5-1-2008

Compensating for Reading Difficulties: A Qualitative Investigation of University Students' Experiences of Influential Personal Characteristics

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This study involved a qualitative examination of the personal characteristics that university students saw as important in helping them to compensate for their reading difficulties at various stages of their education. The sample consisted of 10 undergraduate students or recent graduates who reported a significant history of reading difficulties. Data were collected using in-depth, open-ended interviews with each participant. These data were then analyzed using a form of whole text analysis and resulted in four major themes: seeking assistance from others, de-veloping positive relationships with others, being highly motivated to achieve, and maintaining a belief in one's abilities. The findings highlight the broad range of factors that can influence motivation and self-concept and the wide variety of people who can be involved in providing assistance to individuals with reading difficulties. The implications of the findings for educational practice and for fur-ther research are discussed.

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This study involved a qualitative examination of the personal characteristics that university students saw as important in helping them to compensate for their reading difficulties at various stages of their education. The sample consisted of 10 undergraduate students or recent graduates who reported a significant history of reading difficulties. Data were collected using in-depth, open-ended interviews with each participant. These data were then analyzed using a form of whole text analysis and resulted in four major themes: seeking assistance from others, developing positive relationships with others, being highly motivated to achieve, and maintaining a belief in one's abilities. The findings highlight the broad range of factors that can influence motivation and self-concept and the wide variety of people who can be involved in providing assistance to individuals with reading difficulties. The implications of the findings for educational practice and for further research are discussed.

When a child is identified with a specific reading difficulty, it is often viewed as a "death sentence" as far as post-secondary aspirations are concerned. Despite their past and present reading difficulties, some individuals who have a history of reading difficulties are able to successfully pursue a postsecondary education (e.g., Lefly & Pennington, 1991; Lewis & Farris, 1999). University students who have a significant history of reading difficulties often show residual reading and writing difficulties (e.g., Parrila, Georgiou, & Corkett, 2007), but they are

somehow able to compensate for such difficulties so that their academic performance meets university standards. Little research, however, has examined the personal characteristics that can serve to compensate for these difficulties. The purpose of this study, therefore, was to examine the experiences of university students who reported a significant history of reading difficulties and, in particular, the personal characteristics that they viewed as helpful in dealing with their reading difficulties during various stages of their education. In reviewing relevant literature, we begin by examining what is known about the psychosocial characteristics of adults who have a history of reading difficulties. This is followed by a review of research on the personal characteristics that have been identified as playing a role in compensating for reading difficulties.

While some studies have reported correlations between learning disabilities and an increased risk for psychosocial difficulties, significant statistical associations between reading difficulties and psychosocial difficulties have yet to be firmly established (McNulty, 2003; Undheim, 2003). Although causation cannot be established clearly in these studies, many of them have indicated that individuals with reading difficulties are at greater risk of developing psychosocial difficulties (e.g., Bandura, Pastorelli, Barbaranelli, & Caprara, 1999; Heiman & Precel, 2003; Hellendoorn & Ruijssenaars, 2000; Undheim, 2003). This population has been characterized as experiencing negative emotions such as fear, shame, anger, frustration, sadness, and confusion, which can lead to personal alienation and dysfunctional behaviour (Robertson & Czerwonka, 2001). Scott, Scherman, and Phillips (1992), for example, suggested that many individuals who have developmental dyslexia experience emotional instability because they do not develop an understanding of their academic difficulties. Even when academic success is achieved it may not compensate for the stressors experienced during schooling (Undheim, 2003), and academic and/or career success is not necessarily able to remove the sense of emotional insecurity that is manifested in feelings of self-consciousness and low self-esteem (McNulty, 2003). Furthermore, adults who have a significant history of reading difficulties may believe that they are not as capable as their peers and that they have failed themselves and others (Scott et al., 1992). This feeling of inadequacy can lead individuals with reading difficulties to have persistent feelings of lower self-efficacy, anxiety, lack of self-confidence, self-doubt, and self-criticism (Bandura et al., 1999; Heiman & Precel, 2003).

The question then arises as to whether the level of psychosocial difficulties experienced by individuals with reading difficulties is different from that of normal readers. Research suggests that individuals with reading difficulties appear to display higher levels of anxiety than their normally reading peers (e.g., Carroll & Iles, 2006; Hellendoorn & Ruijssenaars, 2000; McNulty, 2003). As indicated in studies of reading-disabled twins and epidemiological research, higher levels of anxiety appear to be a consequence of reading difficulties, as opposed to genetic or environmental influences (Carroll & Iles, 2006). It is the years of repeated difficulties with reading that causes individuals with reading difficulties to feel stress, worry, and anxiety when literacy demands increase (Carroll & Iles, 2006). This can, in turn, undermine their ability to form positive social contacts. Studies have shown that individuals with reading difficulties experience problems with social contacts (e.g., Hellendoorn & Ruijssenaars, 2000; Undheim, 2003), ranging from a lack of friends and a lack of belonging to social awkwardness. The inability to form positive social contacts may lead to depression and can negatively affect the ability to develop appropriate social supports (Bandura et al., 1999). Causally, this relationship could also be reversed, whereby a lack of support, acceptance, and understanding from others can result in feelings of loneliness, isolation, and shame (McNulty, 2003).

If individuals with reading difficulties must deal with adverse psychosocial issues as well as their reading difficulties, it is likely that both educational interventions and personal characteristics function as compensatory mechanisms for those who are able to achieve academic and career success. Interestingly, while Hellendoorn and Ruijssenaars' (2000) examination of the personal experiences of adults with dyslexia revealed a variety of socioemotional experiences, including unfavourable experiences in school and at work, as well as social and emotional problems, the vast majority of participants also described themselves as individuals who persisted, endured, and survived. As the authors stated, "all [of the participants] were convinced that, whatever they did, they had to work much harder than others to achieve the same results" (p. 234). Therefore, the participants' beliefs in their abilities to accomplish a task may have influenced how much effort they initiated and the extent to which they persisted when faced with obstacles and adverse situations (Bandura, 1977; Kim & Lorsbach, 2005; Tschannen-Moran & Hoy, 2001). However, while McNulty's (2003) examination of the life stories of 12 adults with childhood diagnoses of dyslexia revealed that hard work was sometimes motivated by the perceived adversities that they faced and that their "I'll show you" attitudes enabled them to persevere despite their difficulties, they still voiced serious concerns about their intelligence and work ethic. Thus, while persistence and hard work may be used as compensatory strategies in achieving goals, they may also have a negative psychosocial impact.

A second personal characteristic that may function as a compensatory strategy is the ability to elicit and use social supports. One of the main social supports that individuals with reading difficulties consistently report as having contributed to their success is parental support. Parental support appears to coincide with the likelihood of individuals accepting their reading difficulties, feeling less disabled, reporting fewer problems, using positive coping strategies, and achieving a higher level of education (Fink, 1998; Hellendoorn & Ruijssenaars, 2000; Scott et al., 1992). In addition to parental support, Undheim (2003) also found that despite psychosocial difficulties, adults who had a history of dyslexia reported that having friends was an important coping strategy.

The reviewed studies indicate that adults with reading difficulties may experience psychosocial difficulties along with their reading difficulties, and that hard work and ability to seek and use social support may be significant compensatory strategies (Fink, 1998; Hellendoorn & Ruijssenaars, 2000; Scott et al., 1992). Relatively few studies, however, have focused specifically on socio-cognitive compensatory mechanisms and only a small number of these studies have examined qualitatively the perspectives of individuals who may compensate for their reading difficulties by relying on some of their personal characteristics. Many aspects of these personal characteristics, and their specific role in compensation, therefore remain to be examined. Qualitative methodology is particularly appropriate for examining the role of personal characteristics in compensation as the focus is on participants' experiences, as well as on the meaning that they assign to various aspects of those experiences. Thus, by using qualitative methodology we wanted to address the following research question: What are participants' experiences of the personal characteristics that they have seen as helpful in dealing with their reading difficulties during various phases of their education?

Method

Participants

The participants were 10 white adults (5 men and 5 women) who reported a significant history of reading difficulties and whose responses on the elementary education section of the Adult Reading History Questionnaire-Revised (Parrila, Corkett, Kirby, & Hein, 2003; see Parrila et al., 2007, for a more detailed description of the questionnaire) indicated significant reading difficulties in childhood. They ranged in age from 18 to 52 years, with an average age of 30.8 years ($SD = 9.61$) and were all either current university students or recent graduates (less than 6 months at the time of initial testing), with an average of 3.56 years ($SD = 1.13$) of undergraduate education. Also, these participants were individuals from a larger sample who volunteered to be part of this study. The larger sample consisted of 28 undergraduate students or recent graduates who participated in a quantitative study of cognitive and sociocognitive compensatory mechanisms used by adults with reading difficulties (see Corkett, Parrila, & Hein, 2006; Parrila et al., 2007). All of the participants in the quantitative study were recruited through letters that were sent by the university's student support services, announcements in undergraduate classes, and posters displayed on campus. They reported English as their spoken language of preference. It should be added here that although the qualitative study described in this article was conducted simultaneously with the above-mentioned quantitative study, these studies were not intended to be part of a larger, mixed methods research design.

Data Collection

The data for this study were collected using in-depth qualitative interviews. A standardized open-ended interview format (Patton, 2002) was used and involved developing a set of interview questions prior to the interviews and presenting them in the same order to all participants (see appendix). This more structured form of open-ended interviewing has the benefit of being more systematic and comprehensive in exploring a complex phenomenon. It should be emphasized here that although a standardized interview format was used, all interview questions were presented in an open-ended form, thereby allowing the participant to respond in whatever way he or she felt was most appropriate. More general interview questions were also included to allow participants to describe other experiences that were not addressed in the interview guide.

Individually, each participant was met and given a description of the nature and purpose of the research, followed by information about the interview process. Considerable attention was paid to developing rapport with each participant, which is of primary importance in collecting credible data (e.g., see Becker, 1986; Patton, 2002). All of the interviews were conducted in a private and neutral setting that was free of distractions or interruptions. Each of the interviews was tape recorded for later transcription and ranged in length from 45 to 150 minutes.

Data Analysis

An initial stage of the analysis consisted of transcribing the tape recorded interviews. The interviews were transcribed verbatim and close attention was paid to capturing elements such as the participant's rate of speech and expressed emotion. A form of whole text analysis was then

used that closely resembles a number of commonly used analytic procedures (e.g., see Bogdan & Biklen, 2002; Miles & Huberman, 1994; Strauss & Corbin, 1998). After becoming familiar with the material in each transcript, a line-by-line approach was used to identify (i.e., excerpt) segments of the text that were revealing of an aspect of the phenomenon being investigated. One or more coding categories, each of which normally consisted of a phrase, were then assigned to each excerpt to capture its meaning. Coding categories were viewed as provisional because they were sometimes modified as the analysis continued and other categories were developed. A subsequent stage of the analysis consisted of developing subcategories for many of the categories. Subcategories are smaller and more specific than categories and served to enhance the richness and clarity of the analysis and the discussion of findings.

A form of check-coding (Miles & Huberman, 1994) was also used during the analysis. That is, two members of the research team analyzed the first transcript independently of one another and later shared their efforts at excerpting and coding. Differences sometimes emerged in their analyses, but in all instances, discussion was used to achieve consensus. For the remainder of the analysis, peer debriefing (Creswell, 2003) was also used. More specifically, one member of the research team communicated regularly with the other team members about various aspects of the analysis, including new categories or subcategories that were emerging and any difficulties that were encountered. Again, dialogue was used to arrive at consensus on specific issues.

Results

A whole text analysis resulted in the identification of four major categories. Each category dealt with a personal characteristic that the participants saw as helpful in dealing with their reading difficulties. This analysis was part of a larger study of participants' experiences of reading difficulties and of the way(s) in which they attempted to compensate for those difficulties. All of the categories that were relevant in addressing the research question for this study have been included and are discussed below. It should be noted that pseudonyms have been used to refer to all of the participants. Quoted material is presented in its original form; in some instances, additional information has been inserted to enhance clarity or to provide added context.

Seeking Assistance from Others

Some of the participants described how they dealt with their deficits by asking others for assistance. In some instances, the assistance came from classmates. For example, Craig described the following strategy for gaining assistance from his classmates during group reading in elementary school:

> I would often find ways . . . other people [to] do my reading in the round for me. I got very inventive, getting other people – passing the buck: "Here, I'll give you my cupcake or I'll give you something." Bribes worked very well.

Craig also mentioned how during his entire education he consulted with his peers: "I'd always check with my classmates, you know. . . double check notes and stuff like that, you know. I've always checked." As a university student, Jonathan sought assistance from his peers in borrowing their lecture notes. As he explained, "I will ask for somebody else's notes and just read them." Assistance from classmates could also include help in cheating on examinations. In de-

scribing her experiences in elementary school, Anna stated, "basically, I just had a lot of friends that, that kinda helped me out. They helped me cheat."

Some participants also discussed how they sought help from friends or others. Craig described how, as an undergraduate, he asked two friends, who were also employed by the university, to proofread his written work:

> I would get one of my friends – I had two friends who were student counsellors here [at the university]. Both of them happened to have Latin, and one of them actually speaks five languages. His son also is learning disabled, so he knows where I'm coming from. He has done some proofreading for me. It's been very helpful, the difference between getting a six and a seven [on a nine-point grading scale]. Just by having that second pair of eyes looking at it.

Similarly, as a university student, Diane asks her husband to proofread all of her written submissions. As is evident in the following description, his assistance involves identifying places in her work where she has omitted words or sentences:

> So when I'm doing academic writing or when I'm, writing at all period, I'll miss words, sentences. Random. It's not – there's no – there's no sense to it. And when I'll read it out loud to myself . . . I'll put [in the word] time [or other words or sentences]. And they're not, really not there on the sheet. Not there. So I have my husband edit; . . . he proofreads for me . . . My husband proofreads all my academic work . . . Uhm, but I mean, the extent to which he proofreads is just to make sure that all of my, uhm, all of the words are there. Make sure there's no missing words.

Craig, however, described how he also relied on assistance from people other than family or friends. That is, he sought help from a professional editor for his written work at university. Beginning in his elementary school years, he also obtained assistance from the librarians at a nearby university:

> So I went to [the] university library, from a very young age. And I got to know the librarians there and stuff like that. So, I grew up surrounded by, you know . . . knowing that if I really needed to ask a question, someone out there on campus would probably know.

Developing Positive Relationships with Others

Many of the participants described how their ability to develop positive relationships with their peers, teachers, or instructors was a personal characteristic that was valuable to them during their education. Moreover, the development of these relationships was often seen as a prerequisite for obtaining various forms of assistance or other benefits from others. Although the current theme is related in some ways to the previous one, the focus here is specifically on participants' descriptions of developing positive relationships with others. It should be added that when the issues of seeking assistance or obtaining assistance or other benefits from others do appear in this theme, they occur within the context of established positive relationships with others.

Many of the participants who described developing positive relationships saw themselves as having been popular or as having developed key friendships during their elementary or secondary school years. These relationships afforded them various forms of help from their classmates. For example, in referring to his elementary school experiences, Jonathan explained that his main strategy for improving in school involved "making friends and asking them how

they interpreted the information. And going from there." Becoming aware of how his peers made sense of the material that was presented in class was thus a crucial starting point in his own efforts to achieve understanding during his elementary school years. Laura described her elementary school experiences in a similar way:

> Particularly in grade one to four, uhm – because I was more on the popular side in those years – I could use other people's strengths, uhm, to do group work. I could use my strengths and then utilize theirs. And then we moved – grade five and six. When I didn't have those friends, I was, I was caught. I didn't have that crutch that I'd developed.

Another participant, Tanya, described how her pleasant disposition and her popularity with other students in secondary school provided her with ready assistance when she needed it:

> Just sort of my way with people. I was, you know, fairly well liked and, uhm, and always enjoyable [to be around] and those kinds of things. So sometimes, uh, that helped in if I did need help for something, you know, people would be eager to help me out . . .

Similarly, Anna described how her ability to establish friendships was an important personal quality during her postsecondary education:

> I was also very social. Uhm, I was smart in kind of making friends and having study groups and that kind of stuff. And really, you know, from being shy and kind of withdrawn and a loner, that's not something that's easy to do.

Most of the participants who cultivated positive relationships with others described how their ability to establish good relationships with teachers or instructors was an important factor during their education. Participants highlighted a number of benefits that arose from developing these relationships. Anna, for example, described how getting along with her teachers in elementary school resulted in some measure of special treatment:

> I think it [i.e., the ability to develop positive relationships] only helped me because it shed me in a favourable light. You know, I had friends. I was the teacher's pet. Uhm, so of course, I – I mean, I did okay in school. I was pretty much an average kid. I don't think that it, uhm, made me receive any higher grades but, uh, I think if I was sitting at a 49.4%, you know, the teacher might bump it up to a 50%.

In contrast, Sarah saw her ability to get along with some of her teachers in secondary school as affording her other benefits: "I think I got along with certain teachers and I think those [teachers] kind of helped, uhm, me kind of get accommodations." Tanya, however, focused on the post-secondary level and described how she found the practice of establishing rapport with her university instructors to be valuable:

> Setting up a rapport with all of my profs. It's very important to me personally but I also know if you start asking questions early on – I learned that the hard way – you start asking questions early on and introduce yourself early on. That did help. Be respectful to them and they will be respectful to you. It's reciprocation. And I've had nothing but positive results from all my profs.

Being Highly Motivated to Achieve

Almost all of the participants described themselves as highly motivated to succeed academically and to achieve certain academic goals. All of these participants saw themselves as very motivated during their postsecondary studies, but varied in their level of motivation during their earlier education. Half of the participants described themselves as having been motivated to do well during all stages of their education. For example, Craig's high level of motivation emerged during his elementary school years as a desire to one day attend university and to later become an academic:

> I knew there was pressure for me to just do general. They really – a lot of teachers thought, "Well, university was out for this guy." They didn't even think about it. Uhm, but I knew I wanted to go to university by the time I was eight or nine. I wanted to go to university. Wanted to be a historian. That was my goal, to be a professor, actually. So I set my sights pretty high [laughter]. Uhm, and my family was – my family was mildly amused. Uhm, but no, that was my goal . . . [I was] very motivated.

Craig also made clear that another factor contributing to his motivation was his desire to challenge other people's low expectations of him. As he stated, "Ah, so sometimes, you know, vengeance can be sweet. Yes, you know, to tell me, 'You can't do it.' And I'll go, 'What do you mean I can't do it? I can do it. Watch me.'"

Anna was also driven to learn and do well throughout her education. She described herself as an "overachiever" during her postsecondary education and her motivation in elementary school remained high despite initial reading difficulties. She attributed her consistently high level of motivation to values instilled by her family: "In my family, uhm, success, good grades, that sort of thing, is very, very, valued. And so, uhm, that's why I worked so hard."

For one of the participants, however, his high level of motivation did not emerge until secondary school. Bryan explained how his sudden increase in motivation in high school emerged as a result of moving to a new school, where he was unable to develop new friendships:

> I was very much an introvert and . . . I went from a junior high that had, maybe, not even 100 students to some – to a high school that had over 500 students. And, you know . . . 500 students who didn't even know who I was . . . And had no desire [to know who I was] . . . There were two people who would actually say hello to me if they saw me. And everyone else were just totally strangers. And, uh, yeah, so I spent a lot of time in the library. And doing a lot of reading on my own. Spent a lot at home studying. And, uh, I really wanted to do a good job.

Bryan's high level of motivation continued during his postsecondary education. In describing his strong work ethic as a university student, he stated, "I get up at 5 o'clock every morning and I go to 10:30 at night."

The remaining participants saw themselves as only having become highly motivated during their postsecondary studies. The reasons for these major shifts in their motivation varied considerably. For Sarah, her motivation increased dramatically after completing a university course that dealt with learning and study strategies. What she learned during the course led to her realization that her level of effort could influence her achievement:

> I think that I had it, sort of [an] entity [i.e., fixed] view of intelligence when I was younger. But now I have realized that . . . [through] taking Linda's course [on learning and study strategies], uhm, that it [i.e., intelligence] is incremental. Like, you just have to keep working at it. And, uhm,

I think my aspiration is very high now and I feel that I can – with enough work – that I can achieve this, uhm – you know, maybe a 3.3 average, a 3.4 average. Maybe even higher. Uhm, but I realize that it takes a lot of work.

In contrast, Laura saw her increased motivation as reflective of greater maturity, which resulted from delaying the decision to begin her studies at university: "Not going to university after high school was definitely the best thing that ever happened to me. It – when I got to university, a little bit older, a little bit more mature, I was definitely more ready to go." For Diane, however, increased motivation as a university student resulted from her interest in her field of study (cross-cultural studies), as well as her desire to leave open the option of undertaking a doctorate in anthropology.

In discussing their motivation, the ability to persist or persevere was also emphasized by some of the participants. For most of these participants, persistence emerged early in their education during their elementary school years. Darren, for example, described how in elementary school he was aided by his "tenacity, not to give up." Similarly, Craig described himself as "very persistent" and as "being able to slug it out" in elementary school. Like his work ethic more generally, he saw his persistence as having been instilled by his family:

Well, I come from a family of business people, very successful, fairly well off. So the idea of hard work, being persistent, pays off. So [the] early bird gets the worm or a car or – so that was pounded into me, you know, from the time – long before I was diagnosed as LD actually.

Maintaining a Belief in One's Abilities

Some of the participants also described how their self-confidence or belief in their own abilities was an important personal characteristic that assisted them during their education. Karen saw as important personal characteristics that she "wasn't afraid of anything," was mature, and viewed herself as an intelligent person in elementary school. During that time, she was diagnosed with a reading disability, but not being labelled by others allowed her to view herself and her reading and writing difficulties in a more positive way. She viewed the absence of a label as allowing her to maintain her self-confidence:

Not being labelled [helped me in elementary school]. Like, I was able to be really naïve to my [reading and writing] problems. Like, I didn't realize – I didn't label them as problems much. I never thought of myself as stupid. I think that helped a lot. I just had that confidence to keep trying.

Sarah, however, described a different pattern. A decrease in the number of negative beliefs that she held about her abilities was seen as important during her postsecondary education: "I don't have so many negative beliefs about my abilities now but I am still kind of breaking them down, kind of destroying them."

In contrast, Diane described her belief in herself as having been influential during all stages of her education. She viewed herself as "fearless" and added, "I walked by the beat of my own drummer." The important role that her beliefs about herself played in buffering her against the feedback that she received in secondary school is revealed in the following description:

Uhm, I think my stubbornness is probably my greatest . . . asset . . . only because I didn't believe them [i.e., teachers]. I knew that I could understand a lot of things. I knew that I was an intelligent

person. I knew that my contribution to the classroom wasn't completely ignorant or off – like, completely to the right field or the left field. Like, I think I was on the ball when they [i.e., teachers] were talking. Uhm, and I just didn't believe them. I didn't believe that they could stop me [from going to university].

It is evident that Diane's self-confidence also included a firm belief in her ability to attend university. As she later added, "I knew I was going to university when I was ready. Period. It wasn't a question of whether or not I was going to get the grades. It was a question of when I was going to go. Always."

Discussion

As discussed in the previous section, four major personal characteristics emerged as central in this study: seeking assistance from others, developing positive relationships with others, being highly motivated to achieve, and maintaining a strong belief in one's abilities. Some of the participants described how they sought assistance from others in compensating for their reading difficulties. A wide variety of people, including classmates, friends, family members, and professionals (e.g., teachers, instructors, librarians, professional editors), could be the focus of such help seeking and the assistance provided was often critical in compensating for reading difficulties. Only a small number of studies have examined help seeking among individuals who have reading or other learning difficulties (Cowen, 1988; Eisenman & Tascione, 2002; Hartman-Hall & Haaga, 2002; McNulty, 2003; Miller & Atkinson, 2001; Troiano, 2003). This research has focused on both high school and postsecondary settings and has identified student help seeking for both academic and psychosocial difficulties. What is noteworthy about our finding, however, is the surprisingly wide range of professional and non-professional people who are approached for assistance.

Many of the participants also described being popular and well liked in school, and they were often able to actively cultivate positive relationships with classmates, friends, family members, and various professionals. Prior research has shown that individuals who have reading or other learning difficulties experience a variety of psychosocial difficulties (e.g., Hellendoorn & Ruijssenaars 2000; Robertson & Czerwonka, 2001; Scott et al., 1992), yet many of the participants in our study did not describe social awkwardness, a lack of friends, or an overall inability to form positive relationships with others. Of equal importance, interpersonal relationships often played an instrumental role in compensating for reading (and other learning) difficulties. More specifically, cultivating positive relationships was often seen as a *prerequisite* for obtaining various forms of help and/or other benefits that were used to compensate for reading difficulties. In other words, gaining assistance from others, which then influenced learning and achievement, may not have been possible in some instances without a congenial relationship as a prior condition. This dynamic between the development of positive relationships with others and help seeking would seem to have received little research attention. Compensatory strategies of this kind would also seem to be relatively complex in that they involve the intentional development of amicable relationships within which assistance is then sought.

Another personal characteristic that some participants described as influential was their belief in their own abilities. Some studies (e.g., McNulty, 2003; Polychroni, Koukoura, & Anagnostou, 2006; Undheim, 2003) have suggested that lack of a positive self concept or difficulty in maintaining one is a common characteristic of individuals who have reading difficulties. As evi-

denced in the current study, the belief in one's ability can be highly resilient, remaining stable over the course of one's entire educational experiences. The reasons for this, however, varied considerably. For some participants, external influences (i.e., the absence of either being labelled by others or others' low expectations) appeared to be important in the development of positive beliefs about their own abilities. For other participants, these positive beliefs seemed to be an integral part of their self concept, although others' supportive comments or high expectations may well have been important factors in the development of these beliefs. In both cases, however, it seems valuable to highlight the potential role of the beliefs and expectations that are held by others in shaping the participants' beliefs about their own abilities. Overall, these findings are consistent with Hellendoorn and Ruijssenaars' (2000) study, in which participants reported a positive self concept and described themselves as responsible, persevering, and surviving individuals. The participants also viewed their parents as having been the most important factor influencing their socioemotional health. As in the McNulty (2003) study, the participants' descriptions suggest that their beliefs about their academic abilities may have been influenced, in part, by positive activities and interactions with individuals who fostered a positive self image (e.g., peer and family assistance on academic tasks; values instilled by family members). Alternatively, when positive beliefs about ability were undermined by others, the participants' self confidence may have decreased accordingly, but such interactions may also have provided the motivation to prove these individuals wrong (McNulty, 2003).

The relationship between academic achievement and motivation is well documented (e.g., Bouffard & Couture, 2003; Broussard & Garrison, 2004; Busato, Prins, Elshout, & Hamaker, 2000; Pintrich & Schunk, 1996; Sideridis, Morgan, Botsas, Padeliadu, & Fuchs, 2006). Furthermore, studies of children with reading difficulties have indicated that they not only experience low motivation for reading but also a lower level of motivation in areas not related to reading (e.g., Polychroni et al., 2006). Nevertheless, being highly motivated to succeed academically and to achieve certain academic goals was a fourth personal characteristic that was described by almost all of the participants. While high motivation appears to have been a key characteristic of the participants, it is important to note that in some instances it was not present during all phases of their formal education. Specifically, half of the participants described themselves as having been highly motivated during all stages of their education, but for almost half of the participants, a high level of motivation was present only during their post-secondary education.

Of equal importance, the participants attributed their high level of motivation to a wide range of factors (e.g., strong educational and career goals, values instilled by family members, a desire to challenge others' low expectations of them, increased maturity, changes in their view of their abilities, changes in their social relationships). What this finding underscores is that there are likely a number of equally effective routes to achieving high academic motivation (e.g., see Bouffard & Couture, 2003; Sideridis et al., 2006). It may therefore be inappropriate to focus attention solely on any one of the above-mentioned influences when providing remediation to students who have reading or other learning difficulties. Furthermore, it is also interesting to note that Sideridis et al. found that measures of motivation were highly accurate in identifying Grade 6 students who either had learning difficulties or were at risk of developing them. The high level of motivation described by participants in our study is consistent with these authors' claim that increasing the motivation level of individuals with learning difficulties can, in turn, increase their likelihood of academic success.

The findings have a number of educational implications. Given that students with reading disabilities often have psychosocial difficulties (e.g., Bandura et al., 1999; Robertson & Czerwonka, 2001; Undheim, 2003), it would seem important for elementary, secondary, and postsecondary school systems alike to be fully aware of this aspect of these students' experiences and to provide appropriate resources for identifying and addressing it. This could take the form of special education or other services that directly target this issue (e.g., assistance in dealing with anxiety, shame, anger, and low self-esteem). An important aspect of such efforts would involve helping these individuals to develop more positive relationships with peers and other people (e.g., social skills training). Based on our findings, these positive relationships can include a wide variety of people and they are sometimes essential for obtaining support, which in turn can be instrumental in increasing academic success. The use of interactive approaches to education, such as group work and activity centres, represents another strategy for helping students with reading difficulties to develop stronger peer relationships. Interactive teaching strategies are also useful in that they provide these students with the opportunity to benefit by observing peers' approaches to academic tasks, including the ability to discuss the specific benefits of those approaches (Butler, 1995).

A closely related implication of the findings involves the broad range of people from whom the participants sought help. In their efforts to help students with reading difficulties, it would seem important for school systems to be sensitive to the potential value of all human resources available in their community. This will mean moving beyond the common, but restrictive, practice of relying on educational assistants and resource teachers as the main sources of assistance. Others within the broader community can be enlisted, to whatever degree is possible, to help students with their reading difficulties. Doing so would provide this population with an important support base even after they have left the formal school system. As Gerber, Ginsberg and Reiff (1992) emphasized in their study of highly successful adults who have a learning disability, mentors can play a key role in the social ecologies of these individuals. Developing the ability to use mentors at a young age may increase the academic success of a larger proportion of students who have reading or other learning difficulties.

Last, our findings revealed that a wide array of factors can influence motivation. Recognition of a wide range of influences on motivation would seem to be an important component of school systems' efforts to increase the motivation of students who have reading difficulties. Teachers are often encouraged to establish classroom environments that will motivate students to learn. Rather than emphasizing that motivation is something that is influenced by external factors (i.e., extrinsic motivation), emphasis should be placed on developing students' intrinsic motivation (Wolters, 1999). This practice would enable students to use motivation as a learning strategy when external influences (e.g., teacher praise, tangible rewards) are no longer present. In this regard, self-regulation could be made an integral part of the education program for students who have reading difficulties. Self-regulation—the self-directed process by which learners transform their mental abilities into academic skills (Butler, 1998; Zimmerman, 2002)—can be accomplished through metacognitive, motivational, and behavioural engagement in the learning process, which in turn enables learners to achieve their goals (Butler, 1995; Zimmerman 2002; Zimmerman & Schunk, 2001). Self-regulation focuses "on what students need to know about themselves in order to manage their limitations during efforts to learn, such as a dyslexic student knowing to use a particular strategy to read" (Zimmerman, 2002, p. 65). Thus, self-regulated learners are aware of their strengths and limitations and are guided by personal goals, enabling them to be proactive and motivated in their learning.

The findings also have a number of implications for further research. Our finding that the development of positive relationships was often a prerequisite for obtaining various forms of assistance or other benefits suggests the need for more quantitative and qualitative research on this topic to identify factors that influence this dynamic. Moreover, it would be equally valuable to examine in detail the alternative pattern of help seeking, involving students who are unable to establish these positive relationships. Given that a broad range of factors were identified as responsible for the participants' high motivation, it would be valuable to further examine, both qualitatively and quantitatively, these and other possible influences on the motivation of students who have reading difficulties. The findings of this research could provide educators with the basis for a multi-dimensional view of motivation, which would incorporate various aspects of the student's home, school, and social environment. In addition, further research could focus specifically on the impact of verbal persuasion, both positive and negative, on students' beliefs about themselves, including their level of self-efficacy. In all of the above-mentioned possibilities for further qualitative research, it would also be valuable to augment interview data with data collected through participant observation. Doing so may provide greater insight into these areas of research.

Several limitations of the present study also need to be addressed. Although the degree of transferability (i.e., the generalizability) of findings in qualitative research normally occurs in the form of a judgement made by the reader (rather than by the researcher), it is worthwhile to note that the transferability of our findings to other populations or other contexts remains to be established. First, our sample consisted entirely of white participants and our findings may therefore not be transferable to individuals from other ethnic or racial groups. Second, the participants were included in the study because they reported a significant history of reading difficulties, as measured by the Adult Reading History Questionnaire-Revised (Parrila et al., 2003). The findings may not be relevant to undergraduate students who experience other types of learning disabilities. Third, all of the participants were undergraduate students who attended one Canadian public university. The findings may therefore have limited transferability to other postsecondary institutions or to other student populations (e.g., high school students). Last, all of the participants had academic skills and an achievement level that allowed them to be admitted into a university degree program (and to remain in that program). Thus, the findings may not be reflective of the experiences of similar individuals who were denied admission to a university or other postsecondary institution, who were admitted to a postsecondary institution but did not remain in a program, or who did not complete their secondary education.

Examining the experiences of students who have reading difficulties has revealed a number of personal characteristics that can be influential in compensating for these difficulties. Sensitivity to the role played by these factors in compensation, as well as incorporating them into intervention efforts, may well be a key step in further helping these individuals to achieve academic success. The importance of the latter task also highlights the need for additional research to examine further the nature and efficacy of these and other related personal characteristics.

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Appendix
Interview Guide

I would like to start by having you think back to the time when you first had difficulties with reading. Do you remember that time?

1. When did you first have difficulties with reading?
2. How did you come to learn that you had difficulties?
3. If you learned about them from others, what did they tell you about your difficulties?
4. Do you remember if you were tested in elementary school?
5. Did your parents react to your reading difficulties?
6. What did you feel were your main reading difficulties in elementary school?
7. Did you have any other academic difficulties in elementary school?
8. Please describe what your in-class and out-of-class behaviour was like in elementary school.
9. How would you describe the relationships that you had with your classmates in elementary school?

Now, I'd like to focus specifically on your experiences with reading in elementary school.

1. Did any of your elementary teachers provide help for your difficulties with reading? Please describe your experience of the help you received from teachers.
2. Did you receive any help from a teacher's aide? Please describe your experience of the help you received from teacher's aides.
3. Did you attend a resource room or special education program in elementary school? What were your experiences in the resource room/special education program?
4. Did you receive any other forms of help for your difficulties with reading? Please describe your experiences of this help.
5. Did you receive any help from family members for your difficulties with reading in elementary school? Please describe your experiences of this help.
6. Did you receive any tutoring from others outside of the family? Please describe your experiences of this help.
7. Did you yourself ask other people, such as friends, for help with your reading in elementary school? Please describe your experiences of this help.
8. Did you do any extra work on your own to improve your reading?

Now I'd like to have you think about some of the ways that you approached different tasks in elementary school.

9. Did you use any specific learning or study strategies to try to do better in elementary school?
10. Apart from using these specific strategies, was there any other way that you were accustomed to learning or studying?
11. Were there any test-taking strategies that you used?
12. Apart from using these specific strategies, was there any other way that you were accustomed to taking tests?
13. Do you feel that any of your own personal qualities or characteristics helped you in elementary school?
14. Is there anything else about your elementary school experiences that you think would be important for me to know?

Now, I'd like to look at your experiences during your secondary education. By secondary education I mean your education after elementary school but before any postsecondary education that you completed.

1. When you left elementary school, did you go into junior high school, senior high school, or a transition school?
2. Do you remember if you were assessed for reading difficulties in secondary school?
3. What did you feel were your main difficulties with reading in secondary school?
4. Did you have any other academic difficulties apart from reading?
5. Do you feel that your difficulties with reading contributed to any of your other academic difficulties?
6. Please describe what your in-class behaviour was like in secondary school.

Now, I'd like to ask you about any forms of academic assistance that you received during your secondary education.

7. Did you receive help from any of your teachers? Please describe your experience of the help you received from teachers.
8. Did you receive any other forms of help in secondary school? Please describe your experience of this help.
9. Accommodations are special test-taking or other considerations that are provided to students who have certain academic difficulties. Did you receive any such accommodations in secondary school?
10. Did you receive any help from family members to try to help you do better in secondary school? Please describe your experiences of this help.
11. Did you receive any tutoring from others outside of the family? Please describe your experiences of this help.
12. Did you seek help from others, such as friends, to try to do better in secondary school? Please describe your experiences of this help.

Now I'd like to shift our focus and have you think about some of the ways that you approached different tasks in secondary school.

13. Did you use any specific learning, study, or memory strategies to try to do better in secondary school?
14. Apart from using these specific strategies, was there any other way that you were accustomed to learning, studying, or remembering?
15. Were there any test-taking strategies that you used?
16. Apart from using these specific strategies, was there any other way that you were accustomed to taking tests?
17. Apart from the learning, study, memory, and test-taking strategies that you used, did you do anything else to try to do better?
18. What expectations did your teachers have of you, compared to other students?
19. What expectations do you think your parents had of you?
20. What expectations did you have of yourself?
21. Do you feel that any of your own personal qualities or characteristics helped you in secondary school?
22. Is there anything else about your secondary school experiences that you think would be important for me to know?

Now, I would like you to think about all of your postsecondary school experiences. By postsecondary education, I mean any education that you have obtained at a training institution, college, technical institute, or university.

1. What types of postsecondary education have you had?
2. During your postsecondary education, what do you feel have been your main difficulties with reading?
3. Have you had any other academic difficulties?
4. If so, do you feel that your difficulties with reading have contributed to any of your other academic difficulties?

Now, I'd like to focus on any forms of assistance that you have received during your postsecondary education.

5. Are you aware of any of the services available to students with reading difficulties at the institutions you've attended? If so, did you initiate contact with these services or did others recommend them? Please describe any help that you have obtained from these services.
6. Were you assessed for reading difficulties when you contacted these services?
7. If you have received any accommodations during your postsecondary education, how useful have you found them to be?
8. Have you received help from any of your instructors? Please describe your experiences of this help.
9. Have you received any concessions from your instructors for exams or assignments? If so, do you think that these instructors have understood your difficulties?
10. Have you received any help from family members so that you could do better in your postsecondary education? Please describe your experiences of this help.
11. Have you received help from others, such as friends, to try to do better in postsecondary education? Please describe your experiences of this help.

Now I'd like to have you think about some of the ways that you approached different tasks in your postsecondary education.

12. Have you used any specific learning, study, or memory strategies to try to do better in your postsecondary studies?
13. Apart from using these specific strategies, is there any other way that you have been accustomed to learning, studying, or remembering?
14. Are there any test-taking strategies that you have used?
15. Apart from using these specific strategies, is there any other way that you have been accustomed to taking tests?
16. Apart from the learning, study, memory, and test-taking strategies that you have used, have you done anything else to try to do better?
17. What expectations do you have of yourself?
18. Do you feel that any of your own personal qualities or characteristics have helped you in your postsecondary education?
19. If you could, would you change anything about the postsecondary education system to make it better for people who have reading or other academic difficulties?
20. If you think back to how you were in elementary school and the way you are now, how are you different?
21. How are you the same?
22. Is there anything else that you think would be important for me to know?