SCS in our study emulated Jensen's findings. The more highly resourceful people, in contrast, were markedly happier and described far more control over their lives in comparison with their lesser resourceful counterparts who were experiencing similar levels of pain.

As Kennett and Ackerman (1995) suggested, more effective change may be facilitated by a longer program for individuals scoring lower in resourcefulness. Thus, more careful examination of the length of time that individuals scoring lower on the SCS spend in such programs warrants further investigation. Admittedly, in accordance with past research (Kennett & Ackerman, 1995; Rosenbaum, 1990), after discharge from the program, lower resourceful individuals had a difficult time reinforcing proactive coping behavior without the help of a therapist.

In further support of past research (Kennett, 1994; Kennett & Ackerman, 1995; Rosenbaum, 1990), the current study found that over time, the people having lower resourcefulness skills relied on only a few generalized and much more passive coping strategies (e.g., burning candles, soaking in the tub), whereas the highly resourceful people focused on actual physical exercises best tailored to their pain. Moreover, in contrast to the lower resourceful people who were grappling with their pain at a palliative level, the higher resourceful people dealt with their pain in a preventative manner.

The difference in individuals' abilities to make use of support is another interesting factor. According to past literature, individuals scoring lower on the SCS have a difficult time utilizing support systems (Combden, 2004; Kennett & van Gulick, 2001). Kennett and van Gulick (2001), for instance, found that the few low SCS participants managing to confide in family about their academic failure actually felt worse afterward. Combden (2004), in his interviews with young women on how they dealt with past stress, found that women scoring lower on the SCS had difficulty trusting others, especially their family. Although it appears inconsistent that the lower resourceful people in our study readily mentioned that they desired further support from the clinic, perhaps they viewed the staff as "the pain specialists," and the program as a forum in which they could vent. But, it may also reflect a form of dependency consistent with the more passive attitude adopted by the lower resourceful people.

Contrary to other types of self-management programs (Kennett, 1994; Kennett & Ackerman, 1995; Kennett, Stedwill, Berrill, & Young, 1996), it is important to note that all participants reported extremely high attendance (between 80% and 100%) while at the clinic's program. But unlike the aforementioned studies, in which participation was voluntary, for almost our entire sample, their attendance was mandated by a funding source (e.g., Workman's Compensation Board).

A number of investigations (e.g., Haythornthwaite et al., 1998) have asked if specific strategies are associated with greater perceived control over pain, if being able to draw on many coping strategies is associated with greater control, and if pain severity enhances or limit the effectiveness of various coping strategies. We found that for highly resourceful people, their tailored strategies gave them more control over their pain, regardless of the number of strategies they employed. For the people scoring lower on the SCS, their employment of ignoring their pain as a main coping strategy left them feeling out of control and awaiting further support to alleviate their coping responsibility. For the higher resourceful people, pain severity neither helped nor hindered the effectiveness of their pain coping reactions.

Finally, program therapists and the program coordinator were presented with the initial findings and themes in a focus-group setting and in a one-on-one interview, respectively. The respondent data produced interesting observations and indicated an affinity for the themes on the part of the therapists. It is important to remember that the therapists were unaware of who participated in the study and had no idea of which quotes related to particular clients. What was interesting was the way the talk and themes resonated with their professional practice. These individuals work with clients on a daily basis. They learn to distinguish people who are likely to do well from those who do not through their adoption of attitudes and behaviors that ease the burden of their ongoing pain. In clinical practice, these “hunches” go beyond the quantitative intake assessment measures and tell us about program processes and activities that may be effective in helping clients “get on track.” This study has helped to differentiate the talk that we hear in clients in relation to their resourcefulness profiles. Inclusion of Rosenbaum’s SCS may be of benefit to program therapists in designing programs, but even without this measure, the talk described in this article may help them to work more effectively with clients not as well tooled for developing self-management strategies.

### **This Study and Mixed Methods Research**

Our study contributes to mixed methods in a number of ways. First, the qualitative and quantitative approaches were given equal status, which Johnson et al. (2007) argue represents the strongest or purest form of mixed methods. Secondly, multiple levels of triangulation were employed (Bryman, 2007; Johnson et al., 2007). For instance, the program therapists’ and coordinator’s feedback on the themes that emerged from the interviews provided data triangulation, the balanced and diverse skill specialties of the researchers provided investigator triangulation, and the manner in which the quantitative and qualitative approaches were used satisfied simultaneous (or concurrent) triangulation. Triangulation contributed to our confidence of the results, provided us with richer and thicker data than originally imagined, and more importantly, allowed us to better comprehend the complexities underlying the pain-coping process. Finally, taking a pragmatic approach to understanding a relevant clinical problem allows one to rely on *abductive* reasoning that moves back and forth between induction and deduction, *intersubjectivity* in which one works back and forth between theory and people’s own unique interpretations of the world, and *transferability* whereby one can take things learned with one type of method in one specific setting and apply that knowledge in other circumstances (see Morgan, 2007, pp. 71–73).

Bryman (2007) encourages mixed method researchers to ask this simple question: “Has my understanding of my quantitative findings been substantially enhanced by virtue of the fact that I also have qualitative findings [or vice versa], and have I demonstrated that enrichment?” (p. 20). In short, our answer to this question is yes. Quantification of resourcefulness ensured that a range of resourcefulness profiles were present in the sample. Characterization of a complex construct like resourcefulness is difficult, even for clinicians with long-term exposure to clients. Having resourcefulness quantified enabled the analysis of the qualitative data. The emerging themes from this analysis vividly emulated how learned resourcefulness empowers people with disability to engage in meaningful



activities, providing information over and beyond that typically obtained from a solely deductive, survey-driven, relational approach.

## Conclusions

In the current medical climate, it is becoming more important for people to assume responsibility for their own health, including coping with pain from accident and work related injuries. Highly resourceful people expressed this as the ability to incorporate strategies from the program into their own pain-management approach, use the supports around them in effective and creative ways, and through reflection on their situation, came to accept their pain and move on. In contrast, the talk of lower resourceful people reflected a poverty of self-direction, limited insight into their situation, and the ongoing quest for a cure. This study underscores the importance of resourcefulness as a foundational personal quality in the self-management of pain. The next step for research is to determine what impact learned resourcefulness has on the immediate outcome of programs and, moving on from there, whether programs longer in length and incorporating basic life-skills training serve to enhance the learned resourcefulness skills and the outcomes of its low resourceful patrons. Alternative attention would serve well to address the benefits gained from programs that explicitly focus first and foremost on introspection and emotion to establish acceptance before introducing specific coping modules, questioning at the same time the role of learned resourcefulness in program outcome.

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