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**RESILIENT CHARACTERISTICS IN  
HIGH ACHIEVING WOMEN**

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A dissertation submitted  
in partial fulfilment of the requirements  
for the degree of Master of Education

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## **ABSTRACT**

People who do not succumb to adversity but excel and achieve are said to be resilient. Individuals can become competent and successful despite having experienced adversity. Resilient protective characteristics may be classified into the following categories: internal psychological characteristics, environmental factors and social cultural factors. The internal protective resilient characteristics of populations who have overcome adversity are numerous. However, research on the internal protective resilient characteristics of the population of gifted females is limited. Moreover, there is a lack of literature focusing on one population, gifted females, and what internal resilient protective factors they utilize to build successful lives. This study attempts to provide insight regarding the questions: (1) What behavioral and psychological internal resilient protective factors do gifted women use to overcome challenges; and (2) Do they use the same internal resilient protective factors that other populations use?

This study explores the internal resilient characteristics of women currently enrolled in graduate school who have received an academic scholarship. A content-analysis of the emerging resilient characteristics and a content-analysis of the occurrence or nonoccurrence of 18 specific resilient characteristics is conducted. Recommendations are made to guide educators in nurturing resilient characteristics in gifted female students.

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## **RESILIENT CHARACTERISTICS IN HIGH ACHIEVING WOMEN**

### **CHAPTER ONE: INTRODUCTION**

This study is a direct account of the experiences of high achieving women. It is a study that is more than a scientific endeavour: rather, it is an account of the lives of twelve extraordinary women. In the following pages the reader will come to understand what resiliency means by listening to the stories of twelve women who have overcome challenges and have achieved great accomplishments. Specifically, we come to understand the personality characteristics that enabled these women to cope with their life challenges.

A number of books and research articles have been written about people who have overcome challenges and gone to lead fulfilling lives. However, this study looks at a specific population, gifted high achieving women. Such women have characteristics and experiences that present them with unique challenges. What makes this study different is that it goes beyond just establishing the challenges these women have encountered in their lives. It attempts to uncover the thinking and actions these women used to overcome whatever obstacles these challenges presented. This study is directly concerned with the specific personality and behavioural characteristics that have allowed these women to succeed despite the obstacles they have encountered.

A myth that prevails is that women who go on to achieve great accomplishments are privileged individuals, meaning they have come from socially advantaged backgrounds, endowed with biological intelligence surrounded by supportive families, peers and communities. However,

one cannot assume that high achieving women's experiences and circumstances are positive. Many case studies of high achieving women tell of the obstacles with which they were confronted. The interesting question that arises is what allowed such women to overcome challenges and to excel whereas others who experienced similar challenges did not fare as well? Herein lies the nature of the inquiry of this thesis.

Frederick Flach (1988), a psychiatrist and researcher wrote, that he only came to understand the concept of resiliency when he himself came to know what stress, adversity and disruption his patients and friends, as well as himself, experienced. In an effort to make the concept of resiliency salient, the following four case studies of typical resilient high achieving women are presented:

\*Dorianne Laux was beaten and sexually assaulted until seventeen by her stepfather. She was committed by her parents to a psychiatric hospital at age seventeen where she spent six months. She just managed to finish high school. For twelve years she earned her living by cleaning, pumping gas, frying doughnuts, cooking at a sanatorium and waitressing. As the single mother of a daughter, she took college classes and wrote poetry in her spare time. At thirty-three she obtained a scholarship and graduated with a B.A. Today she teaches at a university and her book, *What We Carry*, has been nominated by the National Critics Award (Laux, 1997).

\*Virginia Woolfe endured a childhood marred by trauma. At thirteen her mother died. Beginning at that age she was sexually assaulted. In childhood she began to suffer recurrent depression, mania, acrophobia and anorexia nervosa that would plague her throughout her lifetime. Despite this, her sole ambition was to become a writer. Amidst profound illness she was extremely productive, writing four thousand letters, thirty volumes of personal journals and

thirteen novels and books during her career.

\*At twenty-one months, Lucy Maud Montgomery's mother died and her father abandoned her. She was raised by maternal grandparents who were restrictive, providing no emotional support. They denied her any freedom of thought. As a child she had poor social skills and low self-esteem, a result of being ridiculed by her peers because of her precocious reading and writing abilities. Furthermore, teachers never provided opportunities to nurture her creativity. As a young woman she taught under deplorable conditions. Suffering nervous attacks and depression, she left teaching for twelve years to care for her aging grandmother. Isolated in a small remote island she continued to write. Today she is a famous international author who published twenty-two books, a volume of poetry, numerous articles, papers and personal journals.

\*Charlotte Bronte born in 1816 lost her mother at a young age. As a child, she was sent to a charity school. There she endured physical and psychological abuse. She was fated to lose all her siblings. She began to suffer from physical and psychological illness that plagued her throughout life. Writing was Charlotte's only escape from the chronic depression and loneliness she felt. She had literary ambitions that she revealed to none, finding it necessary to publish under the male cover name of 'Curer Bell'. Despite these challenges she has a place in history as a brilliant novelist.

These case studies highlight "extreme" challenges that high achieving women have overcome. Their stories provide a comprehensive backdrop to introduce the concept of resiliency.

The question that comes to mind when reading such case studies is why do some people not succumb to adversity, but excel and achieve great accomplishments? Research based on case studies of resilient individuals has been able to provide substantial answers.

In the first part of this chapter, these concepts are introduced. First, the concept of resiliency, second, the concept of giftedness and the problems unique to this population. The third concept is that of gifted females and the problems they encounter. Lastly, the relationship among the three concepts is explored in light of the research questions in this study.

### **Resiliency**

No universally accepted definition of resiliency exists. Definitions of what constitute resiliency vary. The definitions encompass a wide variety of behaviours, personality attributes and other factors. For the purpose of this study, the definition of resiliency used is that stated by Masten, Best and Garmezy (1990):

Resiliency refers to the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances. Psychological resilience is concerned with behavioral adaptation, usually defined in terms of internal states of well-being or effective function in the environment or both (p.426).

Many people encounter challenges in their lives. Considering individuals who experience challenges, who will ultimately overcome, succeed and live productive lives despite such challenges? Masten et al (1990) state that individuals who overcome adversity are resilient and possess : (1) a quality of particular strength within themselves; (2) sustained functioning even in the presence of acute major stressors; and (3) an ability to recover from adversity.

It is important to note that resiliency is not a constant construct. Rather, some challenges arising in certain periods of life make it more difficult for individuals to be resilient. The degree of

the challenge, the duration and frequency, for example, can effect an individual's ability to be resilient. More importantly, the extent to which an individual can protect himself/herself against challenges is the function of an interplay of variables such as the environment and the presence or absence of support networks (Haggerty, Sherrod, Garmezy & Rutter, 1996).

An abundance of research in the field of resiliency has been conducted, primarily with at-risk populations *i.e.* populations who have coped and are living productive lives despite experiencing overwhelming odds. However, to date no study has systematically documented if the protective factors identified in other populations are present in gifted women.

### **Problems Associated with Giftedness**

For the purpose of this study giftedness will be defined as superior ability in one or more of the following areas: (a) intelligence; (b) academic aptitude (potential or demonstrated); (c) creativity; (d) rate of growth or development of a socially desirable variable that is higher than that found in the general population; and (e) talent (Noble, 1987).

Any population including gifted individuals is not a homogenous group of people. Nevertheless they share similar personality characteristics, which can be the source of interpersonal and intrapersonal difficulties. Clark (1988) summarized some of the characteristic as being a profound knowledge about emotions, a sense of humour, a sense of idealism, justice and high expectations of themselves and of others. Such personality characteristics result in gifted individuals experiencing things qualitatively different from those who are not similarly endowed.

High sensitivity accompanied by intuition are common characteristics among the gifted (Silverman 1983c, 1994; Levine & Tucker, 1986; Clark, 1992; Leal, Kearney & Kearney, 1995). Gifted people experience emotions at a deeper level than their peer group. Some research

suggests that insight is an element of intelligence, that the brighter a person is, the greater is the capacity to be introspective (Piechowski, 1997; Piirto, 1994). Having a tendency to be emotionally intense and introspective can combine to increase the capacity to understand nuances and subtle underlying meanings in interpersonal communications. As a result those who are gifted may be capable of feeling complex emotions at a young age (VanTassel-Baska, 1989). However, not possessing the necessary frame of reference that comes from experience, the child does not have the ability to label these emotions. As a result, the gifted child may be prone to hypersensitivity which can predispose them to being hurt emotionally and also being hypersensitive to negative criticism (VanTassel-Baska, 1989; Silverman, 1994).

However, being highly sensitive, intuitive and introspective can be advantageous. Possessing these characteristics allows one to be reflective which is an element of self-understanding an essential aspect of resiliency (Beardslee, 1983a, 1983b; & 1981). The ability to be reflective and to have self-understanding is a gradual evolving process. With each challenge encountered, if people are able to be introspective about what the challenge entails and how they need to deal with it, it may lead to adaptive behaviour. The ability to engage in self-understanding and reflection about challenges encountered may mean that an individual has the ability to take actions based on those reflections. Over time through confronting and overcoming different challenges, people begin to gain an understanding of what allowed them to cope with past challenges. They can then recall coping strategies they used in the past and apply them to present and future challenges.

It appears that self-understanding is a skill which contributes to resiliency. Intuition, introspection and reflection are all elements of self-understanding. These are common

characteristics often found among gifted individuals. The question that arises is do these characteristics help gifted individuals to be competent, successful and resilient when faced with challenges? It seems that it would be important to establish the connection between gifted individuals' ability to be introspective, reflective and have self-understanding, and their ability to be resilient.

Gifted individuals experience asynchronous development in which their cognitive abilities and intensity combine and result in experiencing unique inner emotions. Gifted children must deal with such uneven development. Interestingly, the higher the intellect the higher the asynchronous development (Morelock, 1992; Silverman & Kearney, 1992). For example, one study conducted with gifted students found that the problems of growing up were exacerbated for the gifted child fast tracked in the school system. Those children who were accelerated, revealed feeling weak, socially less capable and unprepared psychologically to be amidst chronologically older students (Freeman, 1994). This is an example of asynchronous development where the intellectual level a child possesses is advanced beyond the age though at a psychological level they are not as advanced. Such development can lead to an incongruity between two states that can be confusing and difficult to deal with for the gifted child. Moreover, this type of uneven development is observed among gifted children in various cultures (Schetky, 1981; Manaster & Powell, 1983; & Terrassier, 1985).

Another experience shared among gifted individuals is the feeling of being different (Beuscher, 1985; Cross, Coleman & Terharr-Yonkers, 1991; Jenkins-Freidman & Murphy, 1988; Robinson, 1989). Feelings of being different can arise from a number of experiences. Cornell (1990) researched high ability students who were unpopular and concluded that they were seen as

different because of the goals and values they adhered to which directly stemmed from their high academic standards.

Gifted individuals also experience things differently from their peers. They feel things in a more vivid, absorbing, complex and overriding manner (Piechowski, 1992). Having these feelings can be a result of asynchronous development. As Silverman (1994) noted it means that the gifted individual is out-of-sync internally and externally. Such feelings may cause cognitive, emotional and physical developmental problems which result in internal tension. Moreover, the internal asynchrony is mirrored in the external adjustment problems because gifted individuals feel different from or out of place with others.

A myth which prevails in society is that once one is identified as gifted it is assumed that she/he will achieve exceptionally in all spheres. The gifted child often has unrealistic expectations placed upon her by others. Such imposed expectations can cause extreme anxiety which, in turn, can be debilitating. As a result, gifted children may lose all motivation to enhance their talents because it is too emotionally demanding. Therefore, being gifted may be accompanied by experiences unique to their ability levels which are difficult and challenging. For individuals who are gifted who experience asynchronous development, feelings of being different, experiencing things differently from their peers and having unrealistic expectations placed upon them that are emotionally demanding can be potentially stressful. Facing such stressors can place the gifted at risk for developmental behavioral and personality difficulties. The gifted individuals who are able to function and deal with these stressors may give a good understanding of how they adapt to life stressors. How does the gifted individuals manage and negotiate these challenges? What coping abilities do they use? More importantly, do they use specific behavioral and personality resilient

protective factors to deal with these stressors?

Yet another shared characteristic of many gifted individuals is perfectionism. This trait can be positive in so much as it motivates people to pay scrupulous attention to detail and allows them to produce work of extraordinary calibre. However, perfectionism can also be debilitating when persons only derive satisfaction from what they accomplish perfectly (Parker & Adkins, 1995). Many studies have linked perfectionism to depression (Hewitt & Dyck, 1986; LaPointe & Crandell, 1980), anorexia nervosa (Lask & Bryant-Waugh, 1992; Toner, Garfinkel & Gardner, 1987), bulimia nervosa (Axtell & Newlon, 1993; Brouwers & Wiggum, 1993) and obsessive compulsive personality (Rasmussen & Eisen, 1992). A note of caution, as Parker et al (1995) indicate: there may exist a link between perfectionism and the above mentioned conditions, however, we cannot conclude that perfectionism alone necessarily caused such conditions. Nevertheless, unrealistic expectations whether imposed by oneself or by others can result in excessive self criticism and can be a source of overwhelming stress for gifted children.

The personality characteristic of gifted individuals namely perfectionism has been linked to negative consequences. However, perfectionism may help gifted individuals to function well, to adapt and negotiate when they are confronted with challenges. Healthy perfectionism can be an extremely beneficial personality characteristic to possess. Inherent to perfectionism is determination, persistence and motivation. Both motivation and persistence are resilient protective factors that other populations have used to overcome challenges (Anthony & Cohler, 1987; Peng, Lee, Wang & Walberg, 1992; Oshse, 1990).

Setting high goals, working diligently often for extended periods of times can lead to great achievement. In its positive form, perfectionism can provide a driving energy (Silverman, 1993c).

The question that arises is, do gifted individuals' perfectionist tendencies translate to motivation and persistence when confronted with a challenge? That is, do they continue to persevere and work hard to overcome it? If so, are these gifted individuals then using motivation and persistence which stems from perfectionism as a coping mechanism, as a resilient protective factor to deal with challenges?

### **Gifted Females**

Gifted females, throughout childhood and adulthood, may encounter interpersonal challenges, such as discouragement if parents are unaware of, or ignore their abilities. Noble (1989) found that one-third of 109 gifted women in her sample were discouraged by parents to fulfil their potential. How then does the gifted women who goes on to achieve, do so in the presence of such discouragement? The gifted girl who does must be developing coping mechanism, problem-solving abilities that enable her to pursue her goals despite the presence of such dissuasion. With time she is developing resilient protective factors. Which protective factors is she developing and using that eventually become part of her repertoire of coping skills?

There exists an abundance of literature also documenting the challenges gifted girls face in school. Gifted children in general display a persistent desire to ask questions and to express their individual opinions. They are precocious, demand to talk, to be heard and have a desire to discuss intellectual matters at an adult level (Clark, 1992a). These characteristics are more appreciated in boys than girls. Studies have found that both female and male teachers prefer gifted boys because they see gifted boys as more capable. The very qualities they admire in the gifted boys (analytical reasoning, nontraditional approaches to learning, questioning, etc.) are not equally admired in gifted girls (Blaubergs, 1980; Fox, Tobin & Brody, 1981).

In addition, another interpersonal challenge many gifted girls face is ambivalence regarding their intellectual abilities not only from parents and educators, but also from their peer group. Kunkel, Chapa, Patterson and Wallings (1992) studied gifted girls, providing a picture of their social relationships. These girls, in seventh and eighth grade, experienced a great deal of ridicule and loneliness. Kerr (1994), who studied the lives of eminent women, repeatedly noted that a common thread in these women's lives was experiencing a sense of awkwardness and loneliness in adolescence. At this age some gifted females make a conscious decision to not do their best, hiding their abilities. They may believe that achievement will lead to social rejection (Horner, 1972; Lavach & Lanier, 1975; Noble, 1987). However, other gifted girls despite lack of encouragement and social rejection decide to continue to do their best and achieve great accomplishments. What personality and behavioral resilient protective factors help the latter group do so?

As adults gifted women may be attempting to achieve great goals. As such, they need guidance, support and information about how other women have coped while pursuing their goals. The gifted young woman has high expectations of herself, often fulfilling multiple roles as a mother, professional and companion (Kerr, 1994; Leroux & Butler-Por, 1996). Gifted women may not receive the support they need to fulfil multiple roles. Furthermore, gifted women may encounter hostility from family and peers if they try to manage professional and domestic roles. Moreover, gifted women face challenges such as inequality and not reaching levels of success that match their abilities (Yewchuck, Chatterton & Jackson, 1991; Callahan, 1991; Leroux, 1992).

Unfortunately, there are many gifted women who face these interpersonal challenges in isolation. In frustration and exhaustion, young women may come to believe they must forgo

fulfilling their potential, possibly resulting in chronic dissatisfaction in life. If the gifted woman chooses to pursue her non-stereotypical goals, family members, peers and educators may discourage her. Gifted women are often at a risk of facing loneliness, alienation and family discouragement because they are different (Noble, 1989).

Such experiences can be stressful challenges for the gifted women. If we can understand how these women deal with the hassles and frustrations that occur daily in their lives, we can understand what they do in order to adjust and cope (Lazarus, 1980 & Lazarus & Folkman, 1984). How do these women maintain their motivation to achieve and persist in the presence of such interpersonal challenges? Studying the personality attributes and behavioral skills they possess and use can help us to uncover resilient protective factors they use to deal with the challenges in their lives?

Many gifted women also experience intrapersonal challenges, which are occurring within themselves. One common intrapersonal challenge was identified by Horner (1972), a clinical psychologist, when she observed that gifted women consciously underachieve when competing against men. Kerr (1994) states that gifted women have a desire to please. It is such a profound need that even if they understand it is irrational, they continue to do so believing success and competence are not always desirable to the opposite sex (Hollinger & Fleming, 1993).

The other intrapersonal challenge gifted women may also experience is the "Imposter Syndrome". Clance and Imes (1978) and Clance (1985) found that many women who are intelligent denied this, even in the presence of disconfirming evidence. Believing they achieved success by fooling others, these women felt they were impostors, not smart, but tricking people in believing they were. They may also have attributed their success to luck (Maskovitz, 1983).

Holding this belief, they do not gain any self-confidence or self-esteem from their accomplishments, but come to doubt their intellectual abilities. Research and clinical observation of people with imposter syndrome have found that it is associated with worry, depression, anxiety and a fear of portraying a successful image. Moreover, people who have the imposter syndrome fear that they will be discovered as being incompetent to occupy the places they do (Langford & Clance, 1993). The imposter syndrome is a challenge many high achieving women encounter. How do these women, despite feeling and experiencing these conflicts, continue to persevere to achieve their goals? Are they using resilient protective factors to help them deal with these challenges?

Yet another intrapersonal challenge gifted women face is multiple-role conflict. Gifted women are often fulfilling multiple roles in careers and motherhood and feel that they are not doing a good job of balancing these various roles (Arnold, 1993). How do gifted young women build internal resources to enable them to successfully cope with the internal and external pressures in their lives?

Gifted women face intrapersonal challenges, the fear that being successful and achieving will lead to social stigmatization or being unattractive to the opposite sex, the belief that they have achieved only do to luck not their abilities and the guilt they are not balancing multiple roles well. These challenges must be negotiated and dealt with if the gifted woman wishes to achieve her goals. It would be valuable to ascertain if in fact high achieving gifted women allude to having faced these interpersonal challenges. If so, then how did they come to terms with them? How did they deal with them? Answers to these questions can provide valuable insight into how gifted women are resilient and what protective factors they use in order to negotiate these challenges.

This knowledge in turn, can be useful for younger females as they proceed on their career spiral (Leroux, 1997).

### **The Relationship Between Resiliency and Gifted Individuals**

Masten et al (1990) provide a comprehensive definition of resiliency. Part of this definition reads, "Resiliency refers to the process of capacity for or outcome of successful adaptation despite challenging or threatening circumstances" (p.426). Inherent in this definition is the assumption that an individual needs to be confronted with challenges or a threatening circumstance in order for she/he to demonstrate she/he can overcome these challenges. Having successfully dealt with challenges, an individual can be referred to as resilient. This description may be applied to individuals at all levels of ability.

Many studies have documented that people who are gifted frequently encounter unique challenges associated with being gifted (Silverman, 1994; Lovecky, 1994; Gore & Eckenrode, 1996; Levine et al, 1986; Roedell, 1984; Kunkel et al, 1992). At times, these challenges can be psychologically demanding and call upon an individual's resources to overcome them.

Gifted females experience many of the same challenges gifted individuals in general do. However, it is clearly demonstrated in the literature that the majority of gifted females do not fulfil their potential. As early as elementary school, at least one half of the children labelled as gifted/talented/creative/highly capable are girls. By junior high less than one-fifth are still identified as such (Clark, 1983; Silverman, 1986). Moreover, a large percentage of gifted women settle for less than their full potential, whereas their male counterparts achieve positions of leadership in all sectors of society (Kerr, 1985).

The above-noted findings leads to the conclusion that perhaps gifted women are

experiencing different and a greater number of challenges associated with their giftedness than gifted men. In addition, the nature and frequency of these challenges associated with being gifted and female may be overwhelming. As such, perhaps some of the most capable gifted women forego on the development of their gifts and potential because the struggle is too difficult (Kerr, 1985; Noble 1989; Silverman, 1995).

If, in fact, gifted women face numerous challenges, then those who overcome them and go on to fulfil their potential may be termed resilient. Herein lies the nature of the inquiry of this thesis. Do gifted women who are high achievers possess the internal resilient protective factors that have been found in other resilient populations? And, specifically, do these characteristics contribute to their ability to overcome the challenges and obstacles with which they are presented?

### **Why Study Resilient Gifted Women?**

The resilient protective factors of populations who have overcome challenges are numerous. However, research regarding the protective factors gifted women use to overcome challenges is limited. Moreover, few studies document the specific challenges gifted women face and how these challenges are overcome. Noble (1987) captures the gifted woman's path of adversity when she states "The path toward realizing high potential is arduous for most gifted women, yet some not only persist and affirm their potential but illuminate new possibilities for all of us" (p.132).

Noble describes these women who have had to struggle to develop their gifts. Some obstacles they face are: a lack of money, discouragement from family, limited encouragement professionally and academically, ill prepared for independence, lack of opportunity, opposition for

displaying talents and professional isolation. As Noble (1989) concluded, "What I find so remarkable about these women is their extraordinary resilience of spirit, their creativity, their honesty and integrity, their passion and enthusiasm, their complexity and capacity for insight and healing, and the openness they bring to the experience of life" (p.133).

The journey gifted women travel to arrive to their destination is fraught with interpersonal, intrapersonal and social obstacles. The adversities faced may be overwhelming. By documenting these challenges and understanding the process resilient gifted women have used to overcome them, we can then impart this knowledge to younger women who will follow.

### **Research Questions**

In the above discussion four areas of the research question were described. First, there is a need to study if resilient protective factors are used by gifted females to overcome challenges. Second, there is a large amount of literature that attests to the unique challenges gifted individuals encounter. Third, gifted females encounter not only problems associated with being gifted but also problems associated with being female and gifted. And fourth, research is needed to establish why some gifted women have the ability to overcome these challenges and go onward to work to fulfil their potential.

Therefore, the following research questions form the basis of this study:

- (1) What behavioral and psychological internal resilient protective factors do gifted women use to overcome adversity?
- (2) Do women use the same internal resilient protective factors that other populations use?

In attempt to answer these questions, the gifted female participants in the present study are adult women who are currently enrolled in a graduate program at a University. These women are currently the recipients of academic scholarships. Due to graduate students' demonstrated intellectual and academic capacity, they represent a plausible reference group to gifted adults. Many of the critical skills associated with scholarly performance are similar to those that gifted adults possess (Enright & Gitomer, 1989; Hansen & Hall, 1985).

### **Organization of the Study**

This study is presented in six chapters. After the introductory chapter, chapter two presents the literature related to research conducted on populations that are resilient. This chapter is divided in three parts, first, a review of literature relative to resiliency; second, a review of the protective factors that have emerged from the literature as being present in resilient individuals; third, an outline of research that demonstrates that the protective factors identified in other populations have also been found in gifted individuals.

In chapter three, the methodology of the present study is outlined. Discussed in this chapter are participant selection, procedure, data collection tools, inter-rater reliability, methodology chosen for this study, data analysis and ethical concerns.

The results of the study are presented in chapter four. In this study, the research participants answers to the interview protocol are presented. Here the emerging themes in relation to each question are offered. Secondly, the results of the content analysis of the preestablished resilient protective factors are presented.

To ensure that the voices of the participants are presented accurately, the participants'

voices are present, not the researcher's interpretation of what the participants meant when they answered the questions in the interview protocol.

In the final chapter five, the two research questions will be answered. Finally, chapter six discusses the implications for educational practices for gifted females. As well, contributions of this study to the field of research are outlined. Moreover, future research directions are indicated. Finally, the chapter concludes with some of the limitations of this study and a discussion of how future research might address these concerns.

There is a lack of literature that examines how gifted women deal with challenges, specifically the process and protective factors they utilize to be resilient. This study attempts to address this question of resiliency in gifted women.

## **CHAPTER TWO: LITERATURE REVIEW**

In this chapter the concept of resiliency and the protective factors that resilient individuals possess is presented in detail. In addition, the research literature which documents the characteristics of gifted individuals is discussed. Specifically, the relationship that appears is that some of the same characteristics that gifted individuals possess are similar to those that have been documented in the literature, as being present in resilient individuals in other populations. Finally a summary of resilient protective factors is presented.

### **Resiliency: Review of Research Literature Conducted with Different Populations**

The focus of resiliency research for a number of years has been on "at risk" populations and the resilient protective factors they use to overcome adversity (Garmezy, 1971; Garmezy & Streitman, 1974; Cicchetti & Garmezy, 1993). Resiliency in the offspring of psychiatric patients, people raised in poverty, children of divorce, people who have overcome trauma and other populations have been studied.

There has been a proliferation of research in studying resilient (invulnerable, stress-resistant) individuals who experience obstacles and overcome them. A review of the literature shows studies conducted with children of psychiatric patients, children born in poverty, survivors of trauma and other high-risk populations who have adapted and coped well despite adversity. From a selected review of studies with these populations, the resilient protective factors that contribute to resiliency will emerge.

Researchers studying resiliency have focused on individuals who have overcome

challenges. Some of the earliest studies in resiliency have focused on the children of psychiatrically ill parents. The following section reviews some of this research.

### **Resilient Children of Psychiatrically Ill Parents**

Early studies documented the resilient protective factors observed in the offspring of psychiatrically ill parents. These children are deemed at risk because they have a higher statistical risk for emotional disorders (Blueuler, 1978; Garmezy, Masten & Tellegen, 1984). Blueuler studied over 20 years, children born to 208 schizophrenic mothers. Blueuler found that in spite of economic suffering, social ostracism and growing up with psychotic parents the offspring, 84%, achieved remarkable things considering the environment in which they were raised. The one prevailing finding was that these children saw success as a way to make sense of and overcome their adversities (Blueuler, 1974).

A second study included 15 children who were labelled as resilient based on good overall ratings of behaviour functioning and the absence of major psychiatric disorder. Some of the personality characteristics they possessed were an above average intelligence, courage, motivation and a sense of personal integrity. Moreover, these children made use of support networks. They had a belief that adversity could be overcome and that they were in control of their fate. The authors also observed that these children were unusually helpful toward their fellow human beings (Beardslee & Podorefsky, 1988).

In another study, Kauffman, Grunebaum, Cohler, and Gamer (1979) examined functioning in the children of psychotic mothers. Out of a larger sample, six of the most and six of the least competent children were further examined. The most competent children differed from the least competent in a number of ways. The children labelled competent had (a) formed at least one

important relationship within the nuclear family, with peers or with adults and (b) placed a great deal of effort on mastering any task they undertook. The competent offspring of psychiatrically ill parents in this study derived pleasure from their successes, which in turn contributed to their higher sense of self-esteem. Moreover, these children were reflective. Self-understanding played a crucial role in their ability to deal with their past adversities. They had a good cognitive appraisal of their parents' illness and its relationship to them. An internal locus of control meant that these offspring functioned independently. They were socially competent and able to elicit help from others. Moreover, they were motivated and possessed a personal integrity.

It appears that another population researchers studying resiliency have focused on is individuals raised in poverty. The following section reviews some of this research.

### **Resilient Individuals Raised in Poverty**

Economic status is one of the most influential variables in determining class status and opportunity; the availability of money determines the quality of one's diet, place of residence, availability to health care and possibilities for the future (Barbour & Barbour, 1997). Retrospective studies of children exposed to the stressors of poverty have observed that a number of these children are resilient despite the challenge of being raised in impoverished environments. They overcome the economic and social disadvantages associated with poverty and are leading productive lives (Cicchetti et al, 1993). Werner and Smith in (1977) studied 210 children from impoverished backgrounds. Seventy-two of the 210 children studied were identified as resilient. The resilient offspring had engaging personalities and were outgoing. This may have contributed to their ease of actively seeking support networks such as developing a close bond with at least one caregiver. An altruistic personality and a high intelligence were also characteristically

observed. Moreover, these individuals had an internal locus of control, believing that they could overcome obstacles and control their future fate.

In 1974, Elder studied adults who had been raised during the great depression. These adults had lived through hunger, depression and uncertainty. The resilient survivors, as opposed to non-resilient survivors, exhibited: (a) higher IQ potential; (b) higher ranks on independence and responsibility; (c) greater autonomy; (d) greater motivation; and (e) had a sense of purpose. It could be inferred from such traits that these resilient survivors possessed greater internal locus of control, meaning that the direction, they took in life was in their control. In addition, throughout their lifetime they showed altruistic characteristics, such as being warm meaning compassionate, altruistic and having an understanding nature towards others (Elder, 1974). It appears that these resilient individuals sought to understand others and themselves.

Another population studied were offspring who were raised in impoverished backgrounds such as the Appalachian mountains. Coles (1986) noted that these children had been exposed to extreme events, pains and problems, experiencing social and economic crises. It was observed that the resilient offspring raised in poverty were characteristically: (a) altruistic; (b) helping anyone in need; (c) they were inquisitive indicating a desire to learn; and (d) functioned autonomously in their daily lives. It appears that the protective factors these children used to overcome adversity were a desire to learn, autonomy, social competence and altruism.

Academic success in children being raised in poverty has also been the focus of many studies. Nuechterlein (1970) and Garmezy and Nuechterlein (1972) studied high achieving poor students who possessed exceptional skills such as: (a) a co-operative nature; (b) a sense of social responsibility; (c) active social participation; (d) being well-liked by their peers; (d) an internal

locus of control; and (e) autonomy. The children in these studies were resilient because they achieved academically despite being raised in impoverished environments.

A third study by Garmezy (1983) studied successful students who thrived despite being raised in poverty-stricken environments. He found that these children were: (a) socially competent; (b) socially responsive; (c) humorous; (d) co-operative; (e) had positive peer and adult relationships; (f) had a positive sense of self; (g) an internal locus of control; (h) highly sensitive; (i) intelligent; and (j) empathetic. The above listed protective factors are those that the resilient students raised in poverty possessed.

The objective of a fourth study by Milgram and Palti (1993) was to study high and low achieving boys being raised in disadvantaged communities. The resilient, high achieving boys possessed unique characteristics, such as; (1) high motivation; (2) high-achievers; (3) took initiative; (4) were autonomous; (5) self-confident; (6) had good self-esteem; (7) flexible with a tolerance for frustration; (8) had a persistent nature; and (9) reflective self-understanding. These resilient boys were socially competent children with the ability to seek and attract social support from peers and adults.

Research by Werner and Smith in (1982) provided further insights. Five groups of children exposed to adversity were studied. One of these groups was minority children achieving well in school. These children were labelled as resilient because, despite being raised in poverty-stricken, discriminatory environment, they were functioning well. Resilient children in this study possessed the following temperamental characteristics: (1) an ability to attract attention; (2) formed at least one bond with a caregiver; (3) recruited surrogate help; (4) were socially competent; (5) took an active approach to solving life's problems; (6) had an optimistic appraisal

of life; (7) had a strong spiritual faith; (8) possessed an altruistic nature and; (9) were deeply involved in various hobbies. Again, we can conclude these are behavioral and personality protective factors that contribute to resiliency.

In reviewing studies of resilient individuals raised in poverty, a pattern of protective characteristics was observed. This population was socially competent with a positive sense of self-efficacy. Their cognitive appraisal of life was optimistic. An autonomous and internal locus of control contributed to their optimistic view of life. A sense of purpose, persistence, endurance and motivation to change their circumstances provided them with hope. In addition, they were intelligent individuals, had a desire to learn and had a tendency to be reflective. Moreover, they were for the most part altruistic individuals who were caring and compassionate toward others.

Research studies have examined resiliency in individuals who have experienced other life stressors. The following section outlines some of this research.

### **Life Stressors and Resiliency**

Survivors of trauma suffer from a myriad of emotional difficulties. Those individuals who have not succumbed to the emotional difficulties as a result of experiencing trauma, who cope and live productive lives are labelled resilient. Mrazek and Mrazek (1987) in studying how survivors of childhood maltreatment became resilient, concluded that the personal characteristics of these survivors included: (a) precocious maturity; (b) dissociation of affect; (c) information seeking; (d) formation of relationships for survival; (e) positive projection anticipation; (f) risk taking; (g) belief they are loved; (h) cognitive restructuring of painful experiences; (i) altruism; and (j) optimism. The above mentioned personality and behavioral characteristics appear to be common traits present in resilient survivors of childhood maltreatment.

Another study looked at adolescents who were maltreated. The resilient adolescents had an internal locus of control and high self-esteem, two characteristics that may have contributed to the low rate of depression among this population (Moran & Eckenrode, 1992).

Himelein and McElrath (1996) studied 20 resilient survivors of child sexual abuse. The women termed resilient described the impact of the sexual abuse on their lives in a manner that minimized the seriousness of their experiences. They believed that the abuse provided a vehicle for their own personal growth, suggesting a positive appraisal of a negative life experience. In addition, the resilient survivors made a concerted effort not to dwell on the abuse they suffered.

Lastly, Fergusson and Lynskey (1996) in their longitudinal study, examined the factors that contributed to resiliency in children who had experienced adversity. A high level of intelligence was observed among this population. Moreover, a desire to learn and an enjoyment of school was reported. These children sought novelty, suggesting they may have been risk-takers. They were also socially competent individuals; taking part in varied interests, such as sports. All had close peer affiliations, attachments and close relationships with adults.

In reviewing studies conducted with resilient individuals, behavioral and personality protective characteristics emerge as being present in the lives of individuals who overcame challenges. A summary of these characteristic is shown in Table 1.

Table 1

**Summary of Protective Factors Found in the Literature**

Self-Understanding	Social Competence
Autonomy	Sense of Purpose
Information Seeking	Formation & Utilization of Relationships
Risk-Taking	Cognitive Reappraisal
Altruism	Optimism
Dreamers	Motivation
Flexibility	Problem -Solving
Refuge in Talents & Hobbies	Internal Locus of Control
Persistence	

Operational definitions for these personality and behavioral characteristics can be found in Appendix B.

Gore et al (1996) have classified protective factors into two categories: (1) personality factors such as the presence of self-esteem; and (2) environmental resources such as family, social economic status and supportive networks. A protective factor may be classified as anything that modifies; ameliorates or alters a person's response to adversity (Rutter, 1985). Protective factors may be further subdivided as falling into characteristics that are internal or external to an individual (Haggerty et al, 1996). Masten and Coatsworth (1995) list the following protective factors which have emerged from the literature as contributing to resiliency that are external to an individual: (a) stable care; (b) attractiveness to peers and adults; and (c) identification with competent role models.

It appears that resiliency is the result of a combination of personal, social or environmental factors. This study examines the personality and behavioral protective factors individuals use to deal with challenges. This decision was made primarily because the study is interested in examining the process resilient gifted women use to overcome obstacles. Therefore, studying the personality and behavioral protective factors will provide insight regarding this question. Stemming from a review of the literature in resiliency, personality and behaviour protective factors repeatedly emerge as being present in individuals who have been labelled resilient. Each personality and behavioral protective factor is expanded in the following section.

### **Behavioral and Personality Protective Characteristics in Resilient Individuals**

#### **Self Understanding**

Resilient individuals have a tendency to be reflective (Beardslee, 1989; Hauser, Vieyra, Jacobson & Wertlieb, 1985; Mrazek et al, 1987; Rutter, 1987). They tend to reflect and understand the challenge they face in their daily lives, specifically, how it effects them, why it occurred, what it means and how they can learn from it. They tend to have a good understanding of themselves and are reflective in the appraisal of what occurred. These individuals are also characteristically introverted, introspective and experience emotions deeply (Silverman, 1993b). For example, a study of children born in homes where a parent suffered from a psychiatric illness found that the children who were resistant to the process of the illness, had a curiosity in studying the etiology, symptoms and treatment of the psychiatric illness their parents' were experiencing (Anthony & Koupernik, 1974). Understanding the nature of their parents illness helped them deal with the consequences of the psychiatric illness. Self-understanding serves as a protective factor

because it enables a person to gain knowledge. For example, understanding, possessing information regarding a psychiatric illness may permit an individual to develop strategies or recruit resources in an attempt to protect or deal with the possibility they may be predisposed genetically to mental illness. Thus self-understanding can be a personality characteristic which serves as a protective factor in resilient individuals.

### **Social Competence**

Resilient individuals are often charismatic and have an agreeable temperament which may contribute to their capacity to elicit positive responses from others (Garmezy & Rutter, 1983). For example, a study of maltreated children who were resilient found that these children possessed the capacity to attract other people who were capable of facilitating good experiences. This helped protect them from depression resulting from their negative experiences (Mrazek et al, 1987). Possessing a charismatic personality facilitates a person's capacity to elicit and sustain helpful social relationships.

Research on resilient children whose parents suffered from an psychiatric illness found that these children had positive social skills, were friendly, well-liked by peers and adults, were more socially responsive, sensitive, altruistic and cooperative (Robin, Aronoff, Barclay & Zucker, 1981). Such constitutional temperaments may help one elicit positive responses from the environment (Werner, 1990). Therefore, having a good temperament may serve as another protective mechanism.

### **Autonomy**

In Redel's (1969) study women were resilient if they showed the ability to recover quickly from setbacks in the absence of external support. In a sample of economically disadvantaged male

and female youth, the differences between the low and high resilient academic achievers were that the high achievers were able to take initiatives and to function autonomously (Milgram et al, 1993). Autonomy facilitates the capacity for one to function as their own source of emotional support, to make decisions independently and to care for oneself (Sternberg, 1985). Therefore, autonomy can function as a protective mechanism if it permits one to feel her/his own worth as a person. This creates a sense of confidence and conviction and allows individuals to cope successfully with life challenges (Rutter, 1987).

### **Sense of Purpose**

Many individuals classified as resilient believe they have a purpose in life. They often have the belief that they will have a bright future if they are goal directed and optimistic (Benard, 1995). Faith that life has a meaning and that things will work out can provide resilient individuals with a sense of purpose, being rooted and connected. This can sustain them in the belief that even in the presence of challenges things would work out in the end (Antonousky, 1979). For example, civil rights workers who encountered hatred and violence, still fought for the civil rights movement. These workers were resilient. They alluded to having a sense of worth and of purpose to what they were doing and this supported them in times of uncertainty and danger (Beardslee, 1989). Resilient individuals have goals, ambitions and aspirations. They have a sense of purpose which they embrace and strive towards even amidst adversity.

### **Information Seeking**

A longitudinal study of the psychosocial outcome of survivors of childhood cancer found that those women who were resilient believed having knowledge and information played a crucial role in their ability to adjust. Having knowledge allowed them to have a realistic appraisal of the

likelihood of their cancer reoccurring (Beardslee, 1989). When faced with a challenge, understanding the nature of it, how it can affect you and how to resolve it, contributes to one's ability to successfully deal with the challenge. Therefore, information seeking can also function as a resilient protective factor.

In addition, the actions an individual takes based on the information they gain is another protective factor. A series of research studies were conducted with offspring of parents who suffered from mental illness. Those offspring with the least psychopathology had sought knowledge about their mothers' illness. As a result they took the action to reach out to adults, caregivers and teachers in periods of stress (Grunebaum & Cohler, 1982; Grunebaum, Cohler, Kauffman & Gallant, 1978). Having information about the challenge can lead to an active attempt to transform or change the situation which contributes to it. For example, Garnezy (1983) and Anthony (1982) found that resilient children of schizophrenic mothers had a good understanding of their parents' illness. As a result, they consciously distanced themselves from their parents and therefore the fear and chaos surrounding them .

Therefore, information seeking can also function as a resilient protective factor. Resilient individuals use the information they have gathered and then take actions, apply it to the challenge and attempt to affect some change.

### **Formation and Utilization of Relationships**

The ability to establish and use relationships has been found in resilient individuals. Resilient people have the capacity to formalize and use relationships. Moreover, they are able to create relationships that can lead to help and support in times of stress and challenges (Mrazek et al, 1987). Surrounding oneself by caring people can help buffer the possible negative outcomes

that arise when people are confronted with obstacles. Formation and utilization of relationships can therefore serve as a resilient protective factor.

### **Risk Taking**

One study of children who were maltreated found that those who were resilient made decisions that involved taking risks meaning, taking responsibility for themselves. For example, by making crucial decisions they had the ability to make things happen. By taking more risks the resilient individuals felt they had the capacity to make changes within their environment (Mrazek et al, 1987). Another longitudinal research studied the consequences of prenatal and perinatal stress on children. The children who grew into resilient women had parents who were not overprotective. Furthermore, the resilient women took risks, functioned autonomously with little emotional support (Werner, 1990). Therefore, risk-taking entails the ability to take action in the absence of security. The decision to take risks can result in establishing better opportunities and lives for oneself. Creating better lives, individuals can leave behind the adversities they have been exposed to as children. Thus risk taking may be another behavioral protective factor which contributes to resiliency.

### **Cognitive Restructuring\Reappraisal**

The ability to cognitively restructure or reappraise a negative event and attempting to find what is positive about it is a protective factor that resilient people utilize. Survivors of child abuse who went on to lead lives free of the long term consequences of the abuse they experienced were labelled as resilient (Spaccarelli & Kim, 1995; Himelein & al, 1996). Interestingly, women who were resilient believed they were stronger and more self-sufficient which was a function of their experiences. Moreover, they perceived themselves as stronger and attributed this characteristic as

a direct result of the abuse they experienced. In addition, they felt they had a high self-esteem because they were able to overcome the negative experience. In summary, they believed they benefited from their experiences that they were successful because of their capacity to cope with the abuse (McMillian, Zuravin & Rideout, 1995). This is consistent with the belief that resilient individuals allude to stress as a potential enhancer of competence (Werner, 1990).

Yet another example of cognitive reappraisal can be seen in a study of educated women who encountered many challenges in their lives. They dealt with them by: (a) accepting that stressful events were a part of life; (b) being able to define things in a constructive way so they would not become discouraged; and (c) accepting the fact that difficulties would continue to arise unexpectedly (Levine, Newman, Cleminshaw & Zarski, 1995). The ability to perceive experiences constructively, changing the perception of the stressor is referred to as cognitive reappraisal. This can be an adaptive way to cope with adverse life stressors (Lazarus et al, 1984).

### **Altruism**

One study which compared stress affected children with those who were stress resistant found that the latter had a higher level of empathy (Parker, Cowen, Work & Wyman, 1990). Other studies such as the Berkeley Ego-Resilience Study (Block & Block, 1980) and the Memminger Coping Project (Murphy & Moriarty, 1976 ) conducted with children who experienced numerous and severe stressors found that the resilient children were characteristically empathetic.

Altruism or empathy may serve as a mediator to obstacles which may serve as a resilient protective factor. Being more concerned about the needs of others rather than one's own can shift

one's focus from their problems onto others. This may be protective because the individual has a respite from the obstacles they are facing. The individual may even find refuge in their acts of caring. Helping others may provide one with a sense of self-direction in life so they have a purpose to strive in the presence of adversity. Furthermore, being altruistic may lead to praise and admiration for kind acts performed. Such acknowledgement may increase a person's self-concept which in turn may provide them with the belief they can overcome any obstacle. Perhaps, it may very well be that altruism serves as a protective resilient characteristic.

### **Optimism**

Some self-enhancing beliefs about reality can be associated with psychological functioning. For example, a positive illusion and exaggerated beliefs of personal control over one's life and unrealistic optimism about the future can contribute to adaptive functioning. Sometimes optimism even if unrealistic can act as a protective factor because it permits people to look ahead and not dwell on past experiences (Himelein et al, 1996). Resilient individuals have a positive illusion of the future; they can distance themselves from negative circumstances by thinking optimistically. Such thinking can work to counteract feelings of hopelessness. Possibly, optimism may be considered a resilient characteristic which can protect individuals from experiencing pessimism that can be psychologically harmful.

### **Dreamers**

Mrazek et al (1987) found that children who were abused in childhood and were resilient had the capacity to project themselves into the future and dream of what their life would be like when the difficult times passed. The resilient children had the capacity to distance themselves from the negative reality of their present situation. Moreover, they had the capacity to project

and see themselves at a different time and place where their current adversities no longer existed. Mrazek et al (1987) believe this ability to project oneself into the future permits an individual to work through their thoughts and use alternative strategies to better control their environment. Consequently, the ability to envision or see oneself in the future helps an individual deal with the adversity they are presently experiencing because it is seen as something temporary and transient.

### **Motivation**

Successful women who achieved despite adversity have been found to be highly motivated. For example, Virginia Wolfe who was traumatized as a child and suffered from psychiatric illness wrote, reviewed essays, stories while maintaining a diary and writing a novel (VanTassel-Baska, 1995). Despite psychiatric illness and adversity Wolfe and Charlotte Bronte demonstrated sustained effort in their work during their lives (Ochse, 1990). In another study observing 1,003 minority students from low-income homes, those classified as resilient were characteristically described as expending effort in their academic pursuits. Motivation can serve as a protective factor when people who experience obstacles consciously act in a manner to overcome them. They take an active approach to solving their own problems.

### **Flexibility**

The long-term effects on children whom were exposed to prenatal, perinatal stress, physical, cognitive and psychosocial abuse found that the resilient children who grew to be competent functioning adults possessed the capacity to be flexible (Werner, 1990). The ability to be flexible to successfully adapt involves the capacity to interact in the world by being resourceful and adapting to changing circumstances (Scheider, 1992). Flexibility, knowing what skill to use in what situation, is yet another protective factor found in resilient individuals.

### **Problem Solving**

Numerous studies have found that resilient individuals possess good problem solving skills (Haggerty et al, 1996; Block et al, 1980; Murphy et al, 1976; Moskowitz, 1983; Benard, 1993). Furthermore, resilient individuals are able to aspire and dream. Equally important is their capacity to translate ideas into action. This is accomplished by systematically planning the steps one must take in order to achieve their goals. Some research exists which demonstrates that when people use problem-solving, it permits them to appraise their environment, change their behaviour in an attempt to alter the environment or the actions of others in the environment (Sowa, McIntire, May & Bland, 1994). Problem-solving has been identified as a protective factor that resilient individuals use to overcome adversity.

### **Refuge in Talents and Hobbies**

VanTassel-Baska (1995) studied the negative life events of famous literary writers. A reoccurring theme was that they had the capacity to find peace, relief and distraction when writing. Other studies have found that resilient people have the ability to find refuge from stress through creative writing, hobbies, extracurricular activities or their absorption in school (Kauffman et al, 1979; Werner et al, 1982). Perhaps in times of profound challenges the capacity to find refuge in something permits an individual to harvest her/his psychological energy. Thus, when faced with challenges, they can attempt to deal with them.

### **Internal Locus of Control**

Luthar and Zinger (1991) believed that resilient individuals have an internal locus of control, the belief that forces that shape one's life are within their control. Resilient individuals believe that they can shape their lives and having this belief of control serves as a protective

mechanism, allowing them to deal with life's challenges. Having this belief they can then master their environment (Luthar et al, 1991). As well, resilient individuals believe they can control the course of events. They tend to believe that things will be more positive than negative in the future (Himelein et al, 1996). Having an internal locus of control can serve as a protective factor because these people believe they have the ability to overcome the adversity they are experiencing.

### **Persistence**

The ability to work and persist in the presence of adversity are common among resilient individuals. Anthony et al (1987) found that the greater the stress or challenge became the greater did the resilient child's effort to deal with the challenge. The resilient child persisted in expending effort. Good coping and a tolerance for frustration have been noted in resilient individuals ( Murphy et al, 1976). Another study conducted by Peng et al (1992) found that at-risk youth who were resilient succeeding in school had an intrinsic motivation to become successful. This helped them persist in their academic pursuits. As Demos (1989) concluded resiliency means the ability to bounce back, take an active stance, be flexible and persistent.

The above listed personality and behavioral resilient protective characteristics are those that repeatedly emerge as being present in resilient individuals. In the following section literature is presented which documents that many of the same characteristics that are called resilient protective factors are present in gifted individuals.

## **Characteristics in Gifted Individuals Similar to Protective Factors in Resilient Individuals**

The overall picture that has emerged is that resilient offspring of parents with a psychiatric illness, people raised in poverty and individuals who have overcome trauma utilize specific behaviour and personality resilient protective factors. Gifted individuals appear to possess some of the same characteristics that resilient individuals possess. In reviewing the literature, one is struck by the fact that the protective factors documented in resilient individuals are similar to those personality characteristics documented in gifted individuals. Numerous studies link the occurrence of a higher IQ to be present in resilient individuals (Kandel, Mednick, Kirkegaard-Sorensen, Hutchings, Knop, Rosenberg & Schulsinger, 1988). Stemming from a review of the literature on gifted individuals, the following personality and behaviour characteristics repeatedly emerge in gifted individuals.

### **Cognitive Reappraisal/Restructuring**

Sowa et al (1994) found that gifted children as young as nine made use of cognitive appraisal to cope with stressors. They studied seven gifted children and provided the following antidotes to support the statement that gifted children use cognitive reappraisal. One gifted child stated that when he was arguing he paused and thought that perhaps doing that was not going to get him what he wanted. Therefore, he realized he needed to adapt a different approach to get his point across. Yet another gifted individual engaged in cognitive restructuring by reevaluating the importance of a situation. For example, one gifted individual explained how initially he would argue and then came to the conclusion that whatever he was arguing about was not important.

Another way the gifted children in this sample used to deal with stress was to withdraw

themselves, consciously taking the time to cognitively reappraise what was occurring. To support these conclusions another study conducted by Gardner (1997) of intelligent individuals found that they characteristically did not give up when challenged. If the gifted individuals faced setbacks they had the ability to reframe negative experiences into positive opportunities.

In addition the gifted men and women used "framing" meaning the ability to construct their experiences in a more positive manner. This strategy permitted them to move forward with renewed energy because they were able to see the positive side of setbacks and not dwell on the negative aspects of their experiences (Gardner, 1997). A content analysis of interviews conducted with gifted women concluded one coping technique that gifted women used was to reframe a situation (Kitano 1994). Meaning, these women were able to reframe a negative situation into a positive one. Gifted individuals at a young age use cognitive appraisal. Perhaps, this is the case because gifted individuals also at a younger age develop the ability to formalize operations (Renzulli & Reis, 1989). In another study 31 Ph.D. students identified as gifted rated high on cognitive versatility (Lewis, Kitano & Lynch, 1992). Therefore, gifted individuals like resilient individuals seem to possess the ability to cognitively restructure or reappraise situations. This can serve as a resilient protective factor because it allows one to reprocess and reappraise a negative event in a more positive manner.

### **Autonomy**

As young as preschool, gifted children surpass their age mates in autonomy (Malone, 1974). Therefore, a majority of gifted programs use self-directed learning (Betts, 1985; Feldhusen & Kolloff, 1986; Renzulli et al, 1989). Gifted students are autonomous, interested and motivated to pursue topics of their own choice (Clark, 1992). Self-directed learning is successful

with gifted individuals because they function autonomously, often believing that learning is their responsibility. Cordeiro (1990) and Corderio & Carspecken (1993) studied 20 low-income academically successful Hispanic boys. These high school students assumed responsibility for their own academic success without the full understanding or support from their families. Lehman & Erdwins (1981) found that individuals classified as gifted were more comfortable with themselves when compared to their non-gifted counterparts. Moreover, the gifted saw themselves as possessing greater personal freedom and more positive feelings about themselves.

### **Problem Solving**

Grossberg and Cornell (1988) found a correlation between adjustment and intelligence in problem focused coping. They found that individuals with a high intelligence had the ability to evaluate their environment and to change their behaviour in an effort to alter the environment or the actions of others in the environment. Gifted individuals' performance on problem-solving tasks showed that they have a tendency to be more strategic. Based on verbal data, it was found that gifted students were more conscious over the control and process they went through when solving a problem (Shore & Carey, 1984). Moreover, they generate a greater number and amount of solutions more often (Shore & Dover, 1987). In addition, gifted individuals can describe verbally the strategies they use when problem-solving better than non-gifted individuals (Shore et al, 1987).

This research supports that gifted individuals not only think critically but are also aware of the strategies they use when problem-solving. Like resilient individuals, gifted people have an ability to appraise their situation and generate ideas, actions or solutions to solve problems.

Gardner (1997) studied highly intelligent individuals and found that they invented a

number of novel and creative ideas to resolve problems. Furthermore, these ideas were then translated into skills and actions in an attempt to overcome or deal with the challenges. Kitano and Perkins (1996) looked at sixteen outstanding academic students in graduate or post-graduate studies. They found that these students when confronted with a problem not only understood, but took action to resolve the problem. Similarly, Noble (1987) found that gifted women were good problem-solvers.

Problem-focused behaviour can contribute to resiliency. Cross et al (1991) provide an example; one gifted child they studied felt he would be teased or socially stigmatized if he revealed how easy he thought a test he wrote in class was. Therefore, to decrease his social vulnerability he did not volunteer this information to his classmates. This example typifies what problem-focused behaviour is. This gifted child was reflective, he knew that telling others he found the test easy might result in the problem of being ridiculed. Therefore, he took the action of not volunteering this information.

By taking action to neutralize the problem he protected himself from being socially ostracized. In this case, problem-solving behaviour was a resilient protective factor that ameliorated this gifted individual's exposure to adversity. It may perhaps be inferred that problem-solving behaviour is another resilient protective factor that gifted and resilient individuals possess.

### **Information Seeking**

Lovecky (1994) studied gifted children and their families. A characteristic that repeatedly emerged was that of intellectual curiosity. The gifted children were fascinated with ideas and words. Caruso, Mayer, Zingler and Dreyden (1989) administered an intellect related, personality

traits test to 150 people. Forty-six were identified as gifted. The gifted individuals scored higher on the trait of absorption. Moreover, the gifted exerted a substantial amount of energy in an effort to resolve a problem.

Another characteristic observed in gifted individuals is their inability to remain still unless they are absorbed and interested in something. Such behaviour may lend support to the notion that gifted people have a need to learn and be exposed to new information.

Parents of the world's youngest university graduate, a ten year old with a B.A., said their son had the capacity to learn from many sources, had "a rage to learn" and a desire to understand everything (Leal et al, 1995). Gardner (1997) who studied the characteristic of highly intelligent people concluded they were persistent, self propelled people who marched to their own drums.

Lewis et al (1992) studied the affective characteristics of gifted adults. The sample included 33 Ph.D. students eleven of whom took part in a focus group results showed that intellectual individuals possessed a desire and persistence in attaining knowledge. Sowa et al (1994) found that the gifted students in their sample created challenges to stimulate themselves. A parent described their gifted child at six and half as wanting to know all the whys about things (Silverman, 1994). This example highlights how gifted individuals have a desire to learn as much as possible. Finally Kitano et al (1996) studied outstanding academic graduate students. Fifteen out of sixteen identified that a personality behaviour which contributed to their success was their love of learning. For the gifted having a desire to learn or to seek information may motivate them to overcome academic challenges and other obstacles that may interfere with their ability to learn. Therefore perhaps possessing this characteristic to seek information for both resilient and gifted individuals, serves as a motivator to overcome and be resilient to obstacles.

### **Formation & Utilization of Relationships**

A study conducted by Cordeiro (1990) found that gifted Latino boys indicated that the formation of friendships in middle school was a crucial factor which contributed to their academic success. The presence of a network of friends means in times of adversity you can utilize these relationships to deal with the challenge. This notion is further supported by a study conducted by Kline and Short (1991) who found that a number of high-risk gifted youth had support from relationships with classmates and neighbours. They used the support from these relationships with others in times of challenge or uncertainty. Moreover, Basu (in press) studied fifteen professional high achieving women. These women had the ability to form good relationships with extended and immediate family members. This helped the women in this study to accomplish their goals. Family support to care for children and household permitted these women to persevere and achieve success. Therefore, gifted and resilient individuals have the ability to form relationships that they can use as support systems in times of challenge which allow them to be resilient to adversity or stress.

### **Persistence**

From an early age gifted individuals show a great deal of persistence in the presence of adversity (Blaubergs, 1978; Hollinger, 1983). Gardner (1994) in his studies of highly intelligent people concluded many of these individuals were highly motivated working steadfast for extended periods of time they would stay up long hours, sleep little, work run or even talk longer. As far back as 1921 Terman's & Oden (1947) study revealed that the most successful gifted individuals had the greatest persistence ( Oden, 1968; Coleman, 1980).

Renzulli (1977) developed his theory that gifted people will demonstrate specific

behaviours, one being task commitment, the tendency to pursue an endeavour long enough to achieve excellence. The ability to stay motivated, determined and persistent in order to succeed was also observed in gifted graduate students (Kitano et al, 1996; Lewis et al, 1992).

Intelligence is not enough to become successful. Bloom (1985) interviewed one-hundred and twenty men and women who reached world class levels of accomplishments. The majority stated that even if they were gifted, their high level of achievement was the result of long hours of practice and work.

Similarly Reis (1995a) study found that gifted individuals were persistent in their drive for success. They continuously worked for a number of years in order to achieve their goals. Gifted individuals similar to resilient individuals have an ability to be persistent and to delay gratification. Such a personality characteristic may allow an individual to cope with adversity and challenge, tolerate frustration and setbacks. Persistence is a resilient protective factor found to be used by gifted and resilient individuals.

### **Flexibility**

Lovecky (1994) studied gifted children based on information from personality tests, observations made by parents and therapists. It was found that gifted individuals see many possible answers to a question. Moreover, they have a capacity to perceive varied aspects related to a specific question. Yet another study examined 11 Ph.D. students that were gifted who took part in a focus group the results indicated that these individuals were cognitively versatile (Lewis et al, 1992) meaning they have flexible thought process namely sensual, intellectual and emotional.

Clark (1992) indicated that one of the characteristics of gifted individuals is their ability to work easily with abstract thinking and ideas. The ability to think abstractly requires flexibility

and thinking in novel ways. To be abstract and divergent in thinking entails flexible thought processes. This means the capacity to solve problems in novel and varied ways.

The capacity to think of many ways to resolve a problem or deal with a challenge is another characteristic seen in gifted and resilient individuals. Having an ability to be flexible permit's an individual to use different strategies to overcome a challenge. It increases the likelihood that one will be resilient because flexible thought processing permits a person to generate different solutions to a problem. Therefore, if one solution does not work another can be used, thus increasing the likelihood that an individual will eventually overcome the obstacle.

### **Motivation**

Case studies of gifted adults have found that the gifted have high aspirations and are characterized by a devotion to their work. Moreover, trait profiles of geniuses' concluded they have strong motivation which allows them to persist and excel within their chosen fields (Ochse, 1990). A study of gifted PhD students found that they possessed more internal motivation than non-gifted individuals (Kitano, 1994). Sowa et al (1994) studied seven children who were attending a gifted program. The focus of the research was on the emotional and social needs of these gifted children. The authors concluded that the gifted children needed challenges to stimulate themselves. In addition, they were highly motivated by a number of factors including the stimulation of the challenge.

Finally, Kitano (1994) studied 16 high achieving women. They found that one of the coping strategies the women used to deal with obstacles was determination and hard work. These characteristics imply that the women in this study were highly motivated to overcome the obstacles they faced.

Both gifted and resilient individuals seem to possess high levels of motivation. If a person encounters a challenge and they are motivated to take action to overcome it, the greater is the likelihood they will be successful in doing so. Therefore, by being motivated, having the drive to take action to resolve a problem can serve as a protective factor. Motivation allows an individual to strive to ameliorate or alter the circumstances that are contributing to the obstacles. Striving to change circumstances can result in the reduction of the stressor thus contributing to resiliency.

### **Optimism**

Wallace and Walberg (1987) analyzed the psychological traits of 42 eminent essayists of history from a sample obtained from work by Cattell (1903). The results showed that 98% of the eminent essayist were optimists. Moreover, VanTassel-Baska (1995) concluded that high achieving women who faced obstacles had a philosophy which guided their lives. Namely, that they had the capacity to rise above the conditions they were living in and to create something worthwhile. These gifted women were optimistic; they had the power to change and alter the course of their lives.

Both gifted and resilient individuals possess the ability to be optimistic even in the face of uncertainty. The belief that one can overcome an obstacle provides a sense of hope which can mediate the impact of one's current struggle. Being optimistic that you can overcome something is thus a resilient protective characteristic. It buffers the impact of the stressors that one is currently experiencing.

### **Social Competence**

Leal & al (1995) stated that gifted children have an ability to fit in any surrounding socially or otherwise with little effort. Resilient black youth who were successful in high school were

academically and socially competent (Taylor, 1991). Moreover, Greary (1988) found that gifted black youth took part and placed a great deal of effort into extra curricular activities. Having a good and strong peer relationships are indicators of competence. Such characteristics help black youths be resilient according to Ford (1994). Black youths deal more effectively with obstacles when they have someone with whom they can confide and share their routine struggles Garmezny (1991).

The ability to form relationships and to elicit support and empathy helps gifted individuals deal with challenges. Being resilient also entails having an ability to be socially competent. Like gifted people, resilient individuals have the temperament and ability to form friendships with a variety of people.

Both gifted and resilient individuals can call upon these relationships that have been established in times of stress. The relationships formed in turn provide support which can serve to increase resiliency. Therefore, being socially competent is a protective factor which contributes to resiliency.

### **Altruism**

Dabrowski (1979\1994) described gifted individuals as being "overexcitable" in five areas psychomotor, sensual, imaginal, intellectual and emotions. Moreover, he believed that due to the gifted individuals heightened sensitivity and integrity they have the capacity to bring humans to a higher set of values. Gifted individuals stand out from their peers because they have a high sense of righteousness and justice (Clark, 1992; Seogore, 1975). Moreover, gifted individuals have a great concern for others and are empathetic (Piechowski, 1979).

Empathy consists of an awareness of others' feelings and something that affects people at a

deep level. Moreover, it motivates one to take action to help people in need (Mendaglio, 1995). Silverman (1994) found that parents of gifted children referred to their children in the following manner: concerned for others feelings; need to befriend people who are unpopular; need to defend children that are teased; compassionate having an awareness of others' feelings and needs (Silverman, 1994).

Having a sense of justice, empathy and concern for others' well-being are all elements of altruism. Being altruistic means getting pleasure from giving to others. This is yet another characteristic which is seen in gifted and resilient individuals. Altruism can serve as a protective factor which contributes to resiliency. When confronted with a challenge or obstacle giving to others may help a person to distance themselves from adversity. In addition, a person can still derive pleasure from others, from giving even in the midst of adversity. Also, giving to others can serve as a way to vicariously nurture in others what you yourself may desire.

### **Risk Takers**

Reis (1995a) found that women who achieved eminence in their fields after age 50 took initiative risks and actions that others may not have been willing to take. Moreover, gifted women beginning at a young age have a high achievement orientation. They are more often interested in non-traditional professions they resist sex-role stereotyping and are more likely to reject outside influences (Noble, 1987). Despite the risk of social ostracism gifted women continued to pursue their goals; it can perhaps be inferred they are risk-takers.

In describing personality characteristics among the gifted, Clark (1992) stated they may be overly adventurous. Risk-taking can serve as a protective factor because being able to make crucial decisions albeit risky ones can alter the consequences of remaining in a negative

environment. Thus the ability to take risk is yet another resilient protective characteristic observed in gifted and resilient individuals.

### **Internal Locus of Control**

Lewis et al (1992) examined the affective qualities in gifted adults. Thirty-one Ph.D. students reported themselves as different from the non-gifted individuals in internal motivation. They saw themselves as internally motivated with no need for recognition by others. In addition Chan (1996) found that gifted individuals perceive themselves as more competent and more intrinsically motivated towards school than their non-gifted peers. Moreover, the gifted students had greater confidence in their learning abilities. Therefore, they believe success or failure in school is based on their effort. A high internal locus of control has been found in gifted individuals (Delisle & Renzulli, 1982; McClelland, Yewchuk & Mulcahy, 1991). Having an internal locus of control means believing they have control over the outcome of their lives. If a person is facing challenges, believing they have the power to overcome the challenge can be empowering. Having an internal locus of control may help one be more optimistic, persistent and motivated to overcome the challenge. Both gifted and resilient individuals seem to possess an internal locus of control which is a resilient protective factor.

### **Self Understanding**

Gardner (1997), in studying gifted individuals, found that they characteristically were reflective, trying to understand what was transpiring in their lives. This self-reflection was part of their daily ritual. Self-understanding requires that a person think and reflect about themselves and events but also to then take action congruent with the reflection (Beardslee, 1989). Being reflective allows people to identify what is functioning or not functioning well in their lives. The

individual can then focus attention and work to improve what is not working well.

The ability to identify stressors can help an individual adapt and thus be resilient.

Moreover, other studies have found that gifted people have a good understanding regarding their personalities. Lewis et al (1992) indicated that gifted adults have a good self-perception.

Furthermore, they are aware of their cognitive motivation, internal motivation and their desire to be recognized by others. Gifted individuals also believed they were different from non-gifted people because they were more cognitively competent which may serve as a source of motivation.

As Silverman (1993b) stated gifted individuals are sensitive which allows them to be aware of their own feelings. Again, having an understanding of one's emotions permits a person to identify how, what and why they are feeling certain things. The ability to identify emotions can help an individual take actions that change the way one feels and therefore become resilient adapting or overcoming a challenge.

In another study 69 gifted children were interviewed. Of these some were underachieving; however, they were aware of the reasons they were failing academically (Freeman, 1994). Using self-understanding, which is a resilient protective factor the challenges faced are understood and the actions needed to overcome them can be taken.

In Freeman's study the gifted children who were underachieving were aware that they were doing poorly due to lack of effort. The gifted children could therefore focus their efforts to work harder. Taking action because they understand what had caused the problem, may allow them to modify or eliminate the challenge, thus being resilient to it.

Another area of research which adds support is evidence that gifted individuals have high levels of metacognition, an awareness of thinking (Flavell, 1977). Metacognition is an aspect of

self-understanding which includes awareness, insight and regulation of cognition (Lovecky, 1994). Some research has found that intelligent individuals possess more of these characteristics (Cheng, 1993; Shore et al, 1987; Borkowski, 1985; Carr & Borkowski, 1987). Metacognition entails in part, insight into the way one thinks.

This skill can serve as a protective resilient characteristic. It permits one to plan and think ahead. Therefore, a person can potentially avoid getting into situations that cause a discrepancy with what one believes and adheres to. As a result, it may be inferred a person who has metacognitive abilities knows what they can deal with and thus avoids getting into situations that may cause challenges they are unable to deal with. In this case having an understanding of the way one thinks serves as a resilient protective factor.

### **Studies of Comparison of Characteristics of Giftedness and Resiliency**

Up to this point, the literature on the characteristics that gifted and resilient individuals share in common has been critiqued. This is similar to what other studies have attempted to do (Bland, Sowa & Callahan, 1994; Kline et al, 1991; Hebert, 1995; Ford, 1994). Following the review of the literature in gifted and resilient individuals, six articles were found which specifically make some attempt to address resiliency in gifted individuals. Bland et al (1994) summarized literature regarding the personality characteristics of resilient individuals, and also summarized common characteristics found in gifted people. However, no attempt was made to empirically establish if the characteristics observed in resilient individuals were observed also in gifted people. Moreover, how gifted women adjust to adversity was not examined.

A second study conducted by Kline et al (1991) investigated changes in the emotional resiliency of gifted adolescent boys. The results indicated that discouragement and hopelessness peaked in junior high school and decreased in high school. The study only alluded to one aspect that gifted and resilient individuals share in common, an internal locus of control. However, no attempt was made to study if gifted adolescent boys use similar protective factors to overcome adversity as do resilient youngsters.

In a third study the same authors Kline et al (1991) looked at the changes in the emotional resiliency of gifted adolescent girls. Results revealed that resiliency decreases (*i.e.* less self-regard, lower self-confidence). As girls progress through the school system, an increase in perfectionism, hopelessness and discouragement was observed. However, no attempt was made to examine how gifted girls overcome these obstacles. Rather the study only documented the presence of obstacles and adversity in the lives of gifted adolescent girls.

The fourth study conducted by Hebert (1995) examined three high achieving Latino boys living in an urban environment who were at-risk for not reaching their full potential. The author alluded to the presence of one resilient characteristic (utilizing relationships) that the three gifted boys used. However, the author did not examine the presence or absence of other personality and behavioral protective factors in gifted boys that resilient individuals use to overcome obstacles.

The fifth study by Ford (1994) was a synthesis of the literature of the characteristics black youths share in common with resilient youths. No attempt was made to study the presence of these characteristics in gifted individuals. Moreover, the process gifted individuals use to overcome adversity was not examined.

The sixth study by Kitano and Perkins (1996) is the only study that has examined the

personality and behaviour characteristics academically high achieving women use to cope with challenges. It was found they share many of the same characteristics that resilient individuals do. However, this study did not ascertain the problems encountered specific to women who were gifted and the behaviour and personality protective factors they use to deal with obstacles which arise because they are gifted and are women.

**Summary**

The following table provides a summary of the personality and behavioral resilient protective factors that "at risk" populations use. In addition the personality and behavioral factors among gifted individuals is also summarized.

Table 2

**Comparison of Concurrent Characteristics in Resilient and Gifted Individuals**

<b>Behavioral &amp; Personality Protective Factors Used by "At Risk" Resilient Individuals</b>	<b>Behavioral &amp; Personality Factors of Gifted Individuals</b>
● Self-Understanding	● *
● Social Competence	● *
● Autonomy	● *
● Sense of Purpose	
● Information Seeking	● *
● Formation/Utilization of Relationships	● *
● Risk-Taking	● *
● Cognitive Restructuring\Reappraisal	● *
● Altruism	● *
● Optimism	● *

● Dreamers	
● Motivation	● *
● Flexibility	● *
● Problem-Solving	● *
● Refugee in Talents & Hobbies	
● Internal Locus of Control	● *
● Persistence	● *

Gifted individuals possess many of the similar personality and behavioral characteristics that "at risk" populations have used to be resilient. The question that arises is, do gifted individuals use the personality and behavioral characteristics to be resilient, to overcome challenges and obstacles?

There have been many studies that have been conducted with "at risk" populations and the resilient protective factors they have used to overcome adversity. The protective factors that have emerged are similar to characteristics that gifted individuals possess. Although much research has been written about people who overcome challenges, few studies have examined how gifted women overcome obstacles and deal with challenges. A large amount of literature attests to the unique challenges gifted individuals experience. In addition, there is a vast amount of evidence that documents the challenges high achieving women encounter. Therefore, being gifted and female means experiencing challenges associated with being both of these things. Research is needed to establish how some high achieving women have been resilient in the light of challenges they face because they are gifted and women. The research methodology to answer these research questions is explained in Chapter III.

### CHAPTER THREE: METHODOLOGY

The study makes use of a qualitative research methods. The present study was guided by two research questions:

- 1) What behavioral and psychological internal resilient protective factors do gifted women use to overcome adversity?
- 2) Do they use the same internal resilient protective factors that other populations use?

In an effort to provide a forum for the voices of women in the present research, and to avoid constraining the women's responses to a predetermined criteria or structure, a qualitative methodology is adopted. The perspective as well as the research design is outlined in this chapter.

We begin with a description of the methodology, followed by two presentations of the data collection instruments used in the study. Next, the method will be addressed and the data analyze and ethical issues will be outlined.

#### **Methodology Issues**

Bogdon and Biklen (1982) state that qualitative research is interested in how people make sense of the world; therefore, researchers focus on the participants' perspective. Consistent with this notion, the study investigates the psychological and behavioral processes gifted women believe they used to overcome challenges. Consequently, a qualitative research design was chosen because it would provide rich data regarding each woman's experience.

Reis (1987) states:

Qualitative research relating to the attributes of women who have achieved is needed. If we can identify the personal and societal factors that enabled women to become successful, we can share this information with parents and educators and provide the advice, guidance, and insights needed for young females to successfully embark upon their road to self-fulfilment (p.88).

Content analysis, a qualitative data analysis method, is used for this research. A content analysis serves as more than a descriptive account of historical events of the population under investigation. This process reduces the content of narrative documents into quantitative terms that permit summation or comparison as a basis for conclusion (Weber, 1990).

Content analysis is the methodology chosen because it allows lengthy texts to be analyzed accurately, and because it facilitates information loss by reducing the amount of information analyzed and reported by the investigator (Weber, 1990). Furthermore, such a methodology yields interesting and theoretically useful generalizations. Content analysis reduces the verbatim transcripts in order to identify the occurrence or non-occurrence of specific variables. Therefore, content analysis serves as a method to quantify the occurrence or non-occurrence of variables which the literature has shown to be imperative in overcoming challenges. This facilitates the emergence of the internal resilient protective factors in the sample of gifted women.

The nature of the present study is explorative. The aim of the study is not to demonstrate that gifted women use 18 specific resilient characteristics to overcome adversity. Rather, the aim is to ascertain if they do use resilient protective factors. As Krippendorff (1980) summarizes,

content analysis is a technique that does not seek to support an experimenter's hypothesis, but to conduct an investigation testing views outside the experimenter's own opinions from the literature. Guidelines ascertain if something holds true or not. This methodology core is "I wonder what in reality is in the text" not "I'm certain such a thing exists".

The advantages to employing this methodology are the following: (a) it is unobtrusive, looking at the manifest content of the text; (b) data will be analyzed minutely; (c) it is non reactive and cost effective; (d) the rules that govern the methodology are explicit; and (e) it is a safe methodology. If something has been omitted or an error in transcription and coding has occurred, it is feasible and possible to return to the original data source and rectify any mistakes (Krippendorff, 1980)

### **Modes of Data Collection**

Three close-ended questionnaires and one interview are used in the present study.

#### **Demographic Questionnaire**

A demographic questionnaire was developed consisting of 14 questions (see Appendix A) designed to obtain background and valuable demographic information about the participants who took part in the study.

Standardized instructions were provided to all participants prior to the administration of the questionnaire. They were asked to complete the questionnaire and were told that if clarification were needed they could direct their inquiries to the researcher. The psychometric properties of the questionnaire were assessed by three graduate school professors who are experts

in the fields of gifted education, educational counselling and methodology. They reviewed content and format of the instrument and ascertained that it adequately asked questions that would allow the researcher to obtain demographic data. The instrument, therefore, is judged to have content validity.

The present study is directed at the behavioral and psychological protective factors gifted women use to overcome adversity. In order to obtain a complete picture of the challenges the participants in the study may have experienced, participants were asked if they had experienced abuse, gender discrimination or a serious illness. Previous research documents indicate such events can have a long standing effect on an individual (Loring, 1994; Unger & Crawford, 1992; Koss, 1985; Walker, 1984). Therefore, if the participants had experienced one or more of the above experiences, they most likely had to deal with the challenges presented by these experiences. In addition, they may have had to deal with challenges presented to them because they are high achieving gifted women. In gathering demographic information, a more complete picture emerges of what challenges these women experienced and overcome and what resilient protective factors they have utilized.

### **Intellectual and Personality Factor Questionnaire**

Two additional questionnaires were developed and administered to all participants (see Appendix B & C). The two instruments were used to verify the implicit hypothesis that the participants chosen for this study are a plausible reference group to gifted adults. The questionnaires attempted to assess the presence or absence of intellectual and personality characteristics that have been documented as being present in gifted individuals. After an extensive literature review, Silverman (1993c) found that 13 intellectual and 13 personality factors

were observed repeatedly in gifted individuals. These same factors were assessed in the present study.

The two questionnaires asked each participant to rate themselves, using a Likert scale on the degree to which selected intellectual and personality characteristics applied to them. The presupposition made is that if the participants responded positively to the majority of the intellectual and personality characteristics, it lends support to the implicit hypothesis that the participants are a plausible reference group to gifted adults.

The questionnaires were developed based on Silverman's (1993c) research conducted with gifted individuals. The content validity, according to three independent experts in the field of education, was deemed acceptable for these two instruments.

### **Interview Protocol**

An interview protocol was developed (see Appendix D) and administered to all participants. The interview protocol consisted of 14 open-ended questions. The interview was semi-structured. Beyond the stated questions, probes were developed and used when necessary. Through the interview protocol questions, the research attempted to understand if the participants in this study used specific behavioral and personality resilient protective factors to deal with challenges. Furthermore, it aimed to ascertain how the resilient protective factors were used.

The interview protocol was developed in collaboration with experts in the field of gifted education. The interview questions are linked to a scholarly literature review and reflect the conceptual base in the aforesaid literature review. Based on this collaboration and a review of the literature, it was judged that the questions posed in the interview would elicit the information

desired. Therefore, it is believed that this instrument has good content validity.

## Method

### Participants

The number of participants to be used in this study was determined in two ways. First, research studies and research methodology textbooks that described the ideal sample size when using a qualitative methodology were consulted. Second, the time needed to collect data using open-ended interviews and to transcribe them verbatim was considered.

Rennie et al. (1988) stated that after five to ten interviews are conducted information becomes redundant; a process that is referred to as saturation. Moreover, Denzin et al (1994) argue that approximately 12 interviews are generally enough to reach the point of saturation. According to Denzin and Lincoln (1994), qualitative research is concerned with the amount of data collected not the number of participants; "appropriateness refers to selection of information according to theoretical needs of the study and emerging model" (p.230). Denzin et al (1994) concluded that 12 interviews are enough to reach the point of redundancy. It was, therefore, decided to conduct 12 interviews.

In order to determine the strategies gifted women use to overcome challenges and to ascertain if they use the same protective factors that the general population of resilient individuals do to overcome challenges, it would be desirable to obtain data from gifted women. A strategy to do this is to interview gifted women, who are high achievers and who are achieving exceptionally well academically. These women can be questioned about their perceptions of what strategies

they use to deal with challenges, and about their experiences of the challenges that have arisen as a function of being gifted and being women. Exploring how these women have been resilient, overcoming challenges, should provide insights of what successful gifted women do to overcome challenges.

Gifted women in graduate school encounter not only the same challenges other gifted women do, but also obstacles associated with achieving in graduate school, *i.e.* balancing academic roles with work, spouses, parental responsibilities, home care, community or other commitments (Dyk, 1987). It is not surprising, then, that on average, women graduate school students have lower completion rates (Adams, 1993; Zwick, 1991) and take longer to complete graduate school (Bowen & Rudenstine, 1992; Sotello Viernes Tuner & Thompson, 1993) than their male peers, therefore, female graduate students who have received a scholarship have likely experienced obstacles similar to other gifted women and dealt with them to achieve the level of success they have. To gain insights into how these women dealt with these challenges, it is important to explore the specific factors they used.

Thus, a target group, female graduate students who are the recipients of scholarships was selected based on the knowledge that graduate students display many of the similar characteristics that gifted individuals do (Enright et al, 1989). In order to obtain this target sample, the researcher approached the graduate awards office a central Canadian university and requested a list of all graduate students currently enrolled in the Faculty of Arts, Engineering and Social Sciences on a full-time basis and who had received a scholarship while enrolled in graduate school. These faculties were approached with the names given by the awards office. The graduate students' addresses and telephone numbers could not be provided; therefore letters to

each potential participant (see Appendix E) were developed and distributed through the different faculties. If the student was interested in taking part in the study she was asked to contact the researcher. At that point an interview time and location was arranged. Twenty-four letters were sent to the Faculty of Arts, Engineering and Social Sciences and responses were received. All ten were from the Faculty of Social Science and Arts.

Not having a large enough sample, the second step was to contact students the researcher knew personally who would qualify for this study, specifically, that the potential participants were graduate students who were recipients of scholarships. If the students agreed to take part in the study, an interview time and location was arranged. Of the four students approached in this manner, all agreed to take part in the study.

Using these sampling techniques, the sample obtained consisted of 14 participants. Originally, it had been decided to use only 12 participants. However, an extra two participants were eager to participate in the study, and 14 interviews were scheduled. In retrospect, this was a wise decision because of the 14 interviews conducted, the audio recording of two were of poor quality; therefore it was not possible to transcribe the interviews. As a result, two of the 14 interviews could not be used and the sample size reverted back to 12 as was originally desired.

### **Procedure**

Fourteen of the potential participants contacted the researcher and declared their willingness to take part in the study. At that point an interview time and location was scheduled. When a participant arrived for the interview, the rationale of the study was explained and all participants were asked for permission to tape the interview. Each woman was reassured that the tapes would remain in the researcher's possession and they would not be heard by anyone

other than the researcher and a fellow researcher. All participants were asked to read and sign a consent form.

All participants completed three questionnaires see (Appendix A, B and C), followed by an interview (Appendix D). The interview consisted of open-ended questions which ranged from one hour to three hours, with an average interview time of two hours, 19 minutes.

At the end of the interview, each woman was told that she would receive an executive summary of the results. In addition, if the researcher wished to use a verbatim quote from the interview conducted, they would be mailed the excerpts intended to be used in the final report. In addition, there would be a brief second telephone interview. Each woman was informed that the purpose of the second interview was twofold. One purpose was to allow her an opportunity to look at excerpts from the interview which were to be used in the final report. If she were uncomfortable with the excerpt being used, she could decide that she did not wish it to be used. The second purpose of the telephone interview was that it would allow all participants to ask any questions regarding the findings of the study and their participation.

The second interview was conducted four months after the first interview. The second interview ranged from five to ten minutes. The average time of the second interview was seven minutes. Five of the participants could not be contacted for a second interview.

## Data Analysis

Over 26 hours of taped interviews were transcribed, a process that took a great deal of time. Each interview was read four times and each was analyzed for the dominant themes and patterns. As each transcript was read, an attempt was made to capture the woman's response to each question in the interview. The emerging themes were written in response to each question in the margins in an effort to capture the essence of what each woman was saying. This method allowed for the analyses of emerging protective factors women alluded to using to be resilient to challenges that may not have been previously studied in the literature.

As well, a content analysis of eighteen specific protective factors was conducted. The eighteen protective factors were the resilient protective factors that have emerged as being present in other populations of resilient individuals that emerged following a review of the literature (see Appendix F). The eighteen protective factors content analyzed are operationally defined in Appendix G. Each response to the interview question was analyzed to determine if the woman alluded to using the protective factors listed in Appendix F. To categorize if a woman used any of the eighteen protective factors, the response to the interview question had to meet the operational definition of the protective factors defined in Appendix G. If a protective factor appeared it was recorded along with the reasoning it was believed to have met the operational definition stipulated. This procedure to content analyze the data was also followed in the same manner by a fellow researcher independently. This was done in order to assess an inter-rater reliability between the analyses of the transcripts (Fraenkel & Wallen, 1995). The percentage of agreement was calculated by looking at the percentage of times there was agreement by the two

independent researchers that the women used the resilient protective factors. The questionnaires were used to obtain demographic information. Questionnaires listed in Appendix B and Appendix C were compiled and a list of the personality and intellectual characteristics each woman identified and rated was summarized. The questionnaire in Appendix E facilitated the construction of tables for providing demographic information of the participants used in this study.

### **Ethical Issues**

In this study, an informed consent was given to all participants before each interview session (See Appendix H). Each participant was asked to read the document and sign it indicating their agreement to participate. The meaning of the consent form was explained. Furthermore, each participant was informed that this ethical approval had been received from the Faculty of Education ethics committee.

The informed consent stated information about the researcher and the rationale behind the study. Moreover, it was stated that their participation was voluntary and they could withdraw at any point. They were informed open-ended interviews using a qualitative design were going to be used for this study. All participants were informed that permission to tape the interview would be requested. In addition, they were told that answers to questionnaires or verbatim transcripts from the interview may be made part of the final report.

A particular concern was maintaining confidentiality. Therefore, all participants were informed that should any of the answers to the questionnaire or excerpts from the interview be

included in the final report, their names would be kept confidential and any identifying characteristics would be eliminated or replaced with pseudonyms. For example, a number of the women who were enrolled in the same faculty. In order to maintain confidentiality, if the participants in the interview made reference to their discipline in the transcription, this was replaced with a pseudonym discipline. Such a strategy was adopted to replace any identifying characteristics throughout the study.

Moreover, the informed consent stated that the interview and questions would be seen by my advisor and a peer researcher, but confidentiality would be maintained. Specifically, their names and any identifying characteristics would be replaced with pseudonyms. Furthermore, the purpose for discussing these sources of data with the above mentioned individuals was explained, namely, to improve interpretation of the data.

### **Summary**

The final sample consisted of 12 graduate students, recipients of scholarships, who are currently enrolled at a large university in central Canada. A summary of demographics indicated that participants' age range was between 22 and 50. A number of the women had experienced some form of abuse. Moreover, a few had experienced a serious illness. Not surprisingly, the majority of participants in this study had encountered gender discrimination. Participants' work history was clustered around a number of different occupations.

Ethical considerations included a consent form which stipulated the participants' rights. In

addition all participants were assured confidentiality throughout the study. The interview procedure consisted of open-ended questions. Interviews lasted an average of 2.19 hours. Each interview was tape-recorded and transcribed verbatim. A qualitative methodology was employed. A content analysis of emerging themes in response to each interview question was conducted. In addition, a content analysis of 18 specific resilient protective factors was also carried out.

The following chapter discusses the challenges and resilient protective factors high achieving women used to deal with them.

## CHAPTER FOUR: RESULTS

The results are introduced in two sections. The women's responses to interview questions are presented. Each interview was examined for dominant themes in response to interview questions. Accordingly, these themes are presented. The interview questions attempted to ascertain: (a) if the women chosen for this study were a plausible reference group to gifted adults; (b) the obstacles and challenges these women have encountered because they are gifted high achieving women; and (c) the behavioral and personality characteristics they use to deal with challenges.

In section I, demographical information about the participants who took part in the study is presented. Moreover, section II presents evidence that the participants are a plausible reference group to gifted individuals. In section III, the challenges and emerging protective factors the women interviewed perceived using is presented. Section III will also present the content-analysis. Each interview was coded for the presence or absence of 18 resilient protective factors that have emerged from the literature. In essence in this section emerging themes were not analyzed but rather pre-established constructs. Finally the results are summarized and the two research questions are addressed.

### Section I

#### Participants' Demographics

A demographical summary of the high achieving women who took part in this study follows. The study's participants predominately were unmarried. Only four participants were married, one was divorced and another was in a common-law relationships (see Figure 1).

Moreover, only one of the participants had children (see Figure 2).

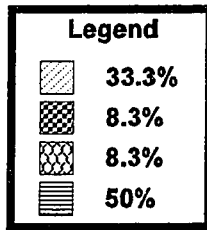
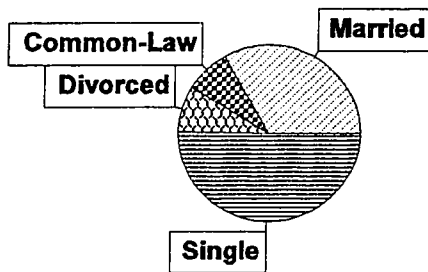
All the women at the time the study were graduate students. Nine of the women were full-time Ph.D. students. One of the participants was a part-time Ph.D. student. Another two of the women were full-time M.A. students (see Figure 3). The 12 women came from different faculties. In order to ensure confidentiality the respective number of women that came from different faculties is not reported.

All of the women had obtained a Bachelor's Degree. In addition, ten had obtained a Master's Degree (see Figure 4). The mean GPA for the participants' undergraduate work was 80.4%. Moreover, the mean GPA for graduate work was 89.6%. The women's work experience varied. The occupations of the participants work experience included: clerks, work in the food industry, bookkeeper, policy analyst, librarian and private business.

As the demographical summary indicates, the population shared similar as well as different characteristics. The following section presents the educational history of the high achieving women who took part in this study.

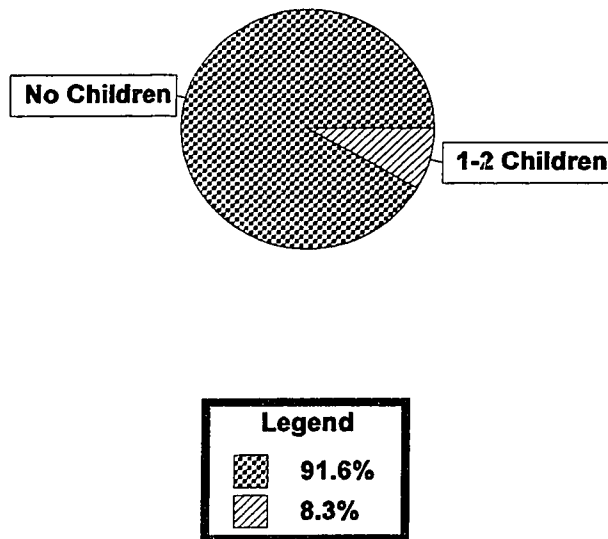
**Figure 1**

## Participants' Marital Status N=12



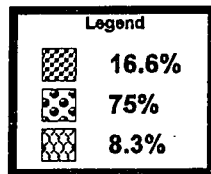
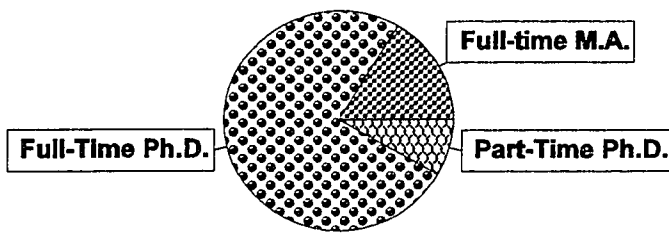
**Figure 2**

## Participants' Number of Children N=12



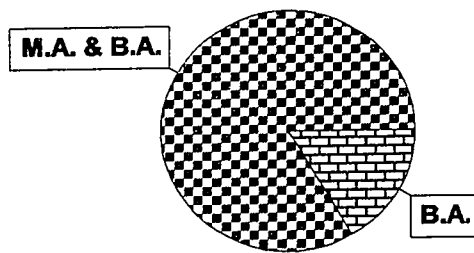
**Figure 3**



## Student Classification N=12



**Figure 4**

## Participants' Education N=12



Legend	
	93.3%
	16.6%

## Section II

### Giftedness Among Participants

When selecting the participants to take part in this study there was no prior information if they had been classified as "gifted" or talented based on any standardized test. However, literature has documented that high academic achieving graduate students are a plausible reference group to gifted individuals (Enright et al, 1989). The 12 women in this study were all graduate students who were recipients of scholarships. Therefore, they were achieving academically. However, to confirm the implicit hypothesis that the participants were an adequate reference group to gifted adults each woman was asked the following question;

*As a child were you considered gifted or as having exceptional abilities or talents? If yes, please explain.*

Most of the high achieving women were never identified as gifted or talented students. Only two of the participants were identified as such. However, 10 women, despite not being formally identified as gifted people, had been placed in accelerated classes for gifted students. Some of the 10 women had skipped grades. Allegra was one of 6 women who was not labelled a gifted student but was placed in gifted classes. Allegra stated:

I don't remember anyone telling me I was a gifted student. I remember in grade 6 we had to write the Canada Standard Basic test or whatever. And I was wondering how I did. And the teacher took me into the principal's office and showed me my results. In grade 6 I was working at a grade 10 or 11 math level. I always knew I was smart because I was always in the highest reading group in grade one. When in grade

five that's when metric was starting to come through I was in the pilot group to try that program. They put the high achieving math group to try the program.

Allegra never recalled anyone saying she was a gifted student, however she seemed to have a sense that she was highly able compared to her peers. Based on her grades, class performance and teachers who suggested she skip a grade, she knew she was intelligent and had a number of abilities. Allegra was typical of many of the gifted high achieving women in this study.

A number of the women thought they were academically talented even if they were never identified as gifted students. When I asked Sarah if she was ever identified as a gifted pupil, she said, "No", but added "I never thought I was gifted. I knew that I had a certain facility to learn. I was always top of my class and it became something I aimed for." Although, Sarah had no knowledge that she was a gifted student she knew she academically outperformed classmates. Sarah's academic accomplishments and her love of learning made her aware that she possessed some special talents. The term "gifted" never entered her mind, but she developed a growing awareness that she was achieving academically beyond her peers.

Another woman, Nina was never identified as a gifted student, however she expressed quite simply she did well academically. She said, "School wasn't a problem, the only thing I can remember is I was able to do well in school." Perhaps, as Nina brought to my attention, the reason she was never identified as a gifted student was that when she attended school there existed no such label. In addition, Nina felt that 40 years ago if she were indeed a gifted girl, it would never have been acknowledged.

When discussing with the women if they had ever been identified as gifted students, a

common recurring theme among 10 of the 12 women emerged. This was their love of school and their passion for learning. One woman said:

I went to the counsellor and he made me write this test and he couldn't believe how high I scored in like a person who likes school. I was the highest he had ever seen in a person who liked school. I loved school, I love it, being in school. School was so easy too, you know.

Therefore, although the majority of the 12 women were not identified as gifted they took part in accelerated or gifted classes. Most of these women excelled academically and they enjoyed learning.

Allegra's passion for learning was evident when she said, "Oh yeah, it was exciting and it came so quickly. I liked that." School was not always easy Allegra seemed to have the ability to master any academic challenge. Repeatedly, many of the women said they found school challenging, but believed they had the ability to overcome the academic obstacles they encountered. A sense of optimism and confidence in their academic abilities was a salient theme among the participants.

Only two women indicated they did not enjoy school. Each alluded to circumstances that may have contributed to their dislike of school. Dee had told me she was not identified as a gifted person. However, her family considered her talented and very bright. When asked if she were a child who enjoyed school, Dee responded:

I was not adverse to school, but I don't think I particularly relished it. I didn't want to particularly get out of bed and go to school. I also had to go to a sitter's house first so there were a lot of issues. I should say those are the years preschool

and early years was the beginning I was sexually assaulted at the sitter's house so those first years of school there were issues. Having to go to this other house, the sexual abuse and then school, so there's a lot of stuff happening.

It is difficult to ascertain if Dee's experience of being sexually assaulted during childhood contributed to her lack of enthusiasm for school.

Lynn was the second woman who told me she disliked school. Lynn indicated that she hated school and that, in fact, she had never graduated from high school. Like Dee there were other issues that may have contributed to Lynn's dislike of school. As I attempted to probe further, Lynn commented:

I hated elementary school I hated high school with a passion. I also am still struggling not to refuse to do the school work I ended up refusing to do because my father was so intent that I do well in school. I mean, I remember my older sister going through university. I remember, as a kid, watching her relationship with my father unfold as my father struggled to do her university assignments for her, as if he was trying to prove to himself that he could do it. My father had tremendous anxiety problems.

Lynn went on to tell me she had inherited an anxiety disorder from her father. Moreover, exam anxiety was something she had to learn to deal with. Having witnessed her father's anxiety Lynn may have also come to associate school work with anxiety. Perhaps the anxiety that she associated and felt with school made her dislike it. It is plausible to speculate that Lynn may not have graduated high school in part due to the anxiety also associated with school. When a person has a phobia of something, she/he avoids the situation because it arouses too much fear and

discomfort (Beck & Emery, 1985). Therefore, like Dee, one can not ascertain if Lynn simply did not like school or if her anxiety played a role in her dislike of school.

Most of the 12 women demonstrated a sustained love of school and learning. Of the 12 women, the two who did not enjoy school faced challenges which may have influenced their dislike of school. However, all the participants described their desire to learn and to seek out information about the world.

### **Talented/Creativity**

An aspect of "giftedness" is demonstrated superior ability in creativity (Noble, 1987). According to Davis (1992), being creative encompasses a way of living and understanding the world. It means cultivating one's talents, using one's abilities and working to become what one is capable of being. Creativity includes the capacity to explore new ideas and create original products. Inherent to the definition of "giftedness" is also demonstrated talent in one or more domains. In order to ascertain if the women who took part in this study possessed gifted characteristics all the women were asked if they had any abilities or talents.

The majority of the 12 women indicated they considered themselves as creative or talented. These women stressed however, that they were not labelled by anyone as such. Based on their own self-reflection, they felt they were creative or talented individuals. One woman Sarah, described her creativity in the following manner:

I just like to initiate ideas. I have ideas I like to develop projects I'm creative in the sense that I can organize something. It doesn't take me long and I love to do new things. I get bored very easily, so I have to constantly have a whole bunch of projects going on and do different things.

Similarly, Lilly shared the following: "I was always creating in and out of school. I would make things. My father used to say I'd never be bored because I would find something to create. I never remember saying I was bored. I would always make things, create things." Lilly's creativity was evident in the way she thought and the way she went about doing things. The need to do something, not to be bored was the motivation behind many of her creative projects.

Another woman described herself as being creative in a different way. Dee shared with me how her creativity shone through in childhood. She said, "I would watch TV and then draw the characters on the television set, or I would actually make books draw little story books with pictures and than put holes and then tie them with a string and actually create a book and things like that." From childhood she recalled being very creative. She thought this may have been attributed to being an only child and having to entertain herself. Regardless of the motive, she would make doll clothes and toys so she felt she was certainly a creative individual.

A number of the women demonstrated their creativity in the arts. Sarah cooked, two other women Joany and Hen were talented in writing. Nina's creativity was expressed through her sewing. For Mary acting was her way of creating she said, "I had a definite penchant for drama. I loved it, so definitely the creativity was there."

### **Gifted Intellectual and Personality Characteristics**

Two questionnaires were administered (see Appendixes C and D) asking all participants to rate themselves on intellectual and personality traits they possessed. The traits were those identified as being present in gifted individuals (Silverman, 1993c). The majority of the participants rated themselves as possessing many of the intellectual characteristics that gifted individuals also possess (see Table 3). In addition as shown in Table 4, most of the participants

rated themselves as possessing personality characteristics that gifted individuals also possess. The respondents who answer hardly ever to some of the characteristics were not all the same women. This reflects the complexity and diversity of female gifted population, not all possess the same traits. In fact, the sample in this study event with its "outliers" is representative of the gifted population.

Table 3

**Frequency of Intellectual Characteristics (n=12)**

	Very Often	Occasionally	Hardly Ever	Not Sure
<b><u>Traits</u></b>				
Exceptional Reasoning Ability	9	3		
Intellectual Curiosity	12			
Rapid Rate of Learning	6	6		
Facility with Abstraction	9	2	1	
Complex Thought Process	9	2	1	
Vivid Imagination	10	2		
Early Moral Concern	8	4		
Passion for Learning	11	1		
Powers of Concentration	7	5		
Analytical Thinking	10	1	1	
Divergent Thinking/Creativity	9	3		

Keen Sense of Humour	10	2
Capacity for Reflection	9	3

Table 4

**Frequency of Personality Characteristics (n=12)**

	Very Often	Occasionally	Hardly Ever	Not Sure
<u>Traits</u>				
Insightful	8	4		
Need to Understand	12			
Need for Mental Stimulation	10	2		
Perfectionism	10	2		
Need for Precision\Logic	9	3		
Excellent Sense of Humour	7	5		
Sensitivity/Empathy	11	1		
Intensity	11	1		
Perseverance	11	1		
Acute Self-Awareness	9	3		
Nonconformity	3	6	3	
Questioning of Rules\Authority	5	4	3	
Tendency Towards Introversion	3	2	7	

The results demonstrate that the high achieving gifted women in this study rated themselves as possessing many of the intellectual and personality characteristics that have been observed in gifted individuals. The one exception was that seven of the women indicated that they hardly ever had a tendency towards introversion. They preferred to spend time with other people rather than be alone. In summary, gifted women achieved well in school, loved learning and generally enjoyed school. The two who did not enjoy school had other circumstances that occurred in their lives that may have contributed to their dislike of school. The majority of the 12 women saw themselves as creative or talented in a number of spheres. Although only two were officially identified as gifted learners, six others had taken part in gifted classes. These results, in conjunction with rating themselves highly on personality and intellectual characteristics that gifted individuals possess, support the belief that the participants are a plausible reference group to gifted individuals.

### **Section III**

#### **Obstacles and Challenges Gifted Women Encountered**

The challenges gifted women face are numerous. They tend to revolve around four themes: interpersonal challenges, intrapersonal challenges, academic challenges and economic challenges. An interpersonal challenge is related to relations with other people. In contrast an intrapersonal challenge alludes to challenges that arise do to a set of processes that are occurring within a person (Carver & Scheier, 1992). Implicitly this means thoughts and motivations that take place within an individual (Webster New Collegiate Dictionary, 1979). The third type of challenge explored in this study is academic challenges. These may include difficulty with course

work, uncertainty about academic abilities or any problems encountered when attempting to fulfil one's academic aspirations. The last type of challenge examined is economic challenges. This makes reference to financial difficulties or concerns encountered as a result of pursuing a higher education. All the gifted women in this study indicated that they have encountered interpersonal and intrapersonal challenges. Some perceived experiencing academic and economic challenges. Each of the challenges that emerged from the interviews is presented in the following section of the paper and described in detail.

### **Interpersonal Challenges**

#### **Lack of Understanding**

The inability of co-workers, family members or peers to support and understand why gifted high achieving women entered graduate school was mentioned by several of the women. One of the women, Dee, despite having a close relationship with her cousins, said they have been unable to understand why she has committed herself to years of academic training that will entail accumulating a large financial debt. Their lack of understanding hinders her relationship with them. Speaking about this issue, Dee was perceptive about what her family thinks about her pursuing a Ph.D.:

There's that conflict between being proud and supportive of my accomplishments but a little bit reluctant or unsure how to value the fact that I'm not earning money, or that I'm paying off these debts, or I'm writing all this really weird stuff and who wants to read it.

To continue to pursue her goals appears to be stressful for Dee. The people who mean a great deal to her do not understand why she is investing a large part of her life into something that they are uncertain has value. This lack of understanding means that Dee perhaps does not have as many support systems that she can call upon during periods of uncertainty or stress.

Like other women in this study, Joan has also experienced interpersonal challenges, in particular the inability of people to understand the reason she is obtaining more education. She explained:

A lot of people say, 'Why are you in arts? Like what are you doing? Why aren't you in medicine or law or something? Make a lot of money.' It's really hard to get it into people's heads I could do that I know, but I wouldn't enjoy it. I wouldn't have any fun and it wouldn't be exercising my brain the way I like to exercise my brain.

Joan went on to say that kind of feedback makes her wonder if she is in the right discipline. She is also good at so many things that it has been difficult for her to choose one vocation. Joan has chosen a discipline where her career opportunities may be limited and where she may not be financially rewarded. Therefore, people have a difficult time understanding that she is obtaining a higher education not to earn more money, but to do something that is instinctively satisfying to her.

For other women, another interpersonal challenge is the inability of people to understand why they are not interested in traditional female roles. Three women alluded to experiencing this challenge. Joan elaborated:

It's hard when people expect you to be interested in more traditional things that

maybe you don't have as much time for, like I'm thinking in particular cooking or whatever. Children is my thing. Because I'm not interested in them at all people don't understand that. They kind of expect you to like them. It doesn't matter how smart you are, it doesn't matter what you're doing. This should be your ultimate goal because you're a female and that's the end of it.

Joan has ambivalent attitudes about having children. She is worried that once she has them she will begin to lose interest in all the things she loves. Based on what she observes with friends who have children, she notes that once they have a family their whole world revolves around their children. She can't see herself leading that kind of life. There are times she is aware that people do not agree with her point of view or consider her selfish for not wanting children. Having people think this of her makes it difficult to continue to adhere to her personal beliefs in the presence of such disparaging opinions.

Lynn was another woman who experienced the inability of friends to understand why she and her husband were not having children. However, in contrast Lynn was not effected by their opinions. She had a clear sense of purpose and conviction in her beliefs.

Consistent with the literature presented in chapter two, the high achieving women in this study encountered numerous interpersonal challenges. Among them, a lack of understanding from colleagues, family and friends. Others were criticized for not adhering to traditional female roles. This lack of support and understanding made it difficult for some of the women to find the support they needed when they were questioning their decision to enter graduate school. For some of the women other's lack of understanding contributed to their questioning their decision to pursue a higher education. The question that arises is why then did these women push forward to

pursue their goals in the presence of discouragement and ambivalence from others? An exploration of the coping mechanism, behavioral and personality skills they used to deal with interpersonal challenges may lend some understanding about the resilient protective factors these women used to negotiate those challenges.

### **Ambivalence**

Many of the women alluded to the ambivalence they have felt from friends, family or educators for choosing to pursue their goals. The majority of the women said they have encountered ambivalence from peers. The ambivalence is not always intended to be negative, nevertheless it has an impact on these women. Joany told me she has caring friends. She appreciates their concern, but they are ambivalent about the choice she has made in her life to pursue a Ph.D. She said, "Friends, they think it would be better if I had a more stable life. Go on trips and all these things. Just cause they are concerned about my well being. That's part of ambivalence." For Joany this type of feedback has made her wonder if she is too focused on her goals. She often wonders if her friends are right, perhaps she is sacrificing too much to obtain her Ph.D.

In addition, a few of the 12 women encountered ambivalence from one or more family members. One young women commented on her parents' reaction when she decided to apply to university.

My parents never thought that I would go to university. They didn't let me know this of course until I brought the applications home. And their 'Who's going to pay for this.' I was 'Of course you are.' That was a big shock, 'We're not paying for it and we don't want you going to university: get a job.'

They had no desire for me to go and because of that I moved out of my parents' house.

Three days after Hen graduated from high school she moved out of her parents' home.

Hen has had to support herself financially through undergraduate and graduate school.

Only one woman alluded to having experienced ambivalence from educators specifically professors. She said, "They just look at me and shake their heads and say, 'Come on, get real.' You've got to have your mind solely on getting a job after this: that's ambivalence." This woman's experience may be related to the fact that she is a mature student and that her professors believe she needs to secure a measure of financial security, such as retirement funds.

### **Old Friendships**

Many of the gifted women have found it a challenge to maintain old friendships. The inability to find common ground with friends who did not pursue higher education was mentioned by more than half of the 12 women. A common theme that emerged was that old friends were unable to maintain conversations that were intellectually stimulating. In the words of one woman:

I have a friend, her name is Sun. She calls me all the time. She wants me to go visit her. I hate going to visit her. Not that I don't like her, but we have nothing to talk about. I can only talk to her about her children so long, about what she doesn't do all day for so long. She doesn't know how to talk to me about my research. Because, it's so far beyond her, so it's very hard.

Although Allegra finds it hard to talk to old friends about her academic life, she still feels keeping old friendships is important. She is aware that very few people have the same level of education that she has. Allegra thought it was important to add that this does not mean they are

stupid. To her it means there are only certain things they share in common.

For another woman, Sarah, the loss of such friendships has caused loneliness and isolation. She said, "Some friends moved to Ottawa, but I'm the only one who pursued post-graduate studies. There's a couple of others who did their Masters and I feel a little bit I must say, alone. I cannot have any intellectual, very deep conversations with them and I find I need that." There are also times when Sarah worries that these friends may get annoyed with her. Being passionate, eager and analytical are all characteristics she possesses. Sarah stated: "I go into detail and sometimes it's hard for me to let go of an idea and then it's like, okay let them digest."

Sarah described the tendency to want friends to be as motivated as she is. This is something she has had to work on for the last couple of years. Even though she may be ambitious and always wanting to learn new things, she has realized not everyone is like that.

For some of the women interpersonal relationships with friends were difficult. Similar personality characteristics the high achieving women in this study shared were: holding high expectations of themselves and others; being emotionally and intellectually intense; and valuing different things than their peers. Moreover, the need to be constantly intellectually stimulated makes it difficult for the women to maintain friendships with others who have not pursued a higher education. These relationships at times are difficult because they cannot find a common ground to talk about. However, the gifted women deal with these interpersonal challenges. What emerged from the interviews was that they used resilient protective factors such as self-understanding, flexibility and social competence to negotiate the interpersonal challenges with which they were confronted.

### **Problems with Men**

Interpersonal relationships with friends are not the only difficult ones. Nine of the women indicated that relationships with men are difficult. Men are intimidated by their abilities and accomplishments. For one of the women, this theme repeatedly occurred in her relationships. It exemplifies some of the other women's problems with men.

Allegra's first experience was with her high school boyfriend. After graduating, she decided to enter university, he had not. Realizing her boyfriend was having trouble accepting that she was going to obtain a university degree, she ended the relationship. Yet in another relationship, the man Allegra was seeing was intimidated by her accomplishments. She spoke about this relationship, "The last relationship, I was doing my doctorate, he was still a little bit intimidated. He was only going to have a double Masters." Her current relationship is successful primarily because Allegra feels the person she is seeing is interested in her research and seems to support her goals. Another woman described how her achievements contributed to the breakdown of her marriage. Cathy commented on the fact that her ex-husband often said, "Psychology was the other man in her life." She shared with me that her ex-husband did not understand the sacrifice her work demanded of her. She explained:

To finish you have to put your thesis as number one. It makes it really difficult for a relationship. But I was married to someone in a job pretty much a world away from the world of academia. He had a problem integrating into the relationships with my friends from school. There was a split - the married "me" and then the school "me". It's very difficult in relationships to find people who are not threatened.

Cathy's dedication, energy and the time she gave to her schoolwork was not understood by her husband. He was unable to understand that Cathy did not purposely choose not to spend time with him, but that the nature of her work demanded a great deal of her, so she had less to give to him. In speaking with Cathy it appeared that her husband did not respect what she was doing, what completing a Ph.D. entailed. This lack of understanding and respect made it difficult for Cathy, in part, to remain in this relationship.

According to another woman, men still tend to see gifted high achieving women in a negative stereotypical manner. Sarah simply stated it: "It's the whole thing when a the man is pushy and is an achiever, but the women is pushy because she wants something she's a bitch." Demonstrating such attributes as ambition and aggressiveness in the pursuit of one's goals is not always received positively by others.

This was noted in several of the participants' comments. For example, Cathy alluded to how pursuing her Ph.D. affects how men see her she said; "At parties men ask you what you do. You tell them, sometimes they walk away. There is always that constant feeling that you have that extra amount to prove because you are female." Two other women Lilly and Mary said when they demonstrated their abilities such as doing well in class they were judged by other men negatively. Some told them directly to stop trying so hard. Others, simply did not accept such behaviour and judged them unfairly.

The majority of the women found that interpersonal relationships with men were a challenge. Some men were intimidated by their intellectual abilities and achievements. Others found their partners could not relate to their academic pursuits. Some of the women were judged negatively because they were ambitious. The gifted women in this study encountered a number of

interpersonal challenges. However, the women continued to work diligently in the pursuit of their goals. How did these women go onwards in the presence of such ambivalence? Again, exploring what coping mechanisms, behavioral and personality protective factors these women used to deal with the ambivalence can provide insight, namely, about the resilient protective factors they developed, used and that became part of their repertoire of coping skills.

### **Age Discrimination**

Due to their academic abilities, some of the women in this study were in graduate programs or in positions that were unusual for their age. There were times when people judged these women because they were young. Three of the women experienced age discrimination. Lilly recalled an incident where she was subjected to this type of discrimination. She said:

I was very young when I got admitted into my first Masters, I was 21 and very first day the class had to introduce themselves. I realized everyone else had all sorts of credentials. As I was walking away the professor came up to me and said, "Who did you know to get into here? And, I applied like everybody else." Lilly added, "Age was a factor at least half of my class was ten years older than me."

Being discriminated against for having achieved great accomplishments at a young age sends a mixed message to young women pursuing their goals. These women know they have earned the right and have the ability to be at the level they are. However, in the presence of such discrimination they may come to doubt their abilities and their confidence decreases. Their achievement may decline because rather than being applauded for their efforts, they are ridiculed

or doubted for them.

For another woman, one of the worst comments she said she received was when she was working for other women. She shared the experience:

I was working with a group of women when I came in, because I'm young and I look younger than what I am. People think I'm still 20 years old.

So I received a comment afterwards that the girls thought, 'Well, she looks dumb, she's too young she doesn't know enough.' It shocked me because I thought, how could a woman say that of another woman I was very hurt.

Both men and women discriminated against some of the high achieving women in this study due to their age. This can have a lasting negative impact and be hurtful for women to experience.

Many of the women in this study found themselves in prestigious, competitive environments at a young age. They were at times resented, judged and their abilities were questioned. As noted in the literature asynchronous development is a risk gifted individuals encounter (Morlock, 1992; Silverman, 1993c). However, these women were resilient to such uneven development. They had the capacity to remain strong, socially capable and were prepared psychologically to perform, work and be amidst experienced professionals who questioned their abilities. These women dealt with the challenge of age discrimination and fared well. What skills did they use to do this?

### **Gender Discrimination**

Another interpersonal challenge that three of the women perceived was gender discrimination. Cathy, who is in a male dominated discipline, recounted the following incident: "I

got an A+ in one course and someone said 'she must be sleeping with the prof.' You can't attribute that to anything but gender." Another woman was resented by males who were in the class. At one point a male colleague pulled her aside and said to her, "You're working so hard at this you're making the rest of us look bad." This same woman recalled as early as high school males teased her because they resented her academic abilities.

Gender discrimination was something Sarah also experienced. She studies in a discipline where she has to work with males and has experienced gender discrimination. She said, "It still makes me uncomfortable at this point because working with male professionals with a team of males you get every comment in the book." Sarah added, "Oh yeah, I know I'm willing to work with both male and women in my career. I just need to prepare myself a little bit differently when I go to work with males." Sarah has had to develop a set of skills that she can call upon when she encounters gender discrimination. Sarah indicated it would be ideal if women did not have to worry about gender discrimination. However, she went on to say that it is a reality and that women must learn how to deal with it if they want to survive in this world.

The women in this study experienced gender discrimination differently. This took place in two forms: (a) being teased, not being socially accepted because they were academically talented females; and (b) their competence professionally or academically was judged because they were women.

One of the women Sarah, indicated how she dealt with the challenge of gender discrimination. She was resilient to its effects, and she developed skills to deal with the discrimination. It did not stop her from achieving her goals.

It appeared that Sarah cognitively restructured the situation she faced. She understood

that being discriminated against by men was difficult but a reality she would have to become comfortable with to continue to work in her discipline. As a result she accepted the challenge of needing to develop adaptive skills to be able to deal with the gender discrimination. This is a resilient protective characteristic. Sarah decided to choose an adaptive way to deal with a challenge. Most likely, such an attitude will help her deal with any future gender discrimination she may encounter.

### **Social Relationships and Time Constraints**

Most of the 12 women mentioned another interpersonal challenge, balancing their academic goals with social or personal relationships. For these women the balance was difficult to maintain in their relationships with men, friends and family. One woman provided insight on how pursuing her goals has affected her personal life when she said, "Oh my personal relationships for sure, would be placed very much on hold because there's no way I could manage those things at the same time." The lack of time makes it necessary for some women to curtail their social interactions with friends. However, as Pat explained, friends are not always accommodating or understanding:

A conflict keeps surfacing again and again because I have limited time to give to other people, I can send a short e-mail short note and that's it. And what happens is people don't understand this. They take it as a loss of interest and it isn't. I try to explain this to my friends but they don't understand, they don't get it.

This same woman ended up in counselling to learn how to deal with this interpersonal challenge. Pat shared with me how this interpersonal concern affected her. She told me, "In the Master's degree I went in for counselling because I was a wreck. Many of my friends couldn't

understand that I was working in the summer and did not have time for them. And I thought it was my fault, I was guilty for that and I was a bad friend. I spent three months in counselling." Eventually, she came to understand that she was not responsible for what others thought and that she had the right to pursue her goals, taking the actions necessary to achieve them.

A number of the women indicated that time constraints that arose by attempting to balance different aspects of their lives has meant placing relationships on hold and curtailing their social interactions.

### **Multiple Roles**

Other women spoke to the difficulty of managing multiple roles and the tendency to place themselves last. This interpersonal challenge is particularly difficult for women to resolve. Nina who is doing a Ph.D., is a mother, wife and a daughter of aging parents. She has multiple roles that she is balancing, all equally demanding. She struggles with what is the right thing for her to do. For Nina, this constant struggle to balance the two results in the loss of time and energy she could use for school work. She said, "I tend to be flexible to other people. Sometimes my kids and everybody else wants my time and I give it because I feel I should. So there's this old working mother thing: how much do I devote to the job, how much do I devote to the family?" Yet another woman commented on the multiple roles she faces as a wife and student. Lynn said she still has difficulty justifying to herself placing her schoolwork first. Not knowing where to devote her time and energy is an ongoing dilemma.

Juggling multiple roles was another interpersonal challenge the high achieving women faced in this study. They often over extended themselves to meet everyone else's needs. One woman said:

I do struggle like mad focusing on my work and not focus on those innate obligations which I was taught as a child. To say the hell with it, I'm not doing the floors, I'm not doing this. It's just going to have to wait. It's really tough.

It is a struggle for some of the women to not focus on what society has traditionally regarded as the responsibilities of women, such as housecleaning, caring for children and nurturing others.

Some women when they began to shift their energy and focus towards themselves and the pursuit of their goals felt guilty. The women often felt this way because they were not devoting their time to what they had been taught by society as being important for women.

### **Ridicule and Jealousy**

A few of the women had problems directly associated with their academic abilities. Two women commented on the interpersonal challenge of being teased because they were academically gifted. Yet two other women experienced the problem of having friends that were envious of their abilities. Joan recalled a hurtful incident. What happened to Joan illustrates how being intelligent can make others envious. Quite a few years later she still had a clear memory of her experience:

I vividly remember after the first exam she a friend knocked her brains out studying for. I think I had read the chapters once. We went to the exam. I had gotten 98 and she had gotten 46 and she was so mad. She was trying to pretend not to be. The way she got revenge was through getting people on her side. So, she tried to do everything she could to manipulate the people in our residence.

For Joan this incident was hard for her to understand. She did not tell people she had

done better than her roommate on their exam. She finished recounting the incident trying to understand why her roommate would do such a thing, saying, "I thought why are you doing that? It's kind of sad."

Doing well academically was not always admired by others, especially by peers. Joan had the ability to do very well academically without necessarily working hard, whereas her friend did not. Such an ability may be envied by others, they see the gifted student as privileged, someone who may not have to work hard to achieve their goals. The gifted students, may come to hate their academic talents because it is a source of conflict between them and their peers. However, none of the women in this study decided to abandon their academic ambitions for fear of ridicule. Rather, they worked to fulfil their goals despite at times experiencing social rejection.

In the presence of such challenges as maintaining social relationships under time constraints, balancing multiple roles and being teased because they excelled academically these women did not succumb to the stress inherent in these challenges. Rather, they continued to pursue their academic goals admits these obstacles and uncertainty. Surely, this takes some kind of resilient capacity to continue being successfully in a demanding academic environment. Thus, it appears these women are resilient, but what did they think and do? What resources did they call upon to successfully negotiate these challenges?

### **Intrapersonal Challenges**

#### **Hiding their Abilities**

All of the high achieving women who took part in this study have experienced intrapersonal challenges, challenges they experience within themselves. The nature of being gifted and high achieving is associated with the presence of specific personality characteristics. Some of

these can be both positive and negative.

A few of the 12 women in the study said they hid their academic abilities from others.

Those that did not, suffered the consequences. Mary flashed back to her experience:

It was weird for me in undergrad was what a lot of young women experience in high school, that classic better hide your smarts or else. I am too cocky to ever hide, but my self-esteem took a battering around attractiveness to men.

Even though Mary is now in a Ph.D. program she still feels the same way. Mary is assertive and ambitious. However, it is not always well received by others, in particular by men. In turn Mary feels she is unattractive to these same males in part because she is outspoken and assertive.

In contrast another woman interviewed chooses to hide her intellectual abilities in the following way: "When I'm with my other friends who haven't pursued a higher education I feel that I should restrain myself. And that I should use a particular vocabulary. I use slang on purpose and try to tone down."

In addition, Pat said: "It exhausts me, it completely exhausts me. And I feel nervous sometimes. I don't want them to think I'm superior. I feel tense with them." Pat hides her abilities because she does not want people to feel insecure or uncomfortable around her.

However, Pat is not being true to herself. It requires a great deal of energy to be someone she is not. As a result it is emotionally draining for her when she hides her abilities.

On a similar note another woman said that she is careful whom she tells that she is in her last year of Ph.D. work. Placing other people's feelings ahead of her own is the motive for hiding her accomplishments. Allegra said: "I don't always tell people upon first meeting them what I do.

If I feel that they will be intimidated or feel uncomfortable." Repeatedly the women said that the primary motive for hiding their abilities was not wanting others to feel uncomfortable with them. The need to nurture, care and look after other's well-being was a common feeling among the women.

Another reason some of the women hide their abilities was their fear of being ostracized. The women in this study said it was difficult and took a great deal of effort to hide their abilities. However, they also believed it was a necessity in certain situations.

This intrapersonal challenge did not stop any of the women from developing their abilities and achieving their goals. They were resilient despite the stress and worry from concealing their gifts. This was a challenge these women successfully negotiated. But, how did they manage? What protective factors did they use to negotiate successful coping in these circumstances?

### **Perfectionism**

One common personality characteristic that gifted high achieving women share is the characteristic of perfectionism. Ten the 12 women said perfectionism is an intrapersonal challenge. Mary exemplifies this when she said:

...the neuroticism that comes just being so intense all the time and never giving myself a break. I did buy into the stereotype of who the perfectionist is. Just recognizing the kinds of standards for my behaviours and achievements and you know the bar is always set higher and higher.

Perfectionism is a personality characteristic that Mary learned to curtail. Interestingly, being so intense she has found that people are intimidated by her. This reaction is difficult to

accept especially, when it is felt by intimate friends.

For Joan her perfectionism has caused her to lose perspective. She sets high standards that may be impossible to achieve. She said, " So like if I get an 82 I think, well, I should have done better. And in my discipline we don't get nineties." When she does not meet her expectations it is difficult. "I remember in fourth year I was taking this course and I got the first exam. I don't know what happened. I wasn't used to writing exams like this. See, I'm justifying and I got 78 and I was so mad, like I was freaking." What would have been considered a good mark to others is not to Joan. She is unable to enjoy her successes in part because she sees them as failures.

Two of the women said perfectionism was not an intrapersonal challenge they currently experience. However, they had faced this dilemma in their lives. Through self-understanding they came to the conclusion the need to lessen the expectations they placed upon themselves.

### **Chronic Worriers**

Several of the 12 women said they were chronic worriers. Joan described how much she worries, her mind always racing. She said: "My brain is like a hamster in a cage going around and around. Saying get to work, get to work, you're going to fail, you're going to fail. I just think too much about everything in general." This constant worrying often paralyzes her. She is unable to do the work she is worrying about and she ends up procrastinating.

Another woman Pat, also explained her tendency to worry in the following manner: "I worry, I'm like a dog at a bone. And I think, oh, now I shouldn't have done this and I should be smarter than that. I should know better and how could I have forgotten to do that." For Pat, worrying is not confined to only academics, but to other areas in her life.

The tendency to worry is a challenging intrapersonal personality characteristic that some of the women alluded to experiencing. This is a trait that can cause difficulty in functioning and working. Nevertheless, these women do just that. Given the fact they can function well despite a tendency to worry speaks to their resiliency. The strategies, personality strengths they utilize to deal with their worrying will be explored in Chapter five.

### **Work Commitment**

The tendency to accept too much work, being focused, feeling guilty for not constantly working or being too goal orientated was indicated by many of the 12 women. For example, Lilly typifies what these women do:

I start out on a committee, next thing I know I'm on the task force. I'm on this, I'm on that and before you know it I'm, into everything I can imagine and saying how could this happen and than one thing leads into another. But, I have so many interests in many areas and I seem to get caught into a number of things.

Many of the women in this study were simultaneously fulfilling multiple roles. They were characteristically over-achievers who worked hard in all domains of their lives. Lilly who was quoted above, went on to say: "One of my biggest challenges is saying, 'no you can't do this'." Lilly often overextends herself and the result is she has always too much work to do. She finds herself being overwhelmed with all she has accepted to do.

For another woman, being highly goal-orientated was the source of difficulty. Allegra shared her concern: "People who are extremely goal orientated tend to miss out living in the moment and enjoying the process because they're so busy trying to reach that goal. It is a

problem I am trying to curtail, to live more in the moment." As this woman described being goal-orientated has caused her to lose perspective in her life. Everything revolves around her work. The danger she and other high achieving women run is not taking time to enjoy their lives, to take pleasure in daily events.

Accepting a lot of work can be a positive trait in so far as it allows you to achieve your goals, to do well in professional and academic environments. However, as some of the women revealed, it can also curtail any possible social life because everything comes to revolve around work. It is interesting that many of the women had this tendency. However, the majority also felt their lives were balanced. How then did they achieve this balance? Why were they resilient, learning to balance their lives and yet continued to achieve their ambitions? The behaviour and personality protective factors they used will be discussed in Chapter five.

### **The Need to be Stimulated**

Some of the women said that a personality characteristic they possessed is the need to be constantly challenged. However, there are times when seeking out challenges can lead to difficult decisions. Lilly left her job because it was not challenging or stimulating. She said: "This has been one of my most frustrating challenges which is really why I moved away from my job taking a deferred leave. Initially it was very exciting, challenging, then it became very routine and I have a very difficult time with routine. I can not do that day in and out."

The need for variety and stimulation is a characteristic that causes these women to seek challenge in their professional and personal lives. A number of them have left friends, partners and careers because they were not intellectually stimulated in those relationships or occupations.

The need to be continuously stimulated, understanding that this is a need they possess has

functioned as a resilient characteristic for many of these women. By changing circumstances or relationships that were uncomfortable or not stimulating has allowed them to create new situations and relationships that are fulfilling. Taking the actions necessary to create environments conducive with their needs has resulted in happier, self-fulfilled lives for these women.

### **Underestimating Self**

A common intrapersonal challenge seven of the women perceived was centred around the theme of not seeing themselves as capable, high achieving women. A number of the women felt uncertain about their abilities, were unable to appreciate their successes or felt intimidated by people in higher positions. Others were easily frustrated because they did not feel that they were capable of achieving what they wanted. Yet others were unable to feel the joy that came from their successes. One of the women told me she did not feel she belonged in graduate school. Interestingly this woman is a Ph.D. student who has won the Governor Generals' Gold Medal, and an entrance scholarship. Dee shared with me that she can not believe she has the right to occupy the position in the University she does. She reflected:

By all rights I probably don't deserve to be here. What I will do is I'll just stay here and I'll keep working and I'll do the best I can until they tell me to leave. I was just going to keep trucking along and I wasn't going to fear the hammer coming down. I wasn't going to worry about the department coming to me and saying you're too stupid to be here. I'm just going to wait for it to happen. Like I've got every reason to be here right? But, wouldn't, couldn't believe it for five minutes.

Dee went on to say that she often has thought the University will find out all she is a cab

driver and that she does not have the right to occupy a teaching assistant's office. She said:

"They're going to find out today who I really am. They're going to come up here and ask me to leave." Another woman Pat, explained how she feels the need to prove she deserves to be in the Ph.D. program. She is always fighting the irrational belief she doesn't belong in the program. She said:

I'm very insecure and believe perhaps I shouldn't be here. I feel insecure about my position here. That someone is going to tap me on the shoulder and say 'We know we caught you. You don't deserve to be here.' There is always a little bit of that I don't feel that I have the mental agility that I should to be here.

Pat's beliefs are very real. Her abilities may be evident to others, but not to her. Despite being admitted into an extremely competitive Ph.D. program and achieving what she has at a young age, Pat continued to doubt her ability to complete her program.

Underestimating their abilities and being unable to appreciate their abilities or success was an intrapersonal challenge several of the women faced. The problem which arises when people are not able to appreciate their accomplishments is that they may be unable to acknowledge and derive pleasure from their work. As a result, they will not internalize the self-efficacy that should follow an achievement. In addition, when the women underestimated their abilities they felt that they were unable to meet the academic challenges they faced. This insecurity was the source of anxiety and fear for some of the women. Possessing such feelings the women could have abandoned their academic pursuits, however they all were resilient and did not. Certainly, they relied on strategies and strengths within themselves that permitted them to continue.

### **Academic Challenges**

Ten of the women have experienced academic obstacles or challenges while pursuing a higher education. Some found it necessary to leave their homes in order to continue their education. Others have struggled to obtain credits or courses. One woman recalled her long struggle:

The first challenge I can think of is after the little bit I left home and lived in Toronto. At that point I was in the second year of my high school in Alberta and I had failed that year. I went to Ontario, I repeated that year. I failed it again and returned to Alberta. I repeated another year. I failed that year, then I dropped out and I started driving a taxi. I drove a taxi for one year without taking any courses in school, then I went back and finally graduated. I was a total of nine years in high school.

This same woman while trying to obtain her high school diploma had to support herself financially. Moreover, she had little support from anyone while attempting to complete her high school diploma. Despite all these hurdles she has graduated not only high school, but is now in a Ph.D. program.

Lilly had a two year setback to obtain her Master's degree. She fought bureaucracy at the University level, yet she persisted. Her one goal was to get through the program and get her degree. She told me her story.

I was called functionally illiterate by a professor. We wrote an exam and she failed me. My exam paper disappeared and I was asked to write my exam paper again.

The professor did not mark a whole major section, so I questioned her. Then the exam was once again nowhere to be found. I made my way to the top of the University: they compromised. They said they would accept a credit from another university so low and behold I went to an American University. I came back and the University said 'No we've never accepted credits from American Universities before. We can't set a precedent here. We are not going to accept this.' Third time I waited a year before I could take a course, went to Windsor and got the credit. It was very costly to do this. It was a big sacrifice on my part.

Being called "functionally illiterate" resulted in a loss of self-esteem. Lilly began to doubt her academic abilities. It took her two years to fight the university bureaucracy. However, she was determined to obtain her degree no matter the personal sacrifices she had to make.

The majority of the women who took part in this study experienced academic obstacles. For some this meant struggling for years to obtain their education. Others experienced problems with advisors and professors, so it took them longer to complete their programs.

### **Economic Challenges**

Economic challenges have affected a few of the women in this study. Others have large student loans and have had to struggle financially to continue their studies. For Dee to arrive at the first year Ph.D. level she has incurred enormous financial debt. She shared her situation: "It starts when I leave home at seventeen I had huge financial problems. My husband was pumping gas. We were on full student loans, so cumulatively we owe 60 thousand in student loans." Dee's nine year struggle to get her high school diploma while driving a cab and fending for herself

beginning at a young age resulted in the accumulation of large debts. Yet another woman, Hen, said she would like to enter a Ph.D. program after completing a Master's degree. She said, "I owe a lot of money, I have big loans, 45 thousand dollars hanging over my head." Hen would like to continue into a doctoral program, however the reality of her financial situation does not permit for her to do so. It is impossible for Hen to fathom the idea of doing a Ph.D. because even if she received funding it would not be enough to cover the expenses of further education.

Economic obstacles were a reality for three of the women. However, this did not prevent them from following their ambitions and goals. What strategy did they utilize to deal with this source of stress and uncertainty? A mounting financial debt and working while pursuing graduate studies requires a sense of fortitude. What skills, what characteristics did they utilize to deal with these challenges?

### **Additional Challenges**

It is notable that a number of participants at some point in their lives have experienced one or a combination of sexual, physical or verbal abuse. As displayed in Table 4, the participants overwhelmingly had experienced some form of verbal abuse. Half of the participants had also been the victims of a sexual assault and a physical assault. It should be noted that when participants were asked if they had experienced any of these abuses, no definition was provided as to what constituted sexual, physical or emotional abuse. This was a conscious decision on the researcher's part. What a person considers an abusive act is specific to her; therefore, I did not want to place a value on what act should be classified as abusive or not. This decision was left to the discretion of each participant in this study.

Table 5

**History of Abuse**

Type of Abuse	N	1	2	3	4	5	6	7	8	9	10	11	12
<i>Sexual</i>			*	*	*			*		*	*		*
<i>Verbal</i>		*	*	*	*	*		*	*	*	*		*
<i>Physical</i>			*	*	*	*		*		*			

In addition, three of the participants indicated that they had experienced a serious illness. They included the following: asthma, allergies, fatigue, benign tumour, pneumonia and kidney infection.

All the participants were asked if they had ever experienced gender discrimination. Ten participants indicated they had, one had not and another was unsure if she had. Having experienced these challenges did not appear to result in psychological maladaptation. They were resilient in the face of challenges. Again, ascertaining what skills they used to cope with life stressors can provide educators with knowledge of the skills which facilitate resiliency.

## **Resilient Protective Characteristics Used to Deal with Challenges**

### **Behavioural and Personality Resilient Protective Factors**

A number of behavioral and personality strategies were used by the 12 women in this study to deal with or to overcome the interpersonal, intrapersonal, academic and economic challenges they experienced (see Figure 5). The most frequently occurring resilient protective factors to the least frequent occurring resilient protective factors reported among the women is presented.

#### **Cognitive Restructuring/Reappraisal**

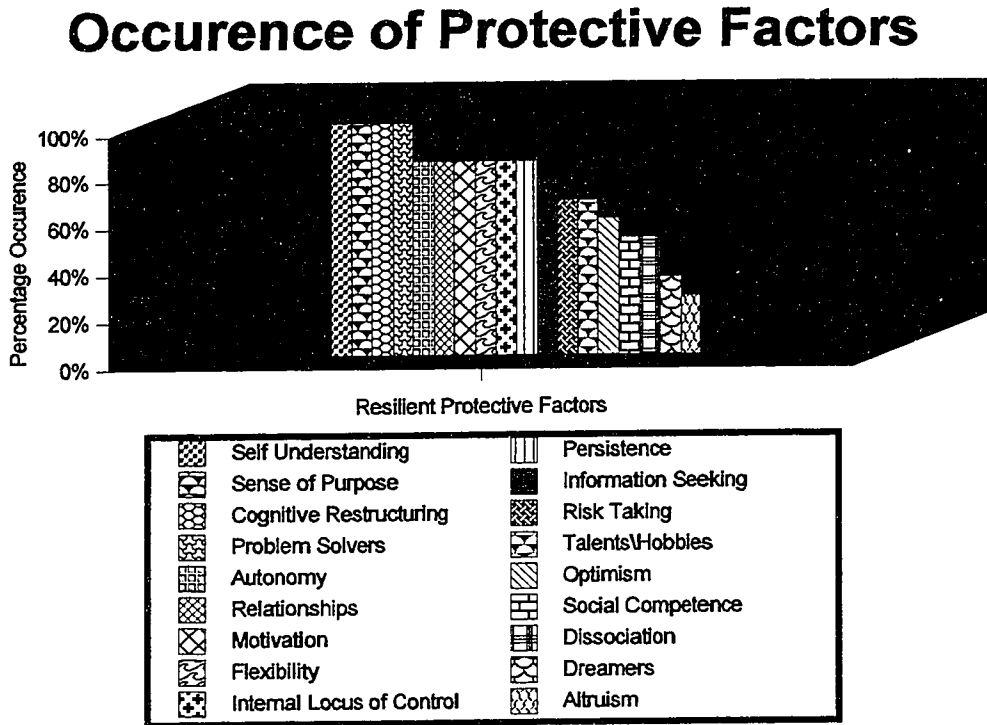
The manner in which an individual perceives a challenge, the skills to overcome that challenge, casts some insight into how she/he cope with adversity. All the women were asked how they perceived a challenge. Some of the women perceived a challenge as something novel where they had to take the time to learn new skills in order to overcome it.

For one woman, Sarah, a challenge entails the need to learn. Learning is exciting for her so she does not fear a challenge, rather, she gets excited. Sarah conveyed it this way, "A challenge for me is something, anything that I'm going to undertake. Where I am going to learn. I have to learn everyday. It seems like I have to go to bed and say, 'God this was a good day because I learned something'. And a challenge is something that is going to get me to think." Sarah does not fear challenges, rather she looks upon them as something that will teach her new skills, therefore they are worth the effort it takes to overcome them.

For another woman, Joany, a challenge also entails the need to learn something. She conveyed what a challenge meant to her: "An opportunity to learn; to some people they say that's

**Figure 5**

\* The percentages reported are those calculated by taking the mean between the reported occurrence of each protective factor coded by two researchers



really great. It takes a lot of courage to do that, I don't think of it as particularly exceptional." Others may be frightened when confronted with a challenge but Joany like Sarah, perceives any challenge as providing her with yet another opportunity to acquire new skills.

The need to work hard or to call upon internal resources to overcome a challenge was perceived by half of the 12 women. One of the women described a challenge in the following way:

Off the top of my head I would say a challenge is something that demands of you your utmost energy or output . It requires you to be more than your average self, more than your normal self, it requires you to go beyond.

Yet another women's perception of a challenge also entailed the need to find internal strength and skills to deal with the challenge. For Cathy a challenge means, "The need to overcome a situation that calls upon resources which reside within oneself." Inherent in Cathy's perception of a challenge is the necessity to rely on oneself.

For half of the 12 women a challenge meant the ability to be persistent, to persevere at a task which is difficult to overcome. Lilly saw a challenge as something novel where you have to learn new skills. She said a challenge was, "Something major more than something you can accomplish in a short time period, not easily come by. It is something you have to persist at for a length of time to do."

The belief that one can overcome an obstacle, being optimistic they can deal with it no matter how difficult was perceived by half of the 12 women. One woman gave the following anecdote.

A challenge to me is exciting. It's something you can work through. It's

really great when it comes in a flash. What's that saying from the Asian culture.

Isn't the Asian character for adversity the same as opportunity? Well, I go that route: I do believe that.

The challenge may cause fear, yet it does not make these women pessimists. Dee is always optimistic even if she is frightened. She says, "Any new challenge always raises in me an aspect of fear, but also there's a thrill to the challenge. There's yet another opportunity to prove I can go beyond or I could do better." One woman stated it quite simply when asked what composed a challenge. She responded, "Something which there's some hint that you can do it."

The manner in which the women perceived a challenge varied. However, their responses highlighted that they used resilient behavioral and personality protective factors to deal with anything they perceived as a challenge. The responses to what a challenge meant included the following: the need to learn new skills to overcome a challenge; the need to call upon strengths which reside within themselves; the need to be persistent; to work diligently to negotiate challenges; and a sense of optimism that any challenge can be overcome. In addition, the protective factors perceived being used were autonomy, optimism and persistence.

The majority of the 12 women (see Figure 5) when faced with a challenge attempted to restructure or reinterpret the challenge. One woman has tried not to dwell on the negative aspects of the challenge. She said, "I think at various points I reflect at how difficult things have been. But having done it, I'm pleased with myself. And even if it didn't come to the conclusion I wanted, there must be something that I picked up along the way."

This woman feels she has gained inner strength from the challenges she has faced.

Therefore, what could be a negative experience becomes a positive one, and she is a stronger person for having undergone the challenge.

Another woman, Dee's strategy is to reframe how she perceives the challenge. She described: "I take the venom out of ideas. If something seems really threatening or really frightening I try to sorta undermine its importance, take the monster out of it." By downplaying the enormity of the challenge, Dee turns it into something that is not as overwhelming. With cognitive reappraisal she is then better able to overcome and successfully deal with the challenge before her.

### **Self Understanding**

All participants were asked if, when faced with a challenge, they were aware of how it impacted them. All the participants said they used self-understanding (see Figure 5). Many of the women indicated they noted physical changes in their bodies. Two women described in detail the physical symptoms they experienced when confronted with a challenge. Pat is in tune with how challenge affects her. She said: "I mean for example the challenge of the exams. I know that in fact it has an effect on my emotional stability. So I'm not as emotionally stable as I can be and I know it affects my time and my sleeping and eating patterns." Being aware of what is causing her to feel less stable is helpful as it has permitted Pat to understand this is a temporary experience that will pass once her comprehensive exams are completed. For Cathy understanding how challenges have effected her has been helpful. She says; "I've learned to listen more to my body. I get stomach aches I can tell by just listening to my body fatigue the desire to sleep all the time, those kinds of things." Understanding, how her body reacts Cathy knows when she needs to slow down and rest.

When asked if having insight was helpful to them, most of the 12 women said having insight was extremely helpful in a number of ways. For some, it allowed them to prepare themselves for what they needed to do to deal with the challenge. One woman explained:

For example, I know for this particular year right now, I've got to write this thesis. I really need to swim three times a week if I'm going to write this thesis. I know the stress and whatever I'm going to need to take my mind off things. I can also feel the stress in my stomach or like feel the anxiety physically in me I often have to make decisions about my lifestyle about my diet, about my exercise based on what challenges I'm facing.

For other women, having insight was helpful because it provided them with understanding about their characters and thus find the best way to handle the challenge. One woman described an incident where having insight about her character was beneficial:

There's certain things I know I can't do. For instance, a few months ago I found out something quite shocking. I was sitting in a teacher's office and he told me something. I knew I had to leave that situation. I knew that if I started talking I would get emotional. So I guess in that sense I had insight into my character. I went home and wrote a letter. Because of my personality I thought it best to do.

This woman had good self-understanding about the way she functioned. She knew how to handle a particular stressful situation in a manner that was consistent with her personality and important for self-control.

### **Sense of Purpose**

All the women were asked if they have a sense of purpose in life. Ninety-six percent indicated that they did (see Figure 5). Some of the women had a well defined sense of purpose, for others it was more ambiguous. For many of the women, the desire to impart knowledge to others was what guided their purpose in life. Pat's sense of purpose was well defined, as she described:

I want to teach. I want to work with students and I want to make them understand what is beautiful about my discipline. The Ph.D. students in our program have to teach first year students. So I'm working with a group right now. They're only first year so they'll probably never go into my discipline and that's fine. But I want them to walk out saying 'Oh my God I love that discipline.'

One woman's sense of purpose was to help children. Having this purpose in life helps her confront obstacles. Reciting a poem that conveys her sense of purpose she said;

One-hundred years from now it doesn't matter what kind of car I drove, what kind of house I lived in, how much money I had in my bank account but that I was important to a child. To me that is my sense of purpose that I will be important to some child, children.

Another woman also indicated how her desire to help others guides her life by saying, "Ultimately whatever I do, it's because I want to help people." One woman indicated her sense of purpose was to learn. She said: "I'm very passionate about learning and just achieving a lot of things in in my life. I am here for a purpose. I want to give as much as I can and to do that I need to keep learning so that I can keep giving."

Finally a woman indicated she had a sense of purpose but was uncertain of what it was. She just knew that she has been placed on this earth to do something wonderful.

For others, a sense of purpose provided them with a sense of hope. One woman who encountered numerous challenges to reach the Ph.D. level said that her sense of purpose drove her to overcome challenges. She said "No matter how bad it gets I want the Ph.D." For Dee the challenges and obstacles that she is presented with are those that need to be overcome in order for her to fulfil her sense of purpose. For the gifted women having a sense of purpose in life helped their resolve to overcome challenges. Having a sense of purpose then functioned as a resilient protective factor.

### **Problem Solving**

A common strategy used by 92% of the women to deal with a challenge is to use some type of problem solving skill (see Figure 5). This included either making lists, taking steps to breakdown the challenge, thinking it through or planning. For Pat her problem-solving strategy entails using organization skills. She says, "I have to write a schedule first of all the things that I need to do. And then arrange it day to day. So this is what needs to be accomplished by this day. So I organize my time." Breaking down the task makes the challenge more manageable for Pat.

Yet another women explained how she reduces the scope of the challenge by using a problem-solving strategy. She deals with challenges by breaking it down into manageable steps. She says:

In the sense not trying to look up the hill to far I always try to break  
it down into smaller components. Like you know the challenge of getting

into the Ph.D. program, we have to break it down, into making the applications, getting the things, make a list.

Yet for another woman telling others how she feels is problem-solving strategy. She said "I get very irritable, hard to live with. I can tell people how I'm feeling, so I tell them I'm overreacting at the moment so just leave me alone." This then gives her the time that she needs free of distraction to concentrate and work at overcoming the stressor.

### **Autonomy**

Eighty-three percent of the women in this study indicated they were autonomous (see Figure 5). This is a personality characteristic which allows one to have a good sense of who they are and what they are capable of achieving. This quality increased the probability that they would successfully negotiate the challenge even in the absence of external support networks.

For Pat, being autonomous helped her to accomplish her goal. She explained: "I'm a very good independent worker. I don't need someone to look over my shoulder. I can do things on my own. So, I could get away and write the chapters for my thesis and not see or talk to my supervisor for a month and a half." On a similar note, Cathy was able to feel confident that she could support herself not needing her husband's financial support to finish her education. "From the very beginning I did not want him paying for my education. It was something I was doing on my own. I was getting a scholarship. I did not want him paying for my education".

For other women, being autonomous helped them to choose a lifestyle that was congruent and healthy for them. They were able to risk acting against the norm. As Mary stated;

There are so many rewards for working hard. Our culture values it so high. And, I take the reverse pleasure. I have a lousy work

ethic. You don't get more than 40 hours of work out of me. That's it absolutely, it's not worth it

Mary knows her limits despite what others say or demand. She knows what she values in life is and she is willing to live her life according to that belief. As such, she has created a life that is efficacious for her. Therefore, the stress and anxiety that comes from living a life that is not congruent with her desires is alleviated. In this sense, autonomy serves as a resilient protective factor for Mary.

### **Formation/Utilization of Relationships**

When confronted with a challenge the ability to ask others for help or input can help decrease the impact of the challenge. The willingness to ask others for aid when faced with a challenge was alluded to by 75% of the 12 women (see Figure 5). Hen would work in her office which she shared with another 22 graduate students. She knew her colleagues would walk by her desk and discuss her thesis work with her.

For Hen the ability to ask for help was valuable when dealing with the challenge of completing her thesis. She would approach fellow students, sit on their desks and say, "I'm having problems with this: help me." Hen reflected how this action helped her to get her thesis completed.

Yeah, I think the one thing I learnt more than anything doing my thesis was that you can't do that kind of work alone. You just can't. There are contributors from my sisters from my professor, from my committee, almost all the students in

the department.

Hen's willingness to ask for help from others has contributed to her ability to complete her current life goal. When she faced uncertainty or needed advice she had the self-efficacy to recruit help which was an important strategy she developed and used.

Another woman Cathy, also stated: "I'm not afraid to ask for help. If I can't handle something on my own I will get help." Cathy, like Hen used this strategy when faced with a challenge and discovered its value.

### **Motivation**

For 75% of the women motivation helped them to overcome the challenges they experienced (see Figure 5). One theme which emerged among the women was that the motivation to understand and to gain knowledge drove them to expend effort to overcome obstacles. Intrinsic motivation for the women included the need to understand, the desire to gain knowledge and the need to achieve their goals. For example, Lilly faced numerous challenges attempting to complete a research project. Nevertheless, the intrinsic motivation behind her resolve to complete her work was the hope she would learn new skills while overcoming the challenges she faced. She said, "People look at me and say, 'You're absolutely nuts, you're crazy' and in one sense yes I am and then I go back and say 'but look what I've learnt doing this.' The knowledge that she was going to learn something from the experience provided her with the resolve to work to overcome the obstacles she faced.

Similarly, another woman said that the promise of gaining new knowledge is an intrinsic motivating factor that helps her to overcome obstacles. She explained.

What motivates me, I don't know, the fact that no matter what, I am going to learn from it. I think you need obstacles in your life. I mean you learn from your mistakes and sometimes things go well, but it's only when you face an obstacle that you learn.

Yet another woman, Hen, said what intrinsically motivated her to overcome challenges was, "That I don't understand. I hate not understanding, it really bugs me. I hate not understanding. There's just that anger- it's not just frustration."

For several of the women, the desire to see the end goal or achieve it, is what motivates them intrinsically to overcome the challenge. For Pat her goal was clearly the motivating factor. She said:

The fact that I have a goal in mind. I would like to promote my discipline and say this is what's good about it. Canadians tend to be self-deprecating about our own work and I think there's a lot of good out there. So I'd like to perpetuate that and that motivates me. In fact I have a goal- eventually I will see myself doing this.

Pat's motivation to overcome any obstacle is her vision of what she wants to achieve. This propels her to handle any obstacles she faces.

Another woman alluded to the degree of her intrinsic motivation and what it meant to meet the challenge in reference to her Ph.D. degree. Cathy said, "Stubbornness, I've gone way too far and gone through way too much to give up. I'm going to finish it and be successful at it." Cathy's motivation to overcome is the sheer determination that she will achieve her goal.

For other women what intrinsically motivated them to overcome a challenge is the power

they feel from successfully meeting the challenge. For one, the motivation came from past successes:

When I overcome something it's like a Brownie Badge. It's very empowering. I use that when I'm crying in the bathroom in the department cause I miss my husband. I think now this is not the hardest thing I've been through. It's given me the power to look at challenges I'm facing now. I can say I've already come through challenges that in so many ways were bigger or more difficult, so I've already proven my ability to survive.

Having overcome a challenge is empowering for this woman. It gives her strength knowing she has been able to surmount other obstacles and she has the strength and courage to face new ones.

Forty-two percent of the 12 women are motivated to overcome challenges because of extrinsic motivation. For some, friends and family members motivate them. One woman explained:

Not wanting to let other people down, or not wanting to have to go to them and say, 'by the way I had to drop this course, I flunked this essay or I'm coming home to live cause I can't take this anymore.' Not only do I not want to think that of myself, I don't want other people to think that of me.

This woman does not want to let others or herself down and this motivates her to overcome obstacles. For another woman, Allegra, it was her father's last dying words that serve as an extrinsic motivator to overcome challenge.

My family is proud of me. My Dad is looking down from heaven

and he's proud of me. My Dad said something to me before he died:

'Allegra you're the smart one in the family, now you take care of your mother.'

That was a great burden, but it was also wonderful because he was telling me how wonderful he thought I was that he would entrust my mother to me.

Knowing that her father believed she was capable and strong, Allegra felt the need to work hard to overcome anything.

Both intrinsic and extrinsic motivation helped the women to work hard, devote time to their work and achieve despite adversity.

### **Flexibility**

The ability to be flexible in approaching a problem was another strategy that gifted women used to deal with challenges. Eighty-three percent of the women described using this protective factor (see Figure 5). For Lynn not getting upset if she is unable to meet the goal she has set for herself suggests she must be flexible. She stated " My strategy is just do the damn thing and what you get done you get done. I don't beat myself for what I can't get done. This is the biggest strategy." Lynn may have an ideal of what she would like to accomplish, however she accepts the fact that at times her expectations need to change. Being flexible she is able to do this.

For Cathy the ability to be flexible to try different things in an attempt to resolve a problem is a helpful strategy she has used to deal with any challenge. Flexibility for her means, "Plot it through. I guess trying to figure out various ways at getting at the problem and just to a certain extent trial and error." If one method is not successful to overcome a challenge, Cathy will try another until she finds the strategy to resolve the issue.

Accepting that there is more than one way to achieve a goal has allowed the women to

overcome discouragement or disillusionment. Therefore, it modifies the impact of the challenge and flexibility works as a resilient protective factor.

### **Internal Locus of Control**

All of the women were asked if they believed that they had control over their lives. Seventy-five percent of the women felt they did (see Figure 5). They believed that the outcomes bad or good of situations were based on their own actions. One woman, Lilly explained an analogy on how this sense of control has guided her Ph.D. work:

I need to work this out on my own. I need to see where I'm headed. I have some ideas, but as I put it in my comprehensive exam, the analogy I gave I see myself in a huge apartment building with all sorts of windows that I can look out any one of them now. I can get different views and they all work, I mean right now. But, I'm not good at housecleaning, so I've got to start proposing some things and I have closed some down, but there is still many I had to work out on my own. I couldn't sort of have an interior designer come in and do it.

Lilly knows that she can go to her committee members and they can tell her what she needs to focus her studies. However, she prefers to work through the questions on her own, Lilly does not want someone making her decisions. Rather, she chooses to control and exercise her judgement to decide the focus of her research.

Some women perceived that they had control over their lives, but that there were some factors that were impossible to completely control. One woman said that she is accountable for all the things in her life but she also realizes when things are beyond her control. She shared her perceptions:

Ain't no use worrying about things out of your control because it's out of your control- ain't no use worrying. So ain't no use worrying about things within your control, because if they are in your control you're controlling them- no use worrying.

This woman focuses on the elements she can control and uses cognitive reappraisal.

The high achieving women characteristically believed that they controlled the outcome of their lives. That the direction of their life and whether they overcame the challenges they were exposed to was in their control. Moreover, believing this empowered them to work at overcoming obstacles.

### **Persistence**

This was a personality characteristic that was present in 83% of the women who took part in this study (see Figure 5). For some, possessing this characteristic made them resilient to many obstacles that they faced. Lilly was in a Master's program and it took her an two extra years to complete her degree because she was subjected to questionable treatment by her professor. Lilly vividly recalled the following:

The guidelines of the program said if you failed a course you were out of the program. My exam paper disappeared and I fought for two years, so that was a definite setback. But my personality was such that 'no I don't believe you that I'm not good enough for this.'

Dee also had to persist to achieve her goals. She left home at a young age and had to support herself financially. Dee left home and spent a number of years driving a taxi. She managed to complete high school but it took her nine years to do so.

Being persistent helped the women overcome challenges. They were able to delay gratification to pursue their goals. Despite circumstances that were challenging, being persistent they overcame them. Therefore, persistence is yet another personality characteristic that serves as a resilient protective factor.

### **Information Seeking**

When faced with a challenge 67% of the women actively sought out information which would help them find a solution to their problem (see Figure 5). For example, one woman was a procrastinator when it came to school work. She would wait until the deadline to complete her work. This was a source of constant anxiety for her. In an attempt to resolve the problem she said she did the following:

I finally read a book on procrastination. It was interesting for me. I actually traced through when I started procrastinating and it was in high school; it was a fear of failure. When I finally picked up the book on procrastination, that helped me get through the sense of frustration.

Another woman Pat, faced a serious challenge when she was doing her M.A. She sought out information to resolve it so she could successfully continue her studies. She shared her actions:

When I was in the Master's degree and I went for counselling. I was a wreck because many of my friends couldn't understand that I was working in the summer and I didn't have time for them. And I thought it was

my fault. I spent three months in counselling because I needed someone to explain it to me, to ground me and my personality.

In both of these cases the women took an active approach to gain information and insight into their problems. Once finding it, they applied new knowledge and were able to deal with the personal challenges that were causing them problems in their lives.

### **Risk Taking**

Sixty-three percent of the women interviewed took risks in order to follow their dreams to lead more fulfilling lives (see Figure 5). For Nina this meant returning to university after many years.

When I went back to university there was the loss of skills, of dealing of pushing myself forward so it took so it took a lot of persuasion by myself and my husband to get myself back, to even apply. I felt there was no way I could get through an oral exam. I was 10 or 12 years out of academic life

Despite these obstacles, Nina went forward to reach an enjoyable and satisfying life. By taking risks, perhaps one is more likely to be able to create the life they envision for themselves.

Hen was another woman who at 18 had to leave home because her parents were not willing to support her financially when she attended university. Hen said: "My parents never thought that I would go to university. They had no desire for me to go and because of that I moved out of my parents' home. Three days after I graduated from high school I went out on my

own and I had to work a couple of years to be eligible for student loans."

Moreover, by taking risks perhaps people can leave behind unhappy lives because they have created new, content ones. In this manner risk taking may also function as a resilient protective factor.

### **Refuge in Talents and Hobbies**

Fifty-nine percent of the women indicated that they sought refuge in talents and hobbies from the stress that challenges caused them (see Figure 5). For example, Lilly said the following "I usually swim, it's just like a break in my mind I can just think I guess it's for me a form of escapism." For Lilly swimming relieved the stress associated with academic challenges; having temporary relief from this stress allowed her to approach the challenges she faced with renewed energy. Similarly Nina said, " I do a lot of sewing. When I am really stressed I take a lot of walks. It just stops me thinking." For Cathy her hobby helps her place things into perspective in her life. She said, "I got involved in musical theatre. It helps me stay grounded, to keep the whole mind body balance."

For the high ability women having a talent or hobby helps them to take their mind off things that are troubling them. As such it ameliorates the constant stress and anxiety associated with challenges. Having time away from a problem may help these women to come back with renewed energy and fortitude to negotiate the challenges they are facing. As such taking refuge in talents and hobbies may function as a resilient protective factor.

### **Optimism**

For more than half of the women, optimism was a personality factor which served as a resilient protective factor. For fifty-four percent of the women, as shown in Figure 5, believing that they could overcome any challenge allowed them to not fear the challenge. This then allowed them to work towards overcoming fears because they were confident. They had the ability to manage any challenge they faced. The optimism these women held is best amplified by two excerpts from the transcripts. Dee said:

I think any new challenge that I'm facing always rises in me an aspect of fear. But, also there's the thrill to the challenge. Yet another opportunity to prove I can go beyond or I could do better.

For another woman optimism was a sustaining force in the presence of adversity:

Basically, I think I have in my mind that whatever I put my mind to I can accomplish. I set goals all the time whether it's school or relationship or whatever. And I guess I'm really confident that I can do these things. I am a very positive person

### **Social Competence**

The ability to be social was mentioned by a 34% of the women as a personality characteristic that was helpful in overcoming obstacles (see Figure 5). Being socially competent and being friendly with others was seen as a beneficial personality characteristic. One woman explained how this personality characteristic aided her:

I know what's helped me an awful lot is my social abilities. I'm friendly

and trusting, all these things has helped me immensely. I think I was instrumental in changing the atmosphere in the faculty because I got involved right away. I tried to open links between people. Then they could see they could trust me and that I wasn't a troublemaker and that I appreciated all they did for me. I wrote thank you notes I'm always polite to people and try to understand their work is important as well. They just need someone to tell their story and then they're ready to listen to what I need them for. So this interaction that's been going on has opened many doors.

Having an ability to form relationships with different people in a variety of environments is valuable. The presence of such skills makes one perhaps more acceptable or effective as collaborators; people who possess such traits have no trouble making friends and they establish networks they can call upon when in need. Thus, social competence, the ability to evoke positive responses from others is a resilient protective factor mentioned by a few women.

### **Dissociation**

The ability to distance oneself from the challenge at hand is a strategy used by 42% of the 12 women (see Figure 5). Being able to postpone dealing with a challenge until it is less overwhelming can be an effective strategy to use. Allegra described this as follows:

Certain challenges- it's just good to distance yourself give yourself a break from it. Time away from it. It doesn't mean you don't think about it, but you try not to see that person for awhile. Time can solve many problems.

For Sarah the ability to distance herself temporarily from the emotions that arise from a

challenge is a strategy she has used to cope. By doing this, she can logically think through the challenge without being overwhelmed by her emotions. Sarah distances herself from her emotions in the following way: "I can park them, that's another thing I've learned is parking so it's a stress distraction. You can't deal with them now so you put them aside, go on to something else and when I need to I can go back." By being able to temporally suspend her emotions, Sarah then can focus on what she needs to do to deal with the challenge. When her emotions are not clouding her judgement, she can better execute her plan to deal with the challenge she is presented.

The capacity to distance oneself for a period of time from life stressors serves as a protective factor. It allows one to compartmentalize the emotion until she/he can deal with it.

### **Dreamers**

Fifty-four percent of the women indicated that they were dreamers (see Figure 5). For example, Hen said that dreaming was a stress reliever for her. Reading historical romances or novels has allowed her to escape. Hen said, "I can not relate to it in the very least as opposed to these wonderful novel classics where of course you feel yourself in there but this is total escapism. I travel in them, my imagination is very vivid of course."

For Hen dreaming allows her to project herself into a different time and place. Although she is experiencing a specific challenge in the present, she can project herself into a time and place where it is not present. This may provide her with the belief that the challenge is something transient which may help her be more optimistic about experiences present in the future. This belief may moderate the impact of the challenge and serve as a resilient protective factor.

For another woman, Allegra, the ability to dream also helps her overcome obstacles she faces. She said she has a vision of what she wanted her life to be like and that drove her

towards achieving that vision.

### **Altruism**

Twenty-five percent of the women indicated that they were altruistic (see Figure 5). For example, Lilly stated: "One of my bosses said to me the problem with me is I care; I looked at him and said, 'well the problem with me is the moment I stop caring.' That's the time for me to get out." Lilly's good intentions meant that sometimes she would not follow work protocol to get things done. For example, she received donated computers and software to help the disadvantaged students in her work. However, she was reprimanded by her superior for doing this without his consent.

For Lilly, knowing she had done something worthwhile for someone who needed help made her able to defend her actions to her superior. As such, she was able to negotiate the challenge that arose. Similarly, another woman Sarah, when she encountered frustration with academic challenges, her altruistic motives for completing the degree fortified her resolve to endure the difficulties and overcome them. She said, "I'm going to help other people and right now whatever I learn, I learn to share it with others."

### **Emerging Resilient Protective Factors**

Three additional resilient protective factors emerged as being used by the women in this study. The resilient protective factors listed below have not been referred to as resilient protective factors previously in the literature.

### **Faith/Spirituality**

Two of the women said that faith and spirituality were personality characteristics which provided them with strength. For Allegra, faith has sustained her in times of adversity. She said:

I believe in God that I am here for a reason I'm doing this [Ph.D] for a reason. I'm in the right place. I just know it, God has a greater purpose for me, I don't know what it is but that gets me through an awful lot.

Believing in a higher power has provided some women with an outlet they felt they could call upon in times of need. Thus, faith was another resilient characteristic. It provided the women with hope and serenity in periods of uncertainty.

### **Confidence**

In addition, 42% of the women felt that confidence was a personality characteristic which provided them with the strength to get through challenges and difficult times. One woman, Cathy, explained: "Basically confidence which I got from my Mom. My Mom instilled in me you can do anything you want. I always believed in myself." Cathy's sense of confidence has helped her overcome challenges she has encountered.

For Lilly having confidence in her own abilities has helped her tremendously. She said:

The faculty of my program, told me I should drop out but my own personality was such that no I'm good enough for this program.

If I drop out now because you say I am not good enough that is not right.

Having a good self-image and self-concept in one's ability was a personality characteristic mentioned by five of the women as providing strength in times of need. Confidence in oneself helped modify the impact of challenges as such it served as a resilient protective factor.

### **Adversity as a Motivator**

Nine of the women felt that a particular challenge that they had overcome fuelled their desire to achieve. One woman described:

Well, I think every obstacle I overcome is a challenge. When you're going through it's difficult and sometimes you're frustrated. Sometimes you don't see the light right away; you think you're stuck forever, but after the fact I always say this has made me stronger. So not just obstacles at school, but life in general.

For another woman, not having graduated from school and the need to earn a living was the greatest challenge she overcame. Writing and obtaining her taxi licence was the accomplishment for Dee that fuelled her desire to achieve. The job security provided her with a level of self-control and was the first real accomplishment she had obtained. She said:

So this achievement this accomplishment of passing the test and getting this license, it was a real sense of achievement. I was breaking into an industry that I suppose I was marginalized in terms of my age, in terms of my sex, and my gender, in terms of my class. Because I was coming from a middle class background rather than a working class background so in so many ways I didn't belong, yet I had achieved it so it was this wonderful sensation. It also meant that I was going to be able to earn a living.

An interesting finding was that almost the entire group of women interviewed saw adversity as a factor which fuelled their desire to overcome obstacles. For example Sarah said, "I have gone through a lot of hard times like anybody else. It hurts but I say I know I'm going to learn from this." Another woman Cathy also alluded to the fact that overcoming a challenge is

empowering. She said "You may not always overcome the challenge but experiencing it then helps you deal better with future challenges." Thus, adversity served as a variable denoting a resolve to overcome.

### Summary

Most of the women who took part in this study were never identified as gifted or as talented. However, despite this 10 were placed in accelerated or gifted classes. Moreover, they generally expressed a love of school and a passion to learn.

Ten of the 12 women considered themselves as talented or creative. Moreover, they rated themselves as possessing many of the same personality and behavioral characteristics observed among gifted individuals (Enright et al, 1989).

The challenges that the gifted women in this study faced were interpersonal, intrapersonal, academic and economic. The interpersonal challenges described were: (1) the inability of co-workers, family or peers to support and understand why they entered graduate school; (2) many of the women found it a challenge to maintain old friendships; (3) finding common ground with friends who did not pursue post-graduate education was difficult; (4) the women also experienced problems with men who were intimidated by their abilities; (5) moreover, age and gender discrimination was encountered by some of the women; (6) another interpersonal challenge was the inability to maintain social relationships due to time constraints; (7) furthermore, others faced the challenge of managing multiple roles; (8) others were teased, ridiculed or were the objects of envy because they were academically gifted; and (9) finally, a

number of the participants described the challenge of hiding their abilities from others.

Another emerging theme was the intrapersonal challenges the women who took part in this study experienced. Some indicated: (1) perfectionism; (2) worrying; (3) being highly goal-oriented; (4) others said they took on too much work; (5) needed to be constantly stimulated; and (6) lastly, not seeing themselves as capable, high achieving women.

A large number of the women alluded to having encountered academic challenges such as difficulty with school work, problems with professors and a lack of opportunity to obtain an education in their city. The economic challenges that the gifted high achieving women encountered were lack of financial aid to pursue their education and the accumulation of large debts.

Several factors described helped women deal with challenges. Among them were motivation, relying on internal resources, persistence and optimism. Actions or strategies women used to deal with challenges were numerous. Some attempted to restructure or reinterpret the challenge, others engaged in problem solving. The ability to reflect how a challenge affects them was another strategy used. Distancing oneself from the challenge and the capacity to express their emotions were other behavioral strategies used by women to deal with challenges. Finding refuge in talents and hobbies helped the women modify the impact of the challenge. The willingness to ask for help and the ability to be flexible were also actions that helped them deal with challenges and to control their own destiny.

What motivated these women to overcome challenges was the need to understand or the belief that they would learn something from overcoming the challenge. For some, the desire to see the end goal or achieve it was what motivated them; others desired control which spurred

their desire to overcome challenges. The motivation came from inside themselves. For others motivation came from extrinsic sources. They all felt that they had a sense of purpose in life which helped them during periods of stress.

The personality characteristics that provided strength were the following: (a) motivation; (b) the capacity to place things into perspective; (c) the ability to persevere; (d) having a sense of faith and spirituality; (e) being socially competent; (f) intuitive; (g) having confidence in one's abilities; and (h) being altruistic.

### **Results of the Content Analysis**

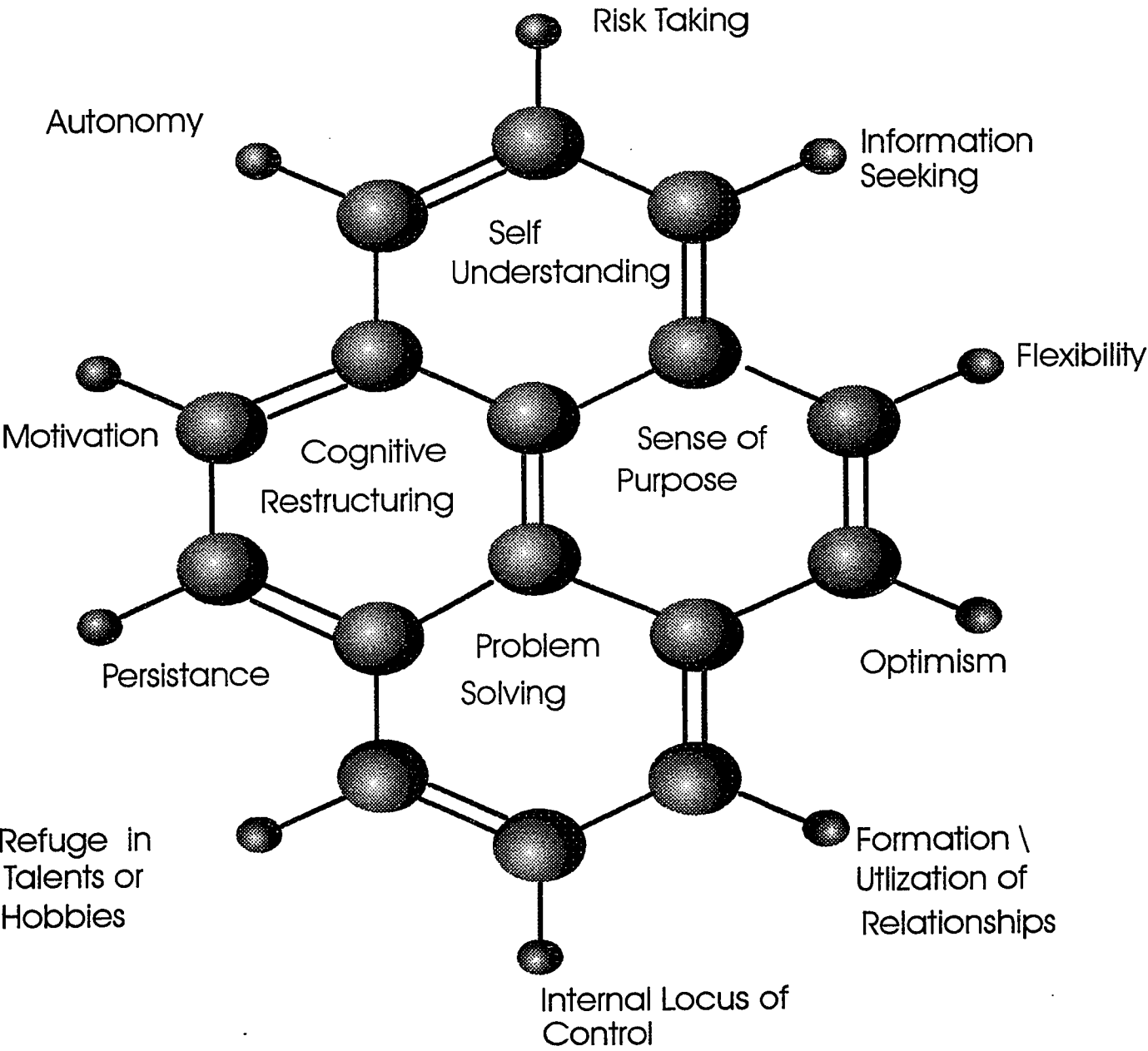
The content analysis of eighteen specific protective factors were those that have emerged as being present in populations of resilient individuals. Fourteen of the 18 resilient protective factors emerged as being used by more than 50% of the gifted women. Three emerging protective factor were identified; the gifted women were driven by adversity, they had a sense of confidence and had faith and spirituality. Only one of these emerging themes was used by 50% or more of the women. The inter-rater reliability calculated is 96.1%. What follows is a model which summarizes the challenges gifted women encountered and the resilient protective factors they used to overcome these challenges (see Figure 6). The cells in this diagram illustrate how all the protective factors joined together comprise the resilient behavioral and personality protective factors the women used to be resilient.

This study was conducted to explore if high achieving women used resilient protective factors to deal with challenges. Moreover, it aimed to determine personality and behavioral characteristics used by these women that other resilient populations have used. There appears to be evidence that the participants used resilient protective factors and they were those that other

populations have used. Each one of these characteristics and their contribution to resiliency is discussed in the following chapter.

Figure 6

# Protective Factors used <50% by Women



## **CHAPTER FIVE: DISSCUSSION**

The results indicated that gifted, high achieving women in this study encountered challenges associated with gifted abilities. This was consistent with the research literature.

All the 18 resilient protective factors that other resilient populations have used also appeared to be present in all 12 women. Moreover, three emerging resilient protective factors were also identified. However, not all the protective factors were used with the same frequency. Fourteen of the protective factors were present in 50% or more of the women. And one emerging factor was present more than 50% of the time in the high achieving women.

In this chapter, the literature on gifted women and resiliency will be reintroduced so that the reader can view the results of this study within the larger literature context. This chapter will present the following: (a) section I will discuss the interpersonal challenges the participants encountered; (b) section II discusses the interpersonal, academic and economic challenges the women experienced; and (c) section III discusses the resilient protective factors gifted women used to overcome obstacles.

### **Section I**

#### **Interpersonal Challenges**

Many of the women discussed the interpersonal challenges they experienced as a function of being high achieving women. Although some of these challenges may appear to be analogous to challenges any high achieving person may experience, research has demonstrated that these challenges are experienced in a unique and different way by women (Kerr, 1985; Noble, 1989;

Silverman, 1995). Moreover, the results of experiencing these interpersonal challenges has a different impact on women. This has been supported by earlier research by Arnold (1993) which concluded that the realization of early promise is far more difficult and complex for the academically talented women. The male valedictorians more often fulfilled their potential than the female valedictorians. Consistent with Noble's conclusions, the gifted women in this study encountered several interpersonal challenges. Each one is presented and discussed in the following section.

### **Lack of Understanding/ Ambivalence as a Challenge**

The gifted women discussed the pain and frustration they experienced as a result of peers, family members and others not understanding why they had chosen to further their education. This is consistent with earlier research (Kunkel et al, 1992; Yewchuck et al, 1991; Callahan, 1991; Leroux, 1992). The women spoke about how others' lack of understanding hindered their interpersonal relationships. People were at times ambivalent about the decision women had made to pursue a graduate education. Moreover, the high achieving women were also discouraged from pursuing their goals. This finding supports earlier work done by Noble (1989) who found that the women she interviewed said they were encouraged and discouraged simultaneously by their families to pursue their goals (Noble, 1989). This is not surprising considering that families, teachers, and peers may reject females who deviate from the norm. Many gifted women are taught at a young age that competence and achievement will be accompanied by loneliness and social rejection (Noble, 1989). Most of the women in this study said that the lack of understanding from significant others made them question their resolve to continue their education, and they were also worried about being goal orientated. If significant people in a

person's life ascribe to the notion that reaching high achievement will lead to isolation and unhappiness, it is not surprising that women who have invested a considerable portion of their lives to obtain a graduate education worry about the possibility that pursuing such goals will lead to unfulfilled lives.

For other respondents, the lack of understanding meant they found it difficult to elicit support. When a woman is repeatedly confronted with a lack of understanding and encouragement to achieve her goals, in times of need she may find herself without support networks. Knowing how others feel about her ambitions, she may feel she has no one to turn to for support.

### **Old Friendships as a Challenge**

Several of the highly able women alluded to another interpersonal challenge, maintaining old friendships. They said they often found themselves in conversations that were not stimulating and that they could not relate to. Many women interviewed were leading different lifestyles than their peers. They alluded to being bored in conversations or unable to discuss what they found interesting, such as their work. This led to a sense of isolation, and thus the women could not talk to people who were once close to them about topics related to their primary love, their research and academic work. This finding supports Miller & Kastberg's (1995) study of gifted women. The results of that study found that gifted women felt both isolation and a loss of connections with family and hometown friends. Miller et al (1995) concluded that this loss of commonality was due to their growing apart since the women were living lifestyles that their friends and family could not relate to. This research supports the finding in this study that high achieving women sometimes hide their accomplishments because they felt that their families or

peers would not understand what they have achieved.

Similar to previous research findings, in this study loneliness that arose from losing connections with family and friends was a salient theme among the gifted women. This finding supports earlier work by Silverman (1993c) who concluded that what makes a person exceptional is can also be that which may also make them lonely. Being gifted high achievers can help women accomplish their goals but it is also their source of isolation. Despite these life challenges the women participants in this research used personality and behavioral characteristics to negotiate such difficulties.

### **Men as a Challenge**

Men were identified by the women as a source of interpersonal challenge. The emerging theme was that men were perceived to be intimidated by these women's achievements and intellect. The fact that men do not feel comfortable among high achieving women has been previously noted by Noble (1989). The women in the present study said they found it challenging to establish relationships with men. Some women felt their partners could not relate to the commitment they had made to their academic goals. In addition, some of the women interviewed felt that they were living separate lives at home and at school. As a result, divorces or end of relationships were not uncommon experiences for these women.

All the high ability women who had successful relationships with men, had partners who understood and supported their goals. A number of the women said that the support received from their partners was invaluable in providing them with strength which in turn helped sustain them in times of need. This finding replicates that of Subotnik and Arnold (1995) which concluded that gifted women who had a partner who valued their career had a positive influence

in their lives. However, the remainder of the women had partners who did not support their educational goals.

Moreover, most of the women experienced problems with men, such as men being intimidated by their abilities and the felt need to prove their abilities because they were women. These experiences were the source of interpersonal challenges for the women. However, using resilient protective factors they were able to overcome these difficulties.

### **Age Discrimination as a Challenge**

Many of the gifted women interviewed found themselves in prestigious positions at a young age. This was a result of a combination of three factors: intelligence, motivation and persistence. However, in achieving their goals at a young age, they were often questioned and challenged about their abilities. At times this made the gifted women doubt their abilities. Being discriminated based on their age was an interpersonal challenge. The high achieving women found themselves in situations where they had to defend their abilities. At other times, they were denied support and encouragement to fulfil their goals. For the women participants this compounded their belief that they lacked the skills and experience to complete graduate school or fulfil professional roles. Despite these challenges the women strived to modify and adapt to the age discrimination. They did this by using specific behavioral and personality characteristics which allowed them to do this.

### **Gender Discrimination as a Challenge**

Another interpersonal challenge the women had experienced and continue to face is gender discrimination. The women indicated that their abilities at times had been ignored, and that their academic competence was judged based on their gender. In many cases the gifted

women interviewed recounted comments they received from men and male professors because they were women. The women were judged negatively for being assertive and expressing their opinions. The gender discrimination the women faced was a source of frustration. It called upon their resolve to remain committed to their goals and values.

Perhaps this finding is understood in relation to research that has documented that gifted women are treated differently than gifted males by educators. Male and female teachers appear to like gifted males better and are viewed as more capable. In addition, teachers would negatively perceive certain characteristics in gifted females but would evaluate these same characteristics as positive in gifted males (Fox et al 1981; Cooley, Chauvin & Karnes, 1984). Repeatedly, they found themselves in situations where they had to prove they were competent women. This was a source of distress and anxiety for the women. Moreover, the women had to work hard to override the impact the gender discrimination had upon them. The need to call upon internal resources allowed these women to successfully reduce the impact of negative, biased comments that were directed at them.

### **Social Relationships/Time Constraints as a Challenge**

Another obstacle which compounded the high achieving women's interpersonal challenges was that they made a conscious decision to curtail their social relationships because they lacked time. As some women indicated, it appeared then that friends and family members believed that they were avoiding them. Others did not believe or understand they had such limited time available. For several of the women, this made them feel guilty that they were not giving enough time to their friends and families. This conflict may exist for gifted women because according to Gilligan (1982), the importance of interpersonal relationships and connectedness is great for

women. Moreover, Reis (1987) stated that gifted women who were pursuing their goals in a way that would allow them to realize their potential risked taking time from their friends and families which was a difficult task.

For the participants in this study the challenge they encountered was not to feel guilt for deciding to curtail their social interactions so that they could pursue their academic goals. Many of the women made a conscious decision to sacrifice their interpersonal relationships, however, the difficulty arose when they felt misunderstood by friends, families and peers. These people did not understand their need to curtail social interactions. Rather they believed the women were avoiding them because they no longer valued their friendships or relationships. Despite feelings of uncertainty and guilt, the high achieving women used resilient protective factors to lessen the sense of guilt for choosing to place their own academic goals as the priority in their lives.

### **Multiple Roles as a Challenge**

Social relationships and time constraints tied in with the other common interpersonal challenge the women experienced, multiple role conflict. The women in this study were balancing multiple roles such as being graduate students, partners, mothers, daughters and workers. Balancing all these roles was difficult and a number of the women felt that everyone else's needs were placed before their own. They voiced the need for their families to understand the many demands with which they were confronted.

In addition, the women felt remorse because they were not always able to fulfil the demands placed upon them. This feeling of guilt about how much time to devote to their families versus the pursuit of one's own goals was often experienced by women. Research has shown that women who were ambivalent about family or career roles faced internal dilemmas. Gifted women

were no different. Women experience stress related to role conflict and this is also true of women who are high achievers (Csikszentmihalyi & Robinson, 1986; Noble, 1989). The women's words supported this finding, stating that they struggled with ambivalence and guilt that stemmed from the role expectations they and others held of them.

### **Ridicule and Jealousy as a Challenge**

The gifted women alluded to being teased because they achieved well academically. The women also perceived that they were teased because they were precocious. However, this was a challenge the women faced more often when they were children. One difficulty they perceived as adults was that others were jealous of them. The women recalled being treated unkindly because others envied what they had achieved. Moreover, some peers ignored them or spoke negatively about them to others because the women achieved great accomplishments in their academic careers or profession.

The fact that people were jealous of the gifted women in this study was not unusual. For example, Kunkel et al (1992) interviewed gifted children who said that one of the problems they experienced was that their peers were jealous of them. For some this meant they were ignored or teased. Such difficulties also emerged for the high ability women in this study. The envy and jealousy they experienced made the women upset and frustrated with the unfair treatment to which they were subjected, such as being excluded from social events and being ignored by their peers.

Being teased for their academic abilities was also a source of difficulty for the women. As adults people ridiculing them for the abilities was another challenge which arose. This caused emotional worry and distress for the women. It was not easy to feel unexcepted because of what

people wrongly perceive about you. The women in the study had to learn and develop skills to mediate the impact ridicule and jealousy had upon them. In fact, the women that experienced this difficulty used some of the resilient protective factors to negotiate this challenge.

Based on the interviews conducted with the 12 high ability women, it is evident that they have had to overcome many interpersonal challenges to achieve what they have. To do this they used behavioral and personality characteristics. The specific resilient protective factors they used are summarized after discussing the intrapersonal challenges the gifted women encountered.

## **Section II**

### **Intrapersonal Challenges**

In order for an individual to be labelled resilient she\he must have been exposed to challenging or threatening circumstances. They were considered resilient if they were able to adapt to these challenges.

Gifted individuals possessed certain personality characteristics that could be the source of intrapersonal and interpersonal difficulties (VanTassel-Baska, 1989; Silverman, 1994; Altman, 1983; Buescher, 1985; Delise, 1992; Freeman, 1983; Roedell, 1984). The ability to manage these difficulties meant that a person had been resilient.

The women who participated in this study were all highly able individuals. They possessed characteristics that were the source of problems, and for many, they were able to negotiate these difficulties and thus proved they were resilient.

One of the primary goals of this study was to understand the challenges the participants encountered as a function of being gifted, high achieving women. As has been summarized, the

gifted women who were interviewed identified a number of challenges in this regard. The challenges the gifted women experienced may appear as not being unique to individuals of high ability. However, numerous studies documented that gifted individuals have unique personality characteristics, such as feelings of being different, that caused difficulties for them (Lewis et al 1992; Austin & Draper, 1981; Buescher, 1985; Gallagher, 1985; Janos, Fung & Robinson, 1985; Maddux, Scheiber & Bass, 1982; Cross et al, 1991; Jenkins-Freidman et al, 1988; Robinson, 1989).

Personality characteristics that gifted individuals possessed could be the source of obstacles both intrapersonally and interpersonally. There are mixed results from studies; some stated that high intelligence made people prone to social and emotional adjustment problems (Hollingworth, 1942; Roedell, 1986; Buescher, 1985; Delisle, 1992; Subotnik, Karp & Morgan, 1989). Other studies have concluded that gifted individuals experienced similar problems that were not unique difficulties relating to their giftedness (Grossberg et al, 1988; Freeman, 1994). In this study, however the findings were clear that the gifted high achieving women indicated that they experienced unique problems associated with their giftedness and specifically with being high achieving women.

The following section discusses some of the intrapersonal challenges these women experienced.

### **Hiding Their Abilities as a Challenge**

An intrapersonal challenge many of the women experienced was the belief that they had to hide their abilities. It was not surprising to hear that many of them were selective about whom they confided to about their accomplishments. This finding was previously established by Miller et al (1995) who concluded that being unable to share and hide their careers was a source of pain.

Many of the gifted women in this study did similar things. Some of the women interviewed changed their manner of speech and refrained from discussing their research with friends and family. Also consistent with earlier findings, the women indicated that it was an exhausting endeavour to try and hide what they had achieved. There were two reasons that motivated them to hide their abilities: fear of social rejection, and wanting others to feel comfortable in their presence.

As reported previously in the literature review, gifted women were often subjected to gender discrimination, ambivalence, lack of understanding, and rejection from men and colleagues for being ambitious women. The women in this study were no different. They were well aware of the price associated with revealing too much about themselves to the wrong people. As such, they wanted to protect themselves from being socially rejected so they chose to hide their accomplishments. Similar to Noble's study (1987), fear of social rejection and a desire to be accepted socially caused them to hide their abilities.

Gifted women are similar to all women in that they feel a strong need to nurture, care for others, and experience difficulty placing their needs ahead of others ( Silverman, 1986; Schwartz, 1980). This supports the second reason the women in this study perceived as motivating them to hide their abilities. Namely, not wanting others to feel uncomfortable in their presence. The highly able women were intuitive and sensed that people were sometimes intimidated by their accomplishments. They felt they could alleviate uneasiness by being caring and nurturing. Although this meant concealing aspects of themselves, the women did so willingly, placing others' feelings ahead of their own.

### **Perfectionism as a Challenge**

A common personality characteristic among gifted individuals is perfectionism (Roedell, 1986; Osche, 1990; Whitmore, 1980; Freeman, 1994). This personality trait can be both a positive and negative trait to possess. The women in this study identified perfectionism as a trait which allowed them to achieve, but it also was a source of difficulty for them. Perfectionism for these women made it a challenge for them to accept their limits. The problem that arose was the women pushed themselves to the extreme. Their focus, ambition and goal orientation made it difficult for them to find a balance between their personal and professional lives. They were extremely demanding of themselves and of others. The women commented that because they were perfectionists, they tended to be overcritical of themselves. This finding was supported by earlier research (Webb, Meckstroth & Tolan, 1982; Sowa et al, 1994; Roedell, 1984).

Perfectionism also caused problems for the women in friendships. It was difficult for some of these high ability women to recognize that not everyone was as motivated as they were. Expecting a lot from people and from themselves, they often felt they and others did not live up to their expectations. Being perfectionists, the women would lose perspective and were unclear about what was necessary compared to what they felt was needed. This lack of perspective made others upset and annoyed with them because their expectations were unrealistic. This reduced the number of people with whom they felt they could associate. Therefore, these women often found themselves to be isolated.

Finally, another difficulty which stemmed from perfectionism was that the high achieving women would become too focused on themselves and their work. They often felt they were missing out on life, not enjoying their lives because they were too involved in attempting to

achieve their goals. In its negative form perfectionism meant they set unrealistically high standards for themselves. The women however learned to modify the expectations they held of themselves by using coping strategies that were effective in curtailing their need to be perfectionists at all times.

However, perfectionism is not only a negative trait. It can also be a positive trait. "The gifted will continuously set unrealistic standards for themselves, will fight windmills and city hall, will persist when others have given up" (Silverman, 1993c, p.58). This finding was supported by this study. In its positive form, the high ability women said perfectionism allowed them to function and persist when presented with obstacles. Being perfectionists, they were determined and motivated to not only reach their goals, but fulfil them to the best of their abilities. Thus, the gifted women often managed to mediate this personality characteristic and were resilient to the possible negative consequences of being perfectionists.

### **Chronic Worriers as a Challenge**

Chronic worrying was a personality characteristic which emerged among the gifted women as a source of concern. The women claimed it was a challenge to relax and feel confident in their achievements and successes. Worry was predominately associated with the fears women held, such as the fear of failure, fear of making mistakes, being laughed at or criticised. Moreover, the tendency to worry was not only restricted to present fears, but also future fears. Essentially the women were worrying about what they feared. Chronic worrying was a difficulty for the women because it was a continuous distracting thought process which made it difficult for them to focus on their work. With time, experience and successes the women came to understand that their fears were unfounded. By using self-understanding, cognitive

restructuring and other protective factors they were able to modify the impact their fears which in turn reduced their tendency to worry. Despite possessing a tendency to worry, the gifted women were resilient and developed skills to curtail this tendency.

### **Work Commitment**

The women interviewed had an exceptionally heavy work load. The tendency to accept and do a lot of work was characteristic of the women. For some their educational goals drove them to work hard. This finding is supported by earlier research conducted by Gardner (1997) who reported that it was not uncommon for gifted adults to make a conscious decision to stay up long hours because they were dedicated to learning. The challenge which arose because the women were committed to their work was that they did not allow anything to interfere with their work or school performance. The positive result was that their grades and job performance was exceptional. However, the negative aspect was that they would neglect other important activities such as attending family reunions and nurturing personal relationships.

Moreover, the high ability women talked about how others did not understand why they needed to work so hard. What occurred then was that the women found it difficult to realistically assess what amount of work was necessary versus what they perceived was a realistic good work load. The difficulty the women faced was they would question if something was wrong with them because they had different goal, values and lifestyles than their peers. At times they would ask themselves if they were sacrificing too much in the pursuit of their academic goals. This finding was similar to that of (Gardner, 1997 & Napier, 1995). Despite the tendency to accept too much work, the women perceived overall they had balanced lives.

### **The Need to be Stimulated as a Challenge**

A number of women discussed the awareness that their level of thinking was different from others. The women described their ability to think analytically, specifically, that they had an ability to think in detail about any subject and that it was difficult for them to let go of ideas. This is not unusual given the literature that has documented that gifted individuals think differently from others. For example, Powell and Haden (1984) found that gifted individuals had a desire to understand complex ideas and had a need to search out inherent patterns of logic or meaning in information. This was similar to the experiences of the women in this study.

The personality characteristic of needing to be stimulated translated to the need for these women to be engaged in deep intellectual conversations. However, the concern was that there were few people like them. Therefore, the gifted women felt that something was missing in their interactions with others. This inability of people to understand and follow their train of thought was a source of frustration for many of the women. A number of the participants said that they found it difficult to meet people who wanted to talk about things that interested them. It was a challenge to find people to whom they could relate. This was not an uncommon challenge gifted individuals experience (Lewis et al, 1992). The need to find peers who can communicate at an intellectual level and who are compatible was a concern perceived by the high ability women in this study.

One emerging theme was that these women had a problem with routine, they felt the need to be continuously challenged. Specifically, if something was no longer stimulating and challenging for them, they took the necessary actions to change this reality. Some left established careers and vocations to find something that was more engaging. Peers and families could

not comprehend their need for continuous new knowledge and thus, they experienced a lack of understanding from peers, family and colleagues.

There are studies that document similar feelings among gifted children. However, the majority of the literature has focused on boredom and lack of stimulation gifted children have with their school work (Feldhusen et al, 1991; Reis & Prucell, 1993). For example, Plucker and McIntire (*in press*) reported that gifted children created challenges for stimulation and for growth in their own environments. The women's narratives support Plunker et al's findings that gifted individuals sought out and created challenges for themselves when challenges were not present. The need to be enriched and stimulated was an intrapersonal challenge that was a source of frustration for the gifted women.

### **Underestimating Self as a Challenge**

Gifted women who experience the imposter syndrome did not internalize a sense of being competent, rather they attributed their success to external causes (Langford et al, 1993; Clance, Dingman, Reviere & Stober, 1995). The findings in this study confirmed this. Many of the high ability women discussed similar feelings such as: (a) they were less competent and intelligent than they appeared; (b) they felt their success and achievement was the result of an error; (c) it was difficult for them to accept praise for their accomplishments; and (d) they feared others would discover they lacked the knowledge to be in the positions they were in. Although, only one woman directly alluded to experiencing the imposter syndrome, others talked about possessing feelings and behaviours consistent with the phenomena.

According to Clance et al (1995), the imposter syndrome was experienced to a greater extent by women than men. Several of the gifted women in this study supported Clance et al's

findings. The women reported approaching work in two ways: (a) they would over-prepare; or (b) they would procrastinate. These two behaviours played into the imposter syndrome. First of all, by over-preparing, the women would come to believe that they must work harder than others in order to achieve. Second, if they procrastinated, they would move to get their work done in a frenzy. They would manage to achieve their task, but would believe they had fooled the others again, and thus would feel like imposters. When the work was completed, they might receive positive feedback on their accomplishments, but acceptance did not last long. Beginning the next goal, the women would then start to re-experience the anxiety, doubt and fear which they had come to believe was necessary for them to be successful.

Much of the research conducted with gifted women who experienced the imposter syndrome documented the negative outcomes it caused for women. Namely, because they feared failure they avoided intellectual challenges because they believed they could not keep up the imposter role of being successful (Clance et al, 1995). The repercussions of the imposter syndrome are numerous, such as avoiding intellectual challenges, turning down promotions or opportunities for advancement, and not working to fulfil one's potential (Clance & O'Toole, 1987; Clance et al, 1995; Holmes, Kertay, Adamson, Holland & Clance, 1993).

This was not the case in this study. The women in this study often felt anxious and feared they would be discovered as being unable to occupy the positions they did. They could not often internalize the success and joy that came from their accomplishments. As such, the self-esteem and confidence that should accompany academic success was not often experienced by the gifted women. However, many of the gifted women continued to function in highly competitive academic environments, harbouring self-doubt about their right and capacity to be in such

demanding programs and environments.

Not one allowed these doubts to stop them from achieving and pursuing their goals. Given the fact that in research reports many women who had similar feelings abandoned their dreams and ambitions, these highly able women appeared to use established personality and behavioral factors to negotiate these feelings.

### ***Economic Challenges***

Another challenge encountered as a function of pursuing a higher education for the gifted women was a financial one. It should be noted that no evidence was found in this study to suggest that this challenge arose as a function of being high achieving women. It is just as likely that economic concerns the gifted women experienced are similar to those that any graduate student experiences regardless of gender or ability. However, some research has documented that high achieving women who go on to pursue a higher education incur financial debts (Langston, 1993; Tokarczy & Fay, 1993). This was an economic challenge that some of the women in this study described. However, they qualified their descriptions by saying it was because either they did not get along with their parents, or that their parents never expected them to go to university and were unwilling to support them financially.

Not one of the women associated their families' lack of financial support to their being gifted women. Regardless, the women in this study faced economic challenges while pursuing graduate studies. Some were unable to continue at the doctoral level because they lacked the financial means. Others had enormous financial debts. Moreover, some were holding down research positions, part-time jobs and a full academic course load while pursuing graduate studies. The stress and anxiety associated with the economic challenges for some of the women was a

continuous source of difficulties.

### **Academic Challenges**

The final domain the women identified as a source of challenge was academic work. The gifted women experienced difficulty with course work, professors and university bureaucracy. However, based on the interviews, it can not be concluded that the academic challenges these gifted women encountered were any different from those graduate male students experience.

For example, some of the women struggled to complete required course work. Yet others, faced setbacks academically because of disagreements over research interests or being subjected to unfair treatment by professors. One woman drove two hours once a week in order to complete the final course in her program. Another women left the country in order to register in a course which she had failed and could not repeat at the same university. Still another of the women struggled academically because she was dyslexic. This meant it took her a longer period of time to complete course work and obtain her degrees. However, despite these academic difficulties the high achieving women negotiated the challenges and were resilient in facing them. This is supported by the fact that all of the women who encountered academic obstacles have obtained high levels of education .

The challenges and obstacles the women faced were numerous, such as the lack of understanding from families and peers, men, age discrimination and gender discrimination. However, the goal of this study was not only to state the challenges women encounter, rather it was to understand how they negotiated these challenges. What resilient protective factors did the women use to do this? It was imperative to provide a comprehensive backdrop of the realities that highly capable women experienced.

This study supported previous research by Hollinger (1991), Noble (1989) and Reis (1987) that gifted women faced challenges associated with their abilities. The challenges have an impact on them interpersonally and intrapersonally. The high achieving women coped and developed resilient protective factors to negotiate and become the heroines of their own lives. The manner in which they did this will be presented in the next section.

### **Section III**

#### **Resilient Protective Factors**

One of the research questions guiding this study was what behavioral and internal resilient protective factors do gifted women use to overcome the challenges they experience? The following is a discussion of the 18 resilient protective factors the women used. They were similar to those that other resilient populations have used. As well the three emerging protective factors are discussed

#### **Cognitive Restructuring/Reappraisal**

Restructuring or cognitive reappraisal was a resilient protective factor that was used by all the gifted women. The cognitive appraisal of a challenge or circumstance would influence the manner in which a person responded to that challenge. The same event can be perceived by different people in a myriad of ways. The person's cognitive appraisal of a life event would determine if she experienced it as stressful or not (Garmezy, 1983). Resilient people used cognitive reappraisal in two ways: they reframed a negative situation into a positive light, or they compared their situation relative to others.

When confronted with a negative event, resilient people attempt to change their appraisal

of the event. This meant they changed the perception of the negative event (stressor) and reappraised it in a positive manner, which then helped them cope with the aversive life event. Some self-enhancing distortions such as positive illusions, exaggerated beliefs of control or unrealistic optimism could be psychological self-enhancing behaviours.

When the women reported changing the appraisal of a negative event, this may have minimized the impact and seriousness of the experience. *Minimization served as a protective factor because it facilitated the capacity to cope with the stress which arose from a negative experience. Moreover, reframing a challenge in a positive manner allowed the women to shift their focus from the stressor to energy and the actions they needed to use in order to resolve the challenge.*

Reframing a challenge into a positive manner was used as a way to deal with a number of challenges the gifted women experienced. Firstly, the manner in which they perceived a difficulty was evident in the way they engaged in cognitive restructuring. Rather than seeing a challenge as something negative and fearful, they saw it as something novel and as an opportunity to learn new skills. Some even became excited by a challenge and saw it as an occasion to prove to themselves and others that they were capable women.

Resilient individuals who engaged in the cognitive reappraisal of a difficult situation believed that overcoming a challenge made them stronger human beings (O'Connell-Higgins, 1983). This has also been supported by Himelein et al (1996), in their study of resilient women who were abused. Similarly, in the present study, the highly able women believed that experiencing challenges allowed them to gain invaluable skills and lessons. The women interviewed believed the lessons they learned provided them with strength of character. Cognitive

restructuring allowed them to place the challenges they experienced into perspective.

The second manner in which resilient individuals used cognitive reappraisal was that they believed having experienced and overcoming a challenge has made them better equipped to deal with future challenges. Having negotiated the challenge, the women participants felt they had added another coping strategy to their repertoire of resilient protective factors, calling upon it in future need. This manner of cognitive restructuring was repeatedly reported by the women. They did not become discouraged or pessimistic about the challenges they confronted. For example, when the women were faced with academic challenges, knowing that they would come out of the experience with new skills for the future, allowed them to persist.

Yet another way cognitive restructuring was used by the resilient individuals was that they evaluated their situation in relation to others. This meant comparing oneself to others and seeing oneself as being in a relatively fortunate position (Taylor, Wood & Lictman, 1983). As the resilient person begins to understand that in fact there are positive circumstances working in her favour, she gains hope and reframes the perception of experiences in positive terms. For these women, therefore, the stress of looking at a challenge in solely negative terms was alleviated.

Cognitive restructuring in this manner was also used by a number of the women to negotiate the interpersonal challenges they encountered. One challenge, for example was that the women encountered criticism for the choices they made in their lives. However, by cognitively reappraising their experiences, they came to a new understanding, namely, that the people who criticized them were themselves discontented with their own lives.

In contrast, the women were content. They enjoyed their lives because they were intellectually stimulated. Moreover, they had no regrets about the choices they made, contrary to

those who were ambivalent and criticized them. Therefore, by comparing the satisfaction in their lives to others' dissatisfaction, they saw themselves as fortunate. As a result, the impact was of a lesser magnitude when they later experienced other social distancing and criticism.

Some of the women used cognitive reappraisal to deal with the problems they had with men. For instance, one woman divorced her husband. In order to cope with this situation, she compared herself to other women in similar situations. She came to the conclusion that she was in a relatively better position than other women whose husbands had left them. This woman acknowledged that she had money, a home and no children to care for. Therefore, she was in an ideal situation to face the challenge before her.

Reappraising her situation in this context gave her the optimism she needed to face the challenge of her future life. Having modified the impact of the stressor helped her adapt better, thus engaging in cognitive restructuring functioned as a resilient protective factor.

Several of the women used cognitive restructuring to focus on alternative explanations for the social challenges they experienced. For example, many friends and family members did not support their commitment to academia. Rather than becoming upset and hurt by this lack of encouragement, the women reappraised their perception of what others were saying. They reprocessed their initial perceptions that people were saying things with the intention to hurt them. Through cognitive reappraisal they came to the conclusion instead that others could not relate or understand the personal satisfaction the women experienced from learning. They told themselves perhaps those who did not support their decisions never experienced doing something that was personally gratifying. Cognitively reappraising the motive behind others' lack of support for their academic goals made it easier for the women to deal with those experiences. Thus,

cognitive restructuring functioned as a resilient protective factor for them.

Similarly, another gifted woman used cognitive restructuring to deal with the end of her marriage. She came to the conclusion that her marriage ended in part because her husband did not respect her academic goals. Throughout their marriage, his lack of understanding was the source of pain and frustration for her. Although the termination of the marriage was difficult, she felt that now she was free to do and be who she really was and could focus on her primary interest, research. Therefore, by reappraising the situation she came to see that the failure of her marriage was in fact, the beginning of being able to live the life she had always envisioned for herself. This, therefore, decreased the stress and sadness of her divorce and made her better able to deal with that stressful event.

As discussed previously, some personality characteristics associated with being a gifted individual could be difficult to negotiate. Perfectionism was a characteristic which caused problems for many of the women. For example, this personality trait resulted in extreme anxiety or stress for a number of the gifted women. However, they used cognitive restructuring to negotiate this trait. They came to the understanding that the way they worked and what they expected from themselves was unrealistic. Placing things into perspective, they reviewed their own behaviour, acknowledging that if they continued to strive for perfectionism they would never have an opportunity to enjoy their lives. Therefore, several of the gifted women cognitively reframed the way they approached their work.

Rather than always striving to be perfectionists, they lowered their expectations. Some gifted women began to realistically assess the amount of work that was required of them. By engaging in cognitive restructuring they focused on the negative aspects of their past behaviour

and developed more adaptive ways to deal with their perfectionistic tendencies in the future. This reappraisal of their behaviour served as a resilient behavioral protective factor for a number of the women.

The use of cognitive restructuring was used by the women to deal with other challenges as well. Some were ridiculed because they were gifted students. However, by using cognitive restructuring the women did not let it affect them. Several of the gifted women asked themselves if the people who teased them were those they admired and respected. Since they were not, these same people's opinions of them no longer mattered. As such, the impact of the ridicule was less profound for the women.

Cognitive restructuring was also used to deal with economic challenges the high ability women encountered because they pursued graduate education. Financial worry was a common source of stress and uncertainty for women. Rather than being held back by economic challenges, they prevailed over them. The women acknowledged that it was a difficult financial struggle in order to pursue their education. However, having successfully negotiated the challenges, they believed they came out with greater strength. Moreover, they believed the economic challenges they faced gave them a greater motivation to achieve.

### **Self Understanding**

In general self-understanding is a complex resilient protective factor, made up of a number of components, including being insightful. Resilient individuals are insightful about what has happened to them, how it has affected them and what they need to do in certain situations. They are also perceptive about what has allowed them to function and adapt when they experienced earlier challenges. Resilient individuals have the ability to understand how to

respond in difficult situations. This helps them be aware of what they need to do in order to overcome challenges they are presented with. This self-understanding was evident with all of the gifted women in this study.

For example, when faced with academic challenges, several of the women dealt with them in a systematic way. Having insight about their characters, they knew when they needed time alone to reflect upon what needed to be done in order to deal with the academic challenges they encountered. They developed the ability to understand why they were feeling stressed, bored or overwhelmed. Having this insight into their personality helped them to overcome academic or economic difficulties. The gifted women could reflect about what was causing them problems and therefore take the steps needed to change their circumstances.

In one case, a woman respondent understood that when she was writing exams she tended to worry. This then affected her emotional stability, eating and sleeping patterns. She understood how the exams caused specific problems and she knew what she needed to do in order to lessen those problems.

Moreover, having insight into her personality and how to best deal with this particular challenge permitted her to take actions that were congruent with her abilities and disposition. This, in turn increased the possibility she could successfully negotiate those challenges.

Self-understanding functioned in this manner for several of the gifted women. In relation to different challenges, self-understanding helped them adapt and function, being able to take actions which decreased the stress associated with the challenges they were experiencing. As such, self-understanding served as a resilient protective factor for the gifted women interviewed.

O'Connell-Higgins (1983) concluded that resilient people were reflective. They

attempted to gain insight and perspective regarding what they were confronting. Women in the study believed that having knowledge and self-understanding allowed them to grow, develop and change situations so they would be more successful to their lives. For instance, some of the gifted women would hide their abilities. By analyzing their motives for doing this they came to understand that they hid their abilities because they feared failure and possible ridicule. However, through reflection, a number of the highly able women came to the understanding that it was not the fear of failing, but the fear of succeeding which caused them to hide their abilities. Having this information helped them understand what they needed to do to alter their perceptions.

In one case, a woman said that she came to an understanding that for most of her adult life, she was receptive to everyone's needs except her own. Understanding this she made the decision to return to school, something she had always wanted to do. Using self-understanding, gaining information about why she was unhappy, helped this woman take the necessary actions to improve her life. It was evident, that self-understanding served as a resilient protective factor for her.

It has also been found that resilient individuals believed that knowledge and information would provide them with the capacity to change, ameliorate or overcome situations (O'Connell-Higgins, 1983). This belief was held by a number of the able women in the study. For instance, to deal with ambivalence from others, the women would analyze the impact upon them of what others had said. To illustrate this point, some of the women interviewed were criticized by other women for choosing to leave their careers and raise their families. Being insightful and having an understanding about themselves, the gifted women knew their decision was the right one for them. Moreover, if others did not respect their choices, they used self-knowledge to conclude the

others were not true friends. As such, using this insight modified the impact others criticism had upon them.

Garmezy et al (1983) found that resilient individuals had an acute awareness of their own needs and limits. Therefore, they avoided situations that made demands on them that they could not fulfil (Garmezy et al, 1983). For the women in this study, being aware of one's limits and capabilities meant that one can set realistic goals. When several of the gifted women perceived that they were perfectionists who were too goal orientated, they came to an understanding that they set unrealistic demands upon themselves. For instance, one of the women experienced panic attacks because her expectations were too high. She came to understand the attacks were the result of the demands she placed on herself. Today she sets realistic goals and she does not make demands on herself which will cause her unnecessary stress.

Having self-understanding served as a protective factor because it allowed this woman to make decisions that led to a better lifestyle. Moreover, the likelihood of her achieving the goals she sets has increased. She no longer will do more than she is capable of doing. Therefore, she perceives it is less likely she will become disappointed or discouraged because she cannot meet her goals. She does not avoid or ignore the stress from unrealistic goals, she chooses resilient behaviours to control it.

The capacity to engage in self-understanding also meant that when one encounters a potential future challenge, you have the ability to recognize the similarity between the present, past and future events. Having a good self-understanding about a past experience can help one in the future if you have the ability to make connections between the two experiences. For example, if a person's experience with a past event is negative, analyzing and reflecting upon what one may

have done differently to make it more successful is a helpful strategy that can be employed in the future (Butler & Meichenbaum, 1981).

A number of the gifted women in this study used self-understanding in order to develop adaptive strategies they could use in the future. For example, one of the gifted women did not spend enough time with her husband and parents when completing her masters degree. Her father becoming ill was a turning point. She reflected on her ambitions, but she was also aware that she needed to spend more time with her family. Therefore, rearranging her Ph.D. program she balanced her life by spending time with her family while pursuing her goals. Her experience while doing this degree has been pleasant. Thus, understanding how her past behaviour had negative consequences, she has modified how she is approaching her current ambitions. Self-understanding modified the impact of stress and anxiety and as such has served as a resilient protective factor.

Self-understanding also served as a protective factor for the women when they underestimated themselves. For example, one able woman said that while doing her Ph.D., she went through periods of doubt, believing she was unable to complete her degree. She considered dropping out. However, reflecting and understanding that doing the Ph.D. was for her own personal satisfaction, when she doubted herself she no longer worried about not meeting other people's expectations. In this way, self-understanding lessened her uncertainty and worry to fulfil others' expectations and served to mediate the impact of worry.

Similarly, resilient individuals use self-understanding to choose what they needed from the environment and made use of it (Anthony et al, 1987). This was evident with some of the high ability women interviewed. When they needed to be challenged, realizing that their work was not

interesting or was too routine, a number of the women made the decision to leave their careers. They either returned to school or found work that was more intrinsically satisfying. Therefore, self-understanding of their needs allowed them to choose environments conducive to their own needs. Self-understanding acted as a protective factor allowing the gifted women to create lives that were satisfying.

### **Sense of Purpose**

Having a sense of purpose in life for these women meant setting goals, and having a philosophy which directed and infused their lives with meaning. According to Bulter et al (1981), setting goals in life required a considerable amount of energy. Therefore, the goal must be identified and the means to achieve it formulated clearly. If this is not done, then the energy invested to achieve the goal is wasted. Equally important was recognizing barriers that would present themselves in the pursuit of one's goals.

For the women in the study, to fulfil a goal meant they must identify and recognize the roadblocks to achieving that goal. The capacity to see the obstacles and challenges they would encounter before they achieved their goals was observed. They had an entrenched sense of purpose, they were committed to their goals and derived satisfaction from attempting to attain them. Having a goal, they would strive towards it, and they were able to overcome obstacles they faced. Having a sense of purpose, working to realize it and then being successful in achieving it helped build their sense of competence.

In this study, each gifted woman was asked if she had a sense of purpose and whether it was helpful in sustaining her in times of challenges. All of the gifted women had a sense of purpose, and many felt it was a factor which helped them during periods of challenge. For some,

their sense of purpose provided them with renewed energy to conquer future obstacles. The majority of the women had a vision of what they wanted their lives to be like. In addition, they had an understanding of what they wanted to contribute to the world. Indeed for almost all of the women, having a sense of purpose provided them with a vision which helped them endure and overcome challenges that threatened the achievement of their goals.

As such, having a sense of purpose functioned as a resilient protective factor for these women. For instance, a number of the women said that whatever obstacles they experienced, they accepted and endured. They believed it was necessary to be confronted with these obstacles in order to fulfil their purpose in life. Again, having a vision or mission in life provided them with resolve and resilience provided them with protection in their life quest.

### **Problem Solving**

Felner, Jason, Moritsugu and Farber (1983) provided a summary of what good problem solving entailed. He summarized that it was the capacity to be adaptive in different social circumstances, the ability to deal effectively with stress and develop the correct methods to achieve personal goals and satisfy personal needs.

Resilient individuals use problem solving as a resilient protective factor. Using problem solving to deal with a challenge increases the likelihood individuals will feel good about themselves. This then acts as an incentive to use problem solving in the future to deal with challenges (O'Connell-Higgins, 1983). The highly able women in this study all used problem solving in many different forms. Some would break down the challenge and ascertain different strategies they needed to implement at different stages. Others would plan ahead which gave them a sense of control over their lives during stressful times.

Moreover, the ability to reflect upon how a challenge affected them was another problem solving strategy used by all 12 women in this study. For some, being reflective and understanding their emotions helped them to convey to others what they were feeling. For example, if they felt the need to be alone the gifted women were able to convey this to others. This strategy was helpful in that they could create the type of environment they needed during stressful periods.

For some of the women problem solving was used in addition to another resilient protective factor, self-understanding. Both helped facilitate the women's ability to adapt and cope with stressors. As such, they made up part of the resilient protective factors these women exhibited.

In order to cope with accepting too much work, a number of the women engaged in problem solving. They developed a plan of action to help them decline accepting more work than they could handle effectively. Translating an idea into action, they were able to ensure that they did not continue to do more work than was feasible.

Other women recognized they had a tendency to worry. In an attempt to negotiate this difficulty, they also turned to problem solving strategies. For example, some would write a list and repeat it to themselves of what they needed to do in order to curtail their tendency to worry. Again, problem solving served as a mediator by decreasing the negative impact of a personality trait, and thus it functioned as a resilient protective factor.

Some of the women reported that they would underestimate themselves. In order to deal with this, several of them used problem solving strategies. To lessen the sense that they were not capable of negotiating a challenge, they used organizational skills. Making lists, assigning things they needed to do and checking them off as they accomplished them, was a problem solving

strategy they used. Although they felt they were incapable of overcoming certain difficulties, by organizing themselves and working hard, they developed resources that enabled them to feel that they were capable of facing the challenge.

Problem solving was also used by the women to change circumstances that were the source of unhappiness. Several of the women experienced frustration because they were not intellectually stimulated. To deal with this, some of the able women would write in a journal ways to create intellectually stimulating challenges for themselves. They then took the steps to carry out the solutions. Therefore, problem solving was used to mediate against boredom and discontent, and served as a resilient protective factor.

### **Autonomy**

For some resilient people the ability to distance themselves from parents or others and seek out more adaptive role models allowed them to create functional relationships and environments (Anthony, 1982). The presence of autonomy was noted in 83% of the women. For some this meant that even though others thought they were incapable of achieving, they had good self-knowledge and knew they were capable of accomplishing their goals. Moreover, the women reportedly made their own decisions. They listened to others' opinions, but followed their own beliefs.

The women were also independent workers who could do things on their own, partially because they had a good sense of who and what they were. Therefore, in periods of adversity they called upon their own resources to overcome the obstacles they were confronted with. When faced with difficulties the high ability women called upon their own internal resources to seek the solutions to their problems.

Being autonomous allowed them to make crucial decisions that would be in their best interest without the confirmation from others that they were making the correct choices. This helped the women make decisions that were congruent with their goals and dreams while at the same time helping them overcome the difficulties they encountered. In this manner then, being autonomous functioned as a resilient protective factor for the women.

### **Formation/Utilization of Relationships**

Resilient individuals are skilful at the formation and utilization of relationships. They have the ability to elicit people's attention and to recruit help from a variety of informal sources (O'Connell-Higgins, 1983). The formation and utilization of relationships was a resilient protective factor present in 83% of the able women in this study. They showed a willingness to ask others for help, perceiving they were able to form and use relationships in times of need. The women's ability to create friendships and relationships meant the women were capable of establishing support networks they could rely upon. These relationships and the capacity to elicit support from others helped several gifted women to successfully deal and adapt with the challenges they encountered. For example, several of the women had to deal with academic challenges. They came to the realization that they could not always work alone. There were circumstances in which they needed help.

The women were comfortable recruiting and asking for help from people. In addition, they formed relationships that would be beneficial to them. Some chose advisors and friends that would be supportive. The women went to great lengths in order to recruit individuals who would provide them with the help they needed. Surrounding themselves with people that were positive in stressful times served as an advantage. When the women were uncertain of their ability to

deal with challenges they encountered, they would solicit opinions from others. These relationships strengthened them and provided the confidence and motivation needed to deal with the challenges that they faced.

Many of the highly able women had unrealistic expectations of themselves. They used the relationships they formed to more set realistic ones. Others provided them with the understanding that their perception of what was expected was often distorted. The women's ability to form new friendships was also a buffer in ending friendships that were not satisfying. Knowing they could establish new friendships with people that understood and supported them, they were willing to risk loss of some relationships, but also recognized the resilient protection benefits from others.

### **Motivation**

Motivation is yet another resilient protective factor. It was present in 83% of the gifted women. They stated that when they were confronted with a challenge, instead of retreating from it they made a concerted effort to overcome it. Their motivation took on an intensity and they had an internal drive to master their situation. O'Connell-Higgins (1983) concluded how motivated resilient were determined to beat the odds and make a concentrated effort to succeed. The high ability women in this study were resilient individuals who enlisted all their resources and powers to master any challenge. Furthermore, they had a desire to fight back, their will was strong, and they were determined to overcome and be active in changing their situation. Their motivation to overcome challenges stemmed from the desire to understand, the promise of being able to learn something, the vision or goal they possessed and the desire they had to be in control of their destiny. All these desires served as motivators to overcome obstacles.

The motivation to overcome was also related to the women's belief that they would gain

knowledge from negotiating the challenge. They had a vision of what they wanted their lives to be like. This provided them with the resolve to overcome obstacles.

Lastly, another motivating factor for the gifted women was the power they felt and experienced when they successfully dealt with a challenge. It was something they internalized and then from success, they added to their repertoire of coping skills. The ability to take an idea and implement action resulted from motivation, and this served as a resilient protective factor for the women.

### **Flexibility**

The capacity to be flexible can serve as a resilient protective factor. Having the ability to generate a range of solutions for a problem typified flexibility (Garmezy et al, 1983). Resilient individuals were flexible as they have the capacity to absorb information, incorporate criticism as well as suggestions, and changed their behaviour when needed (O'Connell-Higgins, 1983). Flexibility facilitated resiliency for the women in this study because it allowed them to discriminate situations and people, and then select those that were most appropriate for them. The presence of flexibility was noted in 83% of the women interviewed. They were flexible in many aspects of their lives. This helped them negotiate challenges which arose. For example, several of the women were researchers, and they were able to try different theoretical approaches in their research until they found the most effective. Being flexible also helped them remove unrealistic time constraints for completing graduate work. Goals became more flexible. Some had to shift their focus from school to work and vice versa. Some of the women chose to return to work on a full-time basis to earn money and then return as students. Some did this for a number of years. For others being flexible helped them accept that they could do other things in their lives besides

graduate work. Therefore, the anxiety associated with always having to perform decreased. Flexibility also facilitated their willingness to try different educational and career paths. This helped them in a number of spheres in their lives, both economically and socially. The capacity to be flexible adjusting to difficulties was a resilient characteristic used by the high ability women.

### **Internal Locus of Control**

Resiliency develops when a person has a positive sense of self. They feel they have the power to control certain things in their lives. Believing one's fate is in your own hands decreases the possibility that someone would feel helpless and therefore have not motivation to engage in overcoming the challenge (Garmezy et al, 1983).

The presence of an internal locus of control was noted in 75% of the women. They wanted to be in control of their lives and determine their own fate. They relied upon their own abilities to achieve their goals. As such, they were optimistic and believed that they had the power to overcome any obstacle. This belief protected them from being pessimistic. It encouraged optimism which in turn helped them work towards overcoming the challenges they faced. For example, one of the women was discouraged when told by professors that she did not have the ability to complete her Masters degree. However, she believed she was in control of that outcome. Having an internal locus of control served as a resilient protective factor for her despite the lack of support. Her confidence in her own abilities allowed her to successfully complete her degree.

### **Persistence**

Demos in 1989 concluded that the resilient are persistent, but know when to redirect their energies. Persistence was a personality trait that was present in 83% of the gifted women. For

some, being stubborn and persistent was what helped them to prevail over challenges. Many described enduring frustrations and being able to postpone immediate gratification. Being persistent, nothing was able to stop them from trying to negotiate the problems they encountered.

Milgram et al (1993) found that the resilient had a tolerance for frustration and that this decreased the level of anxiety they experienced. This was also noted in the women interviewed because they could tolerate frustration or setbacks, and yet they had the capacity to persist at the task until they achieved their goals. For some of the women this meant taking years to complete their education. For others being persistent allowed them to pursue their ambitions despite the lack of support from educators, family and friends. As well, some women continued their journey towards self-fulfilment while experiencing discrimination. Without the ability to persist and delay gratification these women may have not overcome the difficulties they encountered. By being persistent which is a resilient protective factor, these women negotiated the difficulties which confronted them.

### **Information Seeking**

Information seeking functioned as a resilient protective factor because it meant that despite experiencing obstacles, the women sought out information about what they needed to do to restore, master or overcome the challenges they experienced. Holding this belief helped them gain a sense of control over their environment.

By trying to find meaning out of negative events, they gained valuable information about potential action for the future. The presence of information seeking was observed in 75% of the gifted women. They indicated that when they were confronted with a challenge they sought out information that would help them to deal with the challenge.

Interestingly, another way the gifted women sought out information was by reading. For example, one woman was a perfectionist and worked long hours, often experienced a lack of energy, so to resolve this problem she began to read about ways to conserve her energy. She obtained information and came to an understanding of what she needed to do in order be able to continue to work at the rate that she did. Therefore, information seeking functioned as a resilient protective factor.

Mrazek et al (1987) found that resilient people attempted to learn as much as they could about a challenge and then used the information gained in times of need. Another woman by reading books and researching learned where her tendency to procrastinate originated. She used this information gained when she found herself procrastinating to complete work. In such a manner it served as a protective factor as she was able to use information to curtail a behaviour that was not productive.

The women in this study characteristically were aware of the actions they needed to take to adapt well in specific situations. They sought out information about how best to deal with difficulties consistent with their personalities. In addition, they researched and developed information about the best way to approach a problem. The insights they gained from actively seeking out information allowed them to overcome the difficulties they were confronting. The action of seeking out information served to help the women ameliorate their circumstances or eliminate the problems they encountered. Therefore, seeking out information functioned as a resilient protective factor.

### **Risk Taking**

To pursue one's dreams can mean the need to take risks. Risk taking was perceived present in 67% of the gifted women. Many took risks in order to pursue graduate studies. Some left home with no economic security, others moved to cities where they knew no one, and some returned to school and left established careers. The high ability women in this study were assertive and self-assured. This helped them face the problems that arose because they took risks. Taking risks in life appeared to help further develop a sense of self-esteem and self-efficacy. If a woman believed she possessed these characteristics, this appeared to provide her with the confidence to overcome additional challenges. Having taken risks and successfully overcoming them, the women felt able to deal with future challenges and were more likely to take risks again.

The women also took risks when they found themselves in situations which made them unhappy or unfulfilled. The women who took risks established lifestyles which made them content and were, therefore happy and well adjusted. As such risk-taking functioned as a resilient protective factor among those women who took risks.

### **Refuge in Talents and Hobbies**

The tendency to find refuge in talents and hobbies was present in 67% of the women interviewed. Moreover, the women indicated that this behaviour functioned as a mediator to stress. This was similar to research conducted with resilient people who said they used hobbies and talents to find refuge from stress or adversity (Seita, 1994; Kauffman et al, 1979; Werner et al, 1982). For the women interviewed, having a hobby or talent helped take their minds off things that troubled them. It released them from the moment of the challenge. The temporary feeling of taking one's mind off problems mediated the impact of stress that the women

faced. As such, the ability to find refuge in talents and hobbies functioned as a resilient protective factor for the majority of women.

### **Optimism**

Optimism is another personality characteristic found among resilient people (Anthony et al, 1987; Demos, 1989). Optimism was present in 58% of the gifted women. They stated that no matter the enormity of the challenge, they always believed they could overcome it. They took an active stance towards negotiating obstacles. Furthermore, they perceived a difficulty as a challenge that could be worked out, overcome and changed. Moreover, they would invest the time and energy to deal with the challenge because they knew they would be successful at overcoming it. Therefore, optimism helped them make the task more manageable. This then motivated them to overcome and cope with the stressor because they had faith in their ability to cope. Possessing a sense of personal efficacy and optimism functioned as a protective factor for the gifted women. They felt hopeful, which lead to an active attempt to overcome the challenge.

### **Social Competence**

By all accounts resilient individuals are socially competent. They possess excellent social skills, in part because they have good temperaments. They are warm, altruistic, flexible, have good negotiating skills and they are interpersonally sensitive, all traits, that endear people towards them (Masten et al, 1990). It is not surprising then that having an easy temperament makes them likeable people. They have the ability to attract attention, sympathy and support from others because they are genuinely pleasant people to be amidst.

Social competence was perceived in 33% of the gifted women. They were able to communicate and form friendships with a variety of people. Being socially competent contributed

to resiliency in a number of ways. As a woman perceives herself as having a high level of social competence, it serves to bolster her self-esteem and self-concept which can lead to a greater sense of one's ability to overcome a challenge (Bulter et al, 1981).

The gifted women had a high regard for themselves and their interpersonal skills. For instance, one gifted woman knew that because she has good communication skills when she needed help from administrators at the university she would receive it. Being socially competent she has established a personal relationships with these people. She can then go to them in times of need. Other gifted women said because they were socially competent they enjoyed people's company. Several of the gifted women managed to create a community and a circle of friends that were supportive. Moreover, as Dugan & Coles in (1989) stated, the resilient have superior coping mechanism which contributed to their psychological health for a number of reasons. Namely; because they are well-liked by peers, they are socially responsive, co-operative, have the ability to regulate their impulses and delay gratification. All these characteristics help a number of the women cope with obstacles.

In O'Connell-Higgins' (1983) study of resilient adults, she found they obtained a sense of pleasure from giving and nurturing others and received indirect vicarious enjoyment and pleasure. Being altruistic is also a self-serving deed, for some the act of giving was an attempt to stimulate an environment for others that they themselves may have desired. Moreover, by helping others it helped them to focus on other people. As such their focus on themselves dissipated. By refocusing their energy less time was spent reflecting on negative situations. All these factors serve as resilient protective factor because they mediate and ameliorate stress and promote adaptive functioning.

### **Dissociation**

Dissociation was a resilient protective factor used by 42% of the women. In its positive form dissociation functions as a protective factor. For the women in this study the capacity to distance themselves was a way to cope with the stress that arose from challenges. When many stressors were occurring at the same time the women felt unable to cope psychologically.

Dissociation was a productive way to deal with these psychological demands. For the women of high ability the capacity to separate themselves or postpone dealing with a challenge until it was less emotionally overwhelming allowed them to attend to and overcome the challenge logically. In this manner dissociation served as a resilient protective factor for the women in the study.

### **Dreamers**

Dreaming was a resilient protective factor present in 38% of the high achieving women. The ability to dream when confronted with a challenge helped the women deal positively with the challenges they encountered. Dreaming is a resilient protective factor that has been observed among other resilient populations. Seita (1994) found that in times of difficulty the capacity to dream and imagine oneself in better circumstances allowed people to be resilient. Moreover, Blom, Cheney and Snobby (1986) cite one of the personality characteristics that contribute to resiliency is the ability to be day dreamers and having vivid imaginations.

The women reported that they had the ability to dream and some used it when they were faced with challenges. Some of the women would escape and travel in their imagination to a place far away from their current difficulties. Others used dreaming to project themselves into the future, to envision the lives they dream of living. This helped them remain motivated and committed to overcoming the challenges before them.

By dreaming the women were able to transcend the current difficulties which confronted them. Having rich imaginations and the ability to dream of better times gave them hope to overcome. Therefore, dreaming functioned as a resilient protective factor because it ameliorated the possible impact of current stressors.

### **Altruism**

According to O'Connell-Higgins in (1983) doing good deeds to others is a sustaining force when one is under stress or undergoing a difficult time in their lives. Being altruistic also helps increase one's own sense of self-efficacy, that they have something valuable to offer to the world. In addition, being concerned about others well-being has an impact on how you conduct your life.

Being altruistic may help a person tolerate the obstacles and daily hassles they encounter. Altruism was found to be present in 25% of the women. These women believed that challenges were necessary hurdles they had to negotiate in order to be able to help people. This belief helped the gifted women fortify their efforts to overcome or cope with difficulties that arose. Earlier research by Mrazek et al in (1987) found that resilient individuals were motivated to be altruistic because they had needs which were not met, by giving to others they received vicarious fulfilment of them. This finding was supported in this study. Some of the gifted women committed themselves to giving others what they would have liked to have had themselves. This meant being altruistic and giving, so that other people would not face the same enormity and number of challenges they had. Several of the gifted women demonstrated a profound desire to help to make others lives better than their own were.

There were three emerging resilient protective factors that the gifted women described

using they were: (a) adversity functioned as a motivator; (b) confidence; and (c) faith and spirituality. Although these have been suggested to as being present in resilient populations, few studies exist which document that they are used by resilient people. These emerging factors represent a new finding which can inform the body of knowledge on resilient protective factors. These emerging factors are discussed below.

### **Adversity as a Motivator**

Seventy-five percent of the twelve gifted women interviewed felt obstacles they faced served as motivating factors to change their own or others' circumstances. Having overcome an obstacle was a motivator for personal change or growth.

For example, one of the women interviewed felt having lost her husband after years of marriage gave her the motivation she needed to leave an unsatisfying job and return to school. Another woman, faced tremendous financial problems to pursue graduate studies. However, she felt this adversity helped strengthen her resolve to obtain her degree. Moreover, in times of difficulty it served as a motivator to overcome what she was facing.

Resilient people are those who with each new adversity, are able to "bounce back" and thus become more resilient (Anthony et al, 1987). As Peck (1987) concluded, adversity can provide an individual with a strong drive to master. It thus is good for one's personal survival. Once having survived adversity, the women reported they came to feel more competent in their capacity to overcome future stressors. For the women in this study, adversity was a motivating factor that provided them with strength and endurance in order to face life challenges. In that capacity, it functioned as a resilient protective factor for the gifted women.

## **Confidence**

A personality characteristic reported in a few studies with resilient people is confidence (Noble; 1997; Flach, 1988; Flach, 1990). The women in this study alluded to confidence as providing them with strength when confronted with challenges. This was a personality characteristic found to be present in 42% of the women. It was a trait which allowed them to recognize that they possessed unique abilities and talents. Having a positive sense of themselves made them stronger in the face of discouragement and lack of support. Thus, possessing confidence functioned as a resilient protective factor.

For example one woman was able to deal with gender discrimination because she had confidence in her abilities. Although males in her class doubted her abilities and ridiculed her work, because she had a sense of confidence these negative statements did not have an impact on her. Although hearing these comments was difficult, she felt she knew what she was capable of. Therefore, by being confident in herself she came to see that what others were saying was untrue. This, therefore, decreased the anxiety and uncertainty associated with being told that she was not capable because she was a woman.

Being confident helped other women to deal with challenges as well. Some were told they did not have the intellectual abilities to complete graduate work. However, because they were confident the women did not let these beliefs affect them. Since they have a good sense of themselves and what they were capable of accomplishing they ignored these negative comments. By doing so they achieved the goals that others told them they could not. As such, being confident allowed the women to believe in themselves and this characteristic then functioned as a resilient protective factor.

### **Faith/Spirituality**

In one of a few studies it was found that possessing a strong faith in God or in a higher being helps people be resilient. Faith also helps the resilient to rise above what they are experiencing in their lives (Coles, 1986). Faith or spirituality functions as a resilient protective factor because it helps a person use faith to maintain a positive vision that life has meaning (O'Connell-Higgins, 1983). Believing in a higher being also can provide a person with strength and courage to face obstacles in their lives. All this than can help one maintain a positive outlook in her/his life (Hebert, 1995).

Faith\Spirituality was found to be present in seventeen percent of the women. Having faith in a higher being provided them with hope that the challenges they were facing served a purpose. Moreover, believing in something that had a greater power than them allowed some of the gifted women to displace the worry and anxiety that arose from the challenges they were facing. In this manner faith\spirituality allowed the women to modify the impact of current difficulties. As such faith\spirituality functioned as a resilient protective factor.

### **Summary**

Based on the results of this study, it was found that the high ability women experienced obstacles as a function of being gifted, high achieving women. Despite these challenges they excelled and achieved great accomplishments.

The study provided insight into the internal resilient protective factors some able females use to build successful lives. This study also provided insight regarding two research questions.

***1. What behavioral and psychological resilient protective factors do gifted women use?***

The behavioral and psychological resilient protective factors the high ability women used that were outstanding were: self-understanding, having a sense of purpose, cognitive restructuring, problem-solving, persistence, information seeking, having an internal locus of control, risk-taking, finding refuge in talents and hobbies, optimism, motivation, flexibility, autonomy, formation and utilization of relationships and adversity which functioned as a motivator.

***2. Do gifted women use the same internal resilient protective factors that other resilient populations use?***

Fourteen of the 18 same resilient protective factors that other resilient populations have used were also used by the women in this study. However, in contrast, the following protective factors were not present in more than 50% of the women: dissociation, social competence, altruism and dreaming. Moreover, the gifted women in the present study also reported to using three additional protective factors that other resilient populations have not reported to using to a great extent. These included confidence, spirituality/faith and adversity as a motivator.

Having discussed the results chapter six will discuss the limitations of the present study and the implications for educators, high ability women and their families, friends and peers.

## **CHAPTER SIX: SUMMARY AND IMPLICATIONS**

Resiliency is a word which conjures images of successful competent functioning and the ability to prevail over challenges. The 12 gifted high achieving women who took part in this study typify resiliency. Through in-depth interviews these women shared the challenges they faced as high achieving women. Moreover, they provided insight about the resilient protective factors that enabled them to cope with the challenges they encountered.

In order for a person to be classified as resilient she must have been exposed to some stressor or obstacle which required her to use strategies and resources to overcome them. The women of high ability who took part in this study experienced stressors and obstacles which they had to negotiate. In the following section, the challenges which the women perceived as experiencing is presented.

### **Challenges Experienced**

The findings of this study lend support to previous research that has documented that gifted females, throughout childhood and adulthood, encounter challenges associated with their abilities (Noble, 1989; Blaubergs 1980; Fox et al 1981; Kunkel et al, 1992 & Kerr, 1994). Through conversations with the women, it became apparent that the challenges they faced revolved around four themes: interpersonal challenges, intrapersonal challenges, economic challenges and academic challenges.

The numerous difficulties that the women encountered in their relations with others were termed interpersonal challenges. Some faced a lack of understanding from co-workers, family

members or peers. These people did not support or understand why the women entered graduate school. Moreover, other women reported experiencing ambivalence from significant people in their lives for choosing to pursue their goals. As a result, the women lacked support and understanding which made it difficult when they were questioning their own decision to pursue a higher education. Many of the gifted women found it a challenge to maintain old friendships. It was difficult to engage in intellectually stimulating conversations with these friends. There were times where the women felt isolated and unable to share their dreams or talk about their lives with people who meant a great deal to them.

Yet another interpersonal challenge the participants perceived experiencing was problems with men. Namely, that relationships were difficult because men were intimidated by their abilities, or they felt the women were too ambitious and aggressive in the pursuit of their goals. This lack of respect and understanding made it difficult for the women to remain in relationships. Many struggled for years to find partners that were not threatened by their ambitions and goals.

Age discrimination was another challenge the women encountered. A number of them, due to their intellectual abilities, were in positions unusual for their young age. As a result they were challenged, resented and their abilities were questioned. In addition, some of the women also experienced gender discrimination. They were subjected to demeaning comments, some were teased and not socially accepted because they were women who excelled academically. Encountering these forms of discrimination made some of the women doubt their abilities and their confidence decreased. They had to develop resilient skills to counteract these erroneous beliefs.

Another interpersonal challenge that some of the women encountered was the need to

curtail social relationships due to time constraints. Most of the 12 women found it difficult to balance their academic goals with social or personal relationships. An additional challenge that the women faced was over extending themselves in order to fulfill multiple roles. The struggle which arose was that the women were not exclusively focusing on what society has traditionally valued in women, nurturing others. As a result, when the women focused on themselves and the pursuit of their goals they struggled with feelings of guilt.

Due to their academic abilities another interpersonal challenge the women experienced was being teased or being envied by others. It was challenging for the women to understand the motives behind people's actions. They were misunderstood and envied: people saw them as privileged. However they did not understand the sacrifices the women made to achieve what they had academically and professionally.

The second category of difficulties the women experienced revolved around intrapersonal challenges. Intrapersonal challenges are those that arise within a person's own psyche. One of these was the tendency of the high ability women to hide their academic abilities from others. The rationale behind this behaviour was twofold. The women did not want others to feel uncomfortable in their presence and they feared being ostracized because of their intellectual abilities. Engaging in such behaviour was emotionally draining. It was difficult, took a great deal of effort and was a challenge for the women to hide their abilities or accomplishments.

The majority of the women were perfectionists. This was a personality characteristic that was the source of intrapersonal challenge. Being perfectionists, the women had a tendency to lose perspective. At times they were unrealistically demanding of themselves.

The other personality trait that was a source of challenge for the women was that they

were chronic worriers. Being perfectionists and chronic worriers were two traits that lead to obstacles. Setting high standards that were impossible to achieve inevitably resulted in failure. This was extremely difficult for some of the women to accept. In addition, chronic worrying made it a challenge for the women to function and work effectively.

The tendency to be too committed to their work was yet another intrapersonal challenge the women experienced. Being focused and feeling guilty for not constantly working or being too goal orientated was indicated as a problem by many of the 12 women.

Some of the women perceived the need to be constantly challenged as another source of intrapersonal challenge. There were times when seeking out challenges led to difficult decisions such as leaving friends, partners and careers that were not intellectually stimulating.

Finally, the last intrapersonal challenge the women alluded to having experienced was underestimating themselves. Seven of the 12 women did not see themselves as capable high achieving women. A number of the women felt uncertain about their abilities, were unable to appreciate their successes and felt intimidated by people in higher positions. The lack of confidence in their abilities was the source of anxiety which made it difficult to face academic challenges or to reduce perfectionist tendencies.

An additional sphere which caused difficulties for the women centered around academic challenges. Some had to leave their homes in order to continue their education, others struggled to obtain graduate credits or courses. Many faced setbacks academically: one woman fought university bureaucracy and another was called "functionally illiterate". These academic challenges required the women to be tenacious in order to achieve their goals.

Yet another domain which was the source of challenge for the women centered around

economic difficulties. They revolved around having large student loans and having to struggle financially to continue their studies. As a result, some had to delay pursuing their academic goals for a number of years in order to have the finances needed to further their education.

Finally, a number of the women experienced additional challenges to those mentioned above. A number of the participants at some point in their lives have experienced one or a combination of physical or verbal abuse. Moreover, half of them had been victims of sexual assault.

Summarizing thus far, a major finding which emerged was that women of high ability do encounter specific challenges associated with their goals and abilities. Despite experiencing numerous difficulties, the 12 women went onwards to achieve their goals. In order to understand what enabled these women to pursue their goals despite such obstacles, the study explored the following question and findings:

- **What behavioral and psychological internal resilient protective factors do gifted women use to overcome challenges?**

The high achieving women made use of 21 internal resilient protective factors to overcome challenges. Fourteen of the 18 resilient protective factors emerged as being used by more than 50% of the gifted women (see Figure 6). One of these protective factors was cognitive restructuring or reappraisal. This resilient factor was used in two ways: the women reframed a negative situation into a positive light, or they compared their situation relative to others. Cognitive restructuring or reappraisal functioned as a resilient protective factor for the following

reasons: it decreased stress, it gave the women a sense of control or optimism, it minimized the impact of negative events and allowed them to shift their energy in order to resolve their problems. The results of using cognitive restructuring or reappraisal are that it modifies the impact of challenges and thus was a skill that was found useful by the women as a resilient protective factor.

All the participants, when faced with a challenge used another resilient protective factor self-understanding. Possessing self-understanding contributed to effective functioning in a number of ways. The women possessed insight so they were aware of how challenges affected them and therefore knew what actions they needed to implement to successfully negotiate them. Self-understanding served as a resilient protective factor because it helped the women to grow, develop and change situations so they could create lives that were congruent with their dreams and values.

Yet for other women, having a sense of purpose in life served as a resilient protective factor. In times of challenge having a goal and being committed to its realization helped the women endure and negotiate ways to overcome the difficulties they faced. For the women, having a sense of purpose contributed to their capacity to maintain sustained functioning in the presence of stress. It therefore served as a resilient protective factor.

Another resilient protective factor was problem-solving. This resilient skill was used in many ways. For some, problem-solving was used to break down the enormity of a challenge by thinking it through or planning how to overcome it. For others, using this strategy gave them a sense of control over the challenges they faced. By using problem-solving the women were able to mediate the impact stemming from the challenges they confronted. This in turn facilitated

successful adaptation and thus was a skill which contributed to the women's ability to be resilient.

A number of the women indicated that their autonomy allowed them to have a good sense of who they were and what they were capable of achieving. This then increased the probability that they would successfully negotiate the challenges they faced even in the absence of support networks. Moreover, being autonomous allowed these women to choose lifestyles that were congruent with their personalities. As a result they were then able to create lifestyles that were efficacious for themselves. In this capacity, being autonomous was found to be a protective factor which contributed to resiliency.

Yet another resilient factor used by the women was the formation/utilization of relationships. The women possessed the ability to ask for help or input. Being able to surround themselves with people whom they could elicit support from in times of need contributed to resiliency. These relationships helped them to remain motivated to overcome the challenges they encountered.

For a large percentage of the women, motivation was an additional protective factor which contributed to their ability to be resilient. The motivation to understand and to gain knowledge drove the women to expend effort to overcome the obstacles they encountered. Motivation stemmed from many intrinsic sources including the need to understand, the desire to gain knowledge and the need to achieve their goals. Yet others were motivated by extrinsic factors such as friends and family members. Motivation helped the women to not succumb to retreating from the difficulties. In contrast, it fortified their desire to overcome setbacks by adopting a strong will and determination.

Flexibility was found to be a frequently used resilient protective factor by the women.

Being flexible in approaching a problem, not becoming upset by failure, the ability to change one's expectations and try different approaches in order to resolve a problem were all flexible resilient strategies. These skills helped modify the impact of the life challenges the women were exposed to. Therefore, flexibility was an internal resource the women used which enabled them to successfully cope with various difficulties.

Having an internal locus of control was found to function as a resilient protective factor among the participants. Having a sense of control allowed the women to believe that their own abilities and actions would determine if they could overcome the challenges which they experienced. The belief that they had control over their lives helped the women feel empowered to work and succeed. Thus, possessing an internal locus of control helped the women negotiate the challenges that arose in their lives.

Another resilient protective factor that was found to be present in the women was persistence. Possessing this trait helped the women be resilient towards the obstacles they faced. They were able to persist and achieve their goals despite setbacks which ranged from financial problems to delaying gratification in order to pursue their goals.

Information seeking was found to be another resilient protective factor used by the women. When confronted with a challenge it was not unusual for the women to seek out information which would help them to find a solution to their problems. By gaining new knowledge and applying it to their current situations the women were able to deal with personal challenges that were causing them problems.

Risk-taking was another resilient protective factor used by the women of high ability. By taking risks these women were able to follow their dreams and lead fulfilling lives. Moreover,

having confronted risks and successfully overcoming them helped the women feel that they had the ability to deal with future challenges.

Another protective factor used by the women was finding refuge in talents and hobbies. This helped the women obtain relief from the stress that the challenges they were experiencing caused them. It gave them time to reflect on new ways to approach challenges with renewed energy. Therefore, finding refuge in talents and hobbies was a resilient behavioral strategy which the women used which enabled them to direct their energy to eventually overcome the challenges they faced.

Being socially competent and friendly with others was found to be a protective factor for the participants. Possessing this skill helped the women facilitate the formation of relationships with different people in various environments. This made it easier to establish networks they could call upon in times of need. Therefore, being socially competent was a resilient mechanism which helped the women deal with difficult life circumstances.

Dissociation is the ability to distance oneself from a challenge. This was a protective factor that was found to be used by some of the 12 women. This factor contributed to resiliency because it helped the women postpone dealing with challenges until they felt less overwhelmed. This then provided them with the time to logically think through the challenge without being overwhelmed by their emotions.

For other women, day-dreaming was a characteristic which served as a resilient protective factor. The ability to travel to a different time and place, displacing themselves to a place where they could transcend their present problems, provided the women with insight that the difficulties they were currently facing were not permanent. This in turn contributed to their sense of

optimism which helped them then deal with the obstacles they encountered. Moreover, it helped the women to retain a sense of competence despite the presence of challenging circumstances.

Altruism is another protective factor that was used by the women and which contributed to resiliency. Many of the women believed that the challenges they were confronted with were necessary to overcome so that they could fulfil their altruistic desires. This meant that when they were confronted with difficulties they were less likely to become discouraged. The women believed if they overcame the challenge others would profit from their accomplishments. As such, altruism lead to positive adaptive behaviour and contributed to the women's ability to be resilient.

Having a sense of faith or spirituality helped some of the women be resilient to the impact challenges had upon them. For some, it gave them strength in times of adversity. For others it provided an outlet where they perceived they could elicit help in times of need. Having a sense of faith or spirituality provided the women with resources which helped them to face the obstacles in their lives. In this capacity it therefore served as a resilient protective skill.

A number of the high achieving women indicated that confidence helped provide them with the strength to negotiate challenges and difficult times. Having a good self-image and self-concept in their abilities resulted in the women being less likely to become discouraged when they were confronted with challenges. Therefore, having a sense of confidence contributed to the women's resiliency because it helped them deal with challenging life experiences.

Finally, adversity itself served as a motivator for the majority of the women. Many felt that a particular challenge that they had overcome had fuelled their desire to achieve. Moreover, they believed that having faced adversity and having negotiated it has made them stronger. Furthermore, having overcome the obstacles has provided them with a sense of self-control and

accomplishment. Having addressed one of the research questions guiding this study the second research question and the findings regarding it are outlined below.

- **Do the gifted high achieving women use the same internal resilient protective factors that other populations use?**

This study found the gifted high achieving women use all the same internal resilient protective factors that other populations use. However, some were used to a greater extent than others. These included: (a) cognitive restructuring/reappraisal; (b) self-understanding; (c) a sense of purpose; (d) problem solving; (e) autonomy; (f) formation/utilization of relationships; (g) motivation; (h) flexibility; (i) internal locus of control; (j) persistence; (k) information seeking; (l) risk taking; (m) refuge in talents and hobbies; (n) optimism; (o) social competence; (p) dissociation; (q) dreamers and; (r) altruism.

Another major finding which emerged from this study was that the women of high ability also used three additional resilient protective factors. These have been alluded to having been used by other resilient populations but not as often as the above listed factors. The three resilient protective factors which emerged as being used were: (a) confidence; (b) faith\spirituality, and (c) adversity as a motivator.

Having summarized the findings of this study, the following section will explore the contributions this study has made to our understanding of what resilient protective factors help women negotiate the challenges with which they are confronted. As well, the limitations to the current study are explored. The chapter concludes with educational implementations

recommended which stem from the findings of this study.

### **Contributions to Resiliency in Women**

This study examined the challenges high achieving women encountered and the resilient protective factors they used to negotiate them. Women of high ability encounter challenges associated with their ability level as well as their gender (Noble, 1989; Blaubergs, 1980; Fox et al, 1981; Kunkel et al; 1992). Perhaps, the challenges encountered by being high achievers and women is a contributing factor to why women of high ability are not fulfilling their potential (Yewchuck et al, 1991; Callahan, 1991; Leroux, 1992).

By listening to the stories and experiences of gifted women who have successfully overcome obstacles, knowledge is imparted to other women. Specifically, the research speaks to how women can prepare themselves and what resilient protective factors they need to develop so that they too can cope with the challenges they will encounter. Therefore, by developing and using resilient protective factors, perhaps more women of all abilities can successfully negotiate life's pathways.

To date there is a lot of research that has studied and documented the resilient protective factors that other "at risk" populations have used to overcome challenge. However, there is little literature describing the protective factors used by women of high ability. This study is unique because it documented that gifted women used the same resilient protective factors to overcome challenges that other resilient populations studied have used. This study has developed new knowledge regarding what factors, when present, help to modify the impact of challenges on women of high ability. Moreover, this study has documented emerging protective factors used by

gifted women which have not been used frequently by other resilient populations.

This study is important for women who are currently or will in the future encounter challenges associated with being high achieving women. In this study, resilient gifted women shared the challenges they experienced and the skills they used to negotiate and overcome difficulties.

*All women, regardless of their ability level encounter challenges on their road to self-fulfilment. Many young women continue to enter professions that are not congruent with their abilities. Some of these women then find themselves segregated in careers that are unfulfilling. The result is that society loses the potential contributions these women could have made. Moreover, women themselves may not derive the same level of self-satisfaction they would have had they chosen pathways congruent with their abilities.*

This study has established the resilient protective factors used by 12 high achieving women and has provided insight into what protective factors, when present, may help women of high ability reach their potential. Further studies should attempt to ascertain if these same resilient protective factors are present in a larger sample of women with differing abilities. This will then provide educators with knowledge of which protective factors they should nurture not only in gifted women but in all women. This will potentially help more females develop the skills necessary to overcome the difficulties which arise in pursuit of their goals. As such, perhaps more women of differing abilities will then go onwards to fulfil their potential. The findings of this study have made a significant contribution to understanding what repertoire of coping skills females will benefit from developing in their lives.

### **Limitations of the Current Study**

There are some limitations to the current study. This study is limited by the small sample size and the homogenous nature of the characteristics shared by the participants. This study was conducted with 12 white women, all of whom at the time of the interview were completing Masters or Ph.D. degrees. Therefore, the participants shared similar characteristics. These factors restricted the generalizability of the findings.

Although 12 high achieving women were interviewed, this is not representative of all women. It is unclear based on the results of this study if gifted women from different races and ethnic backgrounds experience similar challenges. Moreover, it is uncertain if other gifted women use similar resilient protective factors that the 12 women who took part in this study do.

A second reason this sample may not be representative of all gifted women has to do with the manner in which the participants were designated as gifted women. The participants in this study were identified as "gifted" if they were the recipients of academic scholarships. This is a restricted approach to sampling, as it only takes into consideration demonstrated academic potential as an indicator of "giftedness". However, there are many factors which can be used to identify a gifted individual such as creativity, physical ability or even leadership traits. Future research should use a broader more encompassing definition of gifted high achieving females.

Researcher bias was another limitation of this study. The bias which arose was that the researcher was a graduate student at the same university that the participants attended. This may have reduced objectivity. Having encountered similar experiences as the high achieving woman provided the researcher with a level of understanding and the ability to empathize with the perceptions of the participants. This may have helped establish a level of trust between the

researcher and the participants. In many ways this enhanced the ability to collect valuable data. However, given the researcher's position and having experienced similar challenges as the gifted women may also have decreased the ability to be objective. However, in order to increase objectivity an independent researcher analyzed and interpreted the research data.

Another potential limitation to this study is that a priori constructs were established before the collection of the data. In this sense, the research design was not in the strictest sense qualitative because it was not purely inductive. The limitation which may have arisen was the tendency to force-fit constructs and therefore not accurately present the findings. However, the rationale in establishing a priori constructs was that no previous work had been conducted in documenting the occurrence or non-occurrence of resilient protective factors used by other resilient populations in women of high ability. Therefore, by approaching the study with a priori constructs this study was able to fill this gap in knowledge.

In addition, steps were also taken to minimize the subjective nature of the interpretations. An independent researcher analyzed the data and interpreted what the women were saying. The notes were then compared and agreement was achieved between two researchers about what the women were attempting to convey. Having two people independently analyze and interpret the data and then come to an agreement about what is being said increases the reliability of the findings (Fraenkel et al, 1995).

The quality of the data obtained was rich and descriptive and it provided each woman an opportunity to have her voice heard. Furthermore, the process was a learning experience for the researcher and the participants. Many of the women conveyed that it was helpful, almost therapeutic to share the challenges and how they dealt with them in order to achieve what they

had. The women also felt that younger gifted women could learn and profit from the knowledge of how they overcame the struggles they faced.

In the future researchers need to empirically document if programs intended to teach resilient skills are successful. Future research should also study resiliency in high achieving women using a larger sample. It should include women of different ethnic, class and educational backgrounds.

### **Implications and Recommendations**

If one examines the challenges the women of high ability faced in their lives and the resilient protective factors they used to deal with them it is apparent that recommendations need to be made at two levels. Firstly, imparting knowledge to educators, families and peers about the unique challenges high achieving women encounter. Secondly, younger gifted females need to be educated about the challenges which may arise because of their abilities. However, they also need to be educated about the resilient protective factors that other women of high ability have used in order to overcome these same challenges. Perhaps then, outcomes will result. Some of the challenges gifted women face may be reduced and those that are not, can be successfully negotiated by developing and using resilient protective factors.

It is imperative for society to understand the psychological needs and the obstacles gifted women encounter as a function of their exceptional abilities. Studies have documented the personality characteristics of gifted individuals that are the source of challenge. In addition, there exists a body of literature regarding the dilemmas high achieving women encounter. What is less

of knowledge. Therefore, the following recommendations are made:

\*Educators need to be provided with in-service training or be required to up-grade certification about the characteristics and needs of gifted individuals. Moreover, the challenges specific to gifted females should be addressed.

\* Educators, including guidance counsellors should be exposed to the body of literature on resiliency, becoming aware of what gifted women have done to cope with the challenges they have faced. These resilient coping strategies should be taught or shared with younger gifted women.

\* Parents, families and peers should be provided with opportunities to acquire knowledge about the unique challenges gifted females encounter. Moreover, they should be taught that their support is crucial in helping gifted women deal with the challenges they encounter. Hopefully, significant others in gifted women's lives then will come to understand that they need to make a concerted effort to support gifted women to achieve their goals.

The above recommendations are directed at educators, families and peers. However, gifted women cannot function on the premise that these recommendations will be taken and implemented. Therefore, given the fact the gifted women face obstacles associated with their abilities they need to develop skills to negotiate these obstacles. It would be beneficial for women to be educated that the following behavioral and personality characteristics should be

developed and be included in their repertoire of coping skills.

\* The skill of cognitively restructuring/reappraising a challenge is a resilient factor that should be developed by women. Looking at a challenge as something that will provide an opportunity to learn new skills, restructuring a challenge from something negative to something positive and placing a challenge into perspective are all components of cognitive restructuring/reappraisal.

\* Developing problem solving skills such as breaking down a challenge so it is more manageable in this study has shown to help curtail the impact of adversity.

\* Yet another skill that should be cultivated in women is the ability to form and use relationships. This study has shown that this skill is helpful because it provides women with support in times of difficulty.

\* The ability to be flexible in approaching a problem, accepting the fact that expectations may need to be changed; trying different things to resolve problems and accepting that there are many ways to achieve a goal are all aspects of being flexible. This also is a protective factor that has been found in this study to curtail the impact of a challenge. Therefore, women may benefit from developing this skill.

\* Possessing self-understanding is another factor which contributes to resiliency. The use of this skill has the potential of modifying the impact of a challenge. This is the case because self-understanding allows a person to become aware of how a challenge impacts them; if they are insightful about this they then can prepare themselves to deal with the challenge.

- \* Women would benefit from adopting the position that they need to expend effort to overcome a challenge. In addition, it is beneficial if they can discover what motivates them and helps them be persistent in the presence of obstacles.
  - \* Possessing an internal locus of control is a protective factor that should be advocated to be included in a women's repertoire of coping strategies. Accepting that the outcome of a situation is within one's control may allow women to take control of their own lives.
  - \* The development of a defined sense of purpose has shown to be beneficial for the women in this study when they are confronted with obstacles. This is yet another resilient factor that women should be informed has the potential to contribute to resiliency.
  - \* Women should also be encouraged to develop talents or to find a hobby.
  - \* Adopting the belief that one can overcome any challenge being optimistic is a potential skill which can help a person adapt in the presence of obstacles.
  - \* Women need to be informed that they may profit by seeking out information about the nature of the challenge they are confronted with and seek out possible solutions to their problems.
  - \* Risk-taking is another factor that contributed to the women's ability to be resilient in this study. Learning to feel comfortable with taking risks in academic, personal and professional lives may help women to create lives that are fulfilling.
  - \* The capacity to be persistent is an invaluable skill which contributes to resiliency.
- Women may benefit from adopting a stance where they are patient and have the capacity to delay gratification.

\* Adolescent females should be provided with educational training about resilient protective factors. It is possible, that if coping skills are imparted these young women, they will be able to overcome challenges and achieve their potential.

The findings of this study have shown that women of high ability who have successfully negotiated the challenges they have encountered used specific resilient protective factors to do so. Therefore, educational programs that teach these protective factors to all women should be developed and implemented. A feasible way to do this is to expose younger women to role models. These women can provide information about the resilient protective factors they have used to deal with challenges. Perhaps, if younger gifted women are provided with greater insight and behavioral skills, this then will help them to understand and develop resiliency.

This study has reported the experiences of high achieving women. Through their own words, 12 women speak about the challenges they have encountered. These women have lent some understanding about what resiliency means. Despite numerous challenges, they coped by using resilient protective factors. Therefore, this study has contributed to our understanding of what protective factors gifted women use to overcome challenges.

Once the protective factors are documented, educators, counsellors and psychologist can then turn to the task of developing educational interventions in an effort to nurture these protective factors in other young women of all abilities. The prime objective is that more women will develop the skills needed to be resilient, to overcome obstacles and achieve their potential.

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Appendix A**Demographics Questionnaire**

**Instructions:** Please print your response to the following questions. You do not have to answer every question if you do not want? All answers will be kept confidential. Once you have completed the questionnaire please enclose it in the envelope and seal it. Your name will not be used you will be simply assigned a letter. Therefore no researcher will be able to match the answers to the questionnaire to anyone in the study

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**Question**
**Response  $n = 12$** 


---

 What is your age?  
 .....

 What is your marital status?  
 .....

 If you have children how many?  
 .....

 What education have you obtained?  
 .....  
 .....

 What work experience have you?  
 .....  
 .....

 What is your status in University ie. M.A.\PhD\Full or Part-time?  
 .....  
 .....

 Approximately what was your undergraduate GPA?  
 .....

 Approximately what is your graduate GPA?  
 .....

Have you ever experienced a sexual assault?

.....

Have you ever experienced a physical assault?

.....

Have you ever been verbally assaulted?

.....

Have you ever experienced a serious illness if yes what kind?

.....

Have you ever experienced gender discrimination?

.....

How do you cope with a grief or stress?

.....

Appendix B

**Gifted Intellectual Traits**

Instructions: Rate the degree to which the following characteristics apply to you

---

	Very often\Often	Occasionally	Hardly Ever	Not Sure
Exceptional Reasoning Ability	.....			
Intellectual Curiosity	.....			
Rapid Rate of Learning	.....			
Facility with Abstraction	.....			
Complex Thought Process	.....			
Vivid Imagination	.....			
Early Moral Concern	.....			
Passion for Learning	.....			
Powers of Concentration	.....			
Analytical Thinking	.....			
Divergent Thinking\Creativity	.....			
Keen Sense of Justice	.....			
Capacity for Reflection	.....			

---

Silverman (1993)

Appendix C**Gifted Personality Traits**

Instructions: Rate the degree to which the following characteristics apply to you

---

	Very often/often	Occasionally	Hardly Ever	Not Sure
Insightful	.....	.....	.....	.....
Need to Understand	.....	.....	.....	.....
Need for Mental Stimulation	.....	.....	.....	.....
Perfectionism	.....	.....	.....	.....
Need for Precision\Logic	.....	.....	.....	.....
Excellent Sense of Humour	.....	.....	.....	.....
Sensitivity/Empathy	.....	.....	.....	.....
Intensity	.....	.....	.....	.....
Perseverance	.....	.....	.....	.....
Acute Self-Awareness	.....	.....	.....	.....
Nonconformity	.....	.....	.....	.....
Questioning of Rules\Authority	.....	.....	.....	.....
Tendency Towards Introversion	.....	.....	.....	.....

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Silverman (1993)

## Appendix D

### **Interview Protocol**

1. As a child were you considered "gifted" or as having exceptional abilities or talents? If yes, please explain.
2. What is your definition of a challenge?
3. What challenges have you encountered as a high achieving women working to fulfil her potential?
4. What are some of the difficulties of being a high achieving women?
5. Have you encountered ambivalence from peers, educators or family members for choosing to pursue your goals?
6. What qualities (personality characteristics) of particular strength do you possess as an individual that have helped you deal with the challenges you have faced as a high achieving women?
7. What actions/strategies do you use to deal with challenges?
8. When faced with a challenge are you aware of how it impacts upon you?
9. Do you believe you have control over life?
10. Do you have a sense of purpose in life? Does it help sustain you in times of challenges?
11. What motivates you to overcome obstacles?
12. Where does this motivation come from?
13. When faced with a challenge what actions do you engage in to overcome it?

14. What thoughts go through your mind when you encounter a challenge?
15. What do you do in order to find refuge from the worry challenges cause?
16. Have any challenges you've overcome fuelled your desire to achieve. If yes which ones?

Appendix E

**Letter To Recruit Participants**

My name is Maria Cuffaro I am a M.A. student in the Faculty of Education, at the University of Ottawa. I am currently doing my M.A. thesis. As part of my research I contacted the Awards Office and asked if I could obtain a list of all female full-time graduate students whom were recipients of a scholarship. I was provided with this list, however no address or telephone numbers were released. Therefore, to contact you I had to go to each of your faculties and ask them to mail you this letter on my behalf.

I am studying resiliency in gifted women. I have selected you as a sample because it can be inferred that graduate students whom are the recipients of scholarships due to their demonstrated academic and intellectual abilities represent a plausible reference group to gifted adults.

In the past much research has focused on "at risk" populations who have overcome adversity and obstacles to lead productive lives. However, little research has examined resiliency in high-achieving women. Research shows that women must overcome numerous obstacles and adversity to achieve the level of education you have. As such I would like to know what adversities you have faced in life and the kinds of personality and behavioral characteristics that have helped you overcome them so you could achieve what you have. I believe it is crucial for women to document the obstacles they encounter on their journey to reach their potential. Perhaps if researchers study women who have overcome adversity they can uncover what factors helped them become resilient in order to nurture these characteristics in future generations of younger females.

If you decide to take part in this study you will be required to complete three questionnaires and an interview, this will take place at the University and the time required will be one to one and half hours. I thank-you for having taken time to read this. I can imagine if you're a graduate student like myself your time is precious I hope you find this a worthwhile study to take part in. If you are interested I would appreciate it if you could contact me at 226-2291.

Thank you

Maria Cuffaro  
M.A. Candidate

Appendix F**Documented Resilient Protective Factors**

Autonomy & Internal Locus of Control	Werner et al, 1982; Garmezy, 1983; Luthar et al, 1991; Elder, 1974; Beardslee, 1989; Nuechlerlein, 1970; Garmezy & Nuechlerlein, 1972.
Dreamers	Mrazek & Mrazek, 1987
Good Problem-Solving Ability	Werner, 1990; Werner, 1984; Beardslee, 1989; Werner et al, 1982; Garmezy, 1983; Garmezy et al, 1972; Maddi & Khoshaba, 1994.
High Intelligence	Kandel et al, 1988; Beardslee, 1989 & Luthar et al, 1991
Interpersonal Awareness, Empathy or Altruism	Pellegrini, 1980; Cowen et al, 1988; Anthony, 1987; Bleuler, 1978; Beardslee, 1989; Garmezy, 1983; Werner et al, 1982; Mrazek et al, 1987; Beardslee et al, 1988; Werner & Smith, 1982 & Parker et al, 1990.
Motivation	Bleuler, 1974, Beardslee et al, 1988; Kauffman et al, 1979; Elder, 1974; Nuechterlein, 1970 & Werner et al, 1982.
Optimistic	Werner et al 1982; Mrazek et al, 1987
Cognitive Appraisal	McMillian et al 1995; Bleuler, 1974; Beardslee, 1989; Haggerty et al, 1996; Werner, 1990; Lazarus et al, 1984; Himelein et al, 1996
Purpose in Life	Beardslee, 1989; Hauser et al, 1985; Mrazek et al, 1987; Rutter, 1987; Anthonousky, 1979 & Bernard, 1995
Self-Efficacy	Elder, 1974; Werner et al, 1982 & Rutter, 1985

Sense of Self-Worth or Self-Esteem	Werner, 1990; Maddi & Khoshaba, 1994; Beardslee, 1989; Mrazek et al, 1987; Nuechlerlein, 1970; Garmezy et al, 1972
Tendency for Help-Seeking	Werner et al, 1982; Bleuler, 1974; Kauffman et al, 1979; Werner et al, 1977; Garmezy, 1983; & Mrazek et al, 1987
Refuge in Hobbies\Talents	Kauffman et al, 1979; Werner et al, 1982; & Baska-VanTassel, 1995.
Superiour Coping Styles (i.e. Persistence & endurance)	Murphy et al, 1976; Werner, 1984; Beardslee, 1989; Mrazek et al, 1987; Himelein et al, 1996

Appendix G

**Operational Definitions of Resilient Protective Factors**

<b>Self-Understanding</b>	"Internal psychological process through which an individual makes causal connections between experiences in the world at large and inner feelings"	Beardslee, 1989, p.268.
<b>Social Competence</b>	"Responsiveness, especially the ability to elicit positive responses from others; flexibility, including the ability to move between different cultures; empathy; communication skills; a sense of humour"	Benard, 1995, p.1
<b>Autonomy</b>	"A sense of one's identity and an ability to act independently and to exert some control over one's environment, including a sense of task mastery, internal locus of control, and self-efficacy"	Benard, 1995, p.1
<b>Sense of Purpose</b>	"A belief in a bright future including goal direction, educational aspirations, achievement motivation, persistence, hopefulness, optimism and spiritual connectedness"	Benard, 1995, p.1
<b>Dissociation</b>	"Distance oneself from intense feelings can be effective defense and to some degree can be consciously facilitated"	Mrazek & Mrazek, 1987, p.360
<b>Information Seeking</b>	A desire to learn as much as possible about the obstacles and adversity they face and use this knowledge to deal with them	

<b>Formation and Utilization of Relationships</b>	"The ability to create relationships that will result in critical help and support at times of crises"	Mrazek & Mrazek, 1987, p.360
<b>Risk-Taking</b>	"To assume responsibility for oneself by making some crucial decision and dealing with the consequences can result in considerable personal risk"	Mrazek & Mrazek, 1987, p. 360
<b>Cognitive Restructuring/Reappraisal</b>	"The ability to process past negative events in one's mind in order to make them more acceptable or congruent with one's current view. Can review their own behaviour at the time of a crises and focus on their more adaptive responses which they might not have appreciated at the time"	Mrazek & Mrazek, 1987, p. 361
<b>Altruism</b>	"Getting pleasure from giving to others what one would like to receive oneself"	Mrazek & Mrazek, 1987, p.362
<b>Optimism</b>	A belief that one can overcome obstacles	
<b>Dreamers</b>	Ability to project oneself into the future and fantasize about how life will be like	Mrazek & Mrazek, 1987
<b>Motivation</b>	The ability to translate ideas into action	Murphy & Moriarty, 1979
<b>Flexibility</b>	"Flexible means to an end"	Murphy & Moriarty, 1979
<b>Problem-Solvers</b>	"The ability to plan; to be resourceful in seeking help from others; and to think critically, creatively & reflectively"	Benard, 1995, p.1
<b>Refuge in Talents/Hobbies</b>	Ability to find refuge from stress and adversity in hobbies, creative activity and talents	
<b>Internal Locus of Control</b>	A belief that one controls the outcome of their lives	

<b>Persistence</b>	<b>Ability to postpone immediate gratification having a tolerance for frustration, setbacks and obstacles</b>	
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## Appendix H

### **Informed Consent Protocol**

(To be read by the interviewer before the beginning of the interview. One copy of this form should be left with the interviewee, and one copy should be signed by the interviewee and kept by the interviewer.)

My name is Maria Cuffaro. I am a M.A. student in the Faculty of Education, at the University of Ottawa. I would like to thank-you for participating in this study. Before beginning the administration of the questionnaires and interview I would like to explain my study and discuss your rights as a participant in this study.

I am studying resiliency in gifted women. I have selected you as a sample because it can be inferred that graduate students due to their demonstrated academic and intellectual abilities represent a plausible reference group to gifted adults. My interest in resiliency stems from research that has examined how people overcome adversity and challenges in order to lead productive fulfilling lives. I am interested in why some people overcome adversity and challenges and why some do not. And more specifically, do the presence of certain personality and behavioral characteristics serve as protective factors that contribute to resiliency.

In the past much research has focused on "at risk" populations who have overcome adversity and challenges to lead productive lives. However, little research has examined resiliency in high-achieving women. Research shows that women must overcome numerous challenges and adversity to achieve the level of education you have. As such I would like to know what adversities you have faced in life and the kinds of personality and behavioral characteristics that have helped you overcome them so you could achieve what you have. I believe it is crucial for women to document the challenges they encounter on their journey to reach their potential. Perhaps if researchers study women who have overcome adversity they can uncover what factors helped them become resilient in order to nurture these characteristics in future generations of younger females.

These are the questions and motivations behind the study. I hope you will take part. You will be asked to complete three brief questionnaires anonymously, an interview and a follow-up interview by telephone. Interviews will be tape recorded and transcribed. You will be mailed an executive summary of the results you then will be contacted by telephone and can talk to me again if something seems incomplete, wrong or if you have any other concerns. All data will be presented anonymously. If you have any questions, at any time concerning this study you can contact me at 226-2291. You may also contact my Faculty Advisor, Dr. Janice Leroux at 562-5800 ext 4159.

Before beginning the study I would like to inform you of your rights as a participant in this study. Your participation in this study answering questionnaires and interviews is voluntary. As such you can refuse to answer any question at any point in time. As well you are free to withdraw your participation at any point in time. In addition, you also have the right to ask me any questions at any point and time. The administration of the questionnaires and the interview will take approximately one hour. All interviews will take place in my office in Room 430 LMX.

The interview and questionnaire will be kept strictly confidential and will be accessible only to yourself and to me. The questionnaires will not require any names. The interview will have your name but only myself, my advisor Dr. Janice Leroux and a peer researcher, Kelly Gill will discuss them. The purpose of my discussions with these two people is to improve my interpretation and data analysis of the answers.

Answers to the questionnaire may be made part of the final research report, but neither your name nor any identifying characteristics will be included in the report. Furthermore, if excerpts from the interview are used neither your name nor any identifying characteristics will be included. Anonymity will be maintained. Once the final report is completed and defended all questionnaires and interviews will be destroyed to further ensure confidentiality.

The University of Ottawa Human Research Ethic Committee requires that all research participants be informed of the purpose and nature of their participation in any study conducted at the University. This is a requirement so that all research participants rights are upheld. Therefore, before any research can proceed using human subjects a written mandatory consent form must be signed. Please sign this form to show that I have informed you to the nature of this study, and to indicate that you understand your rights as a participants and choose to take part in this research.

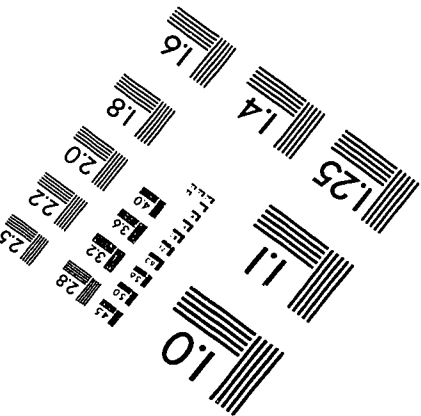
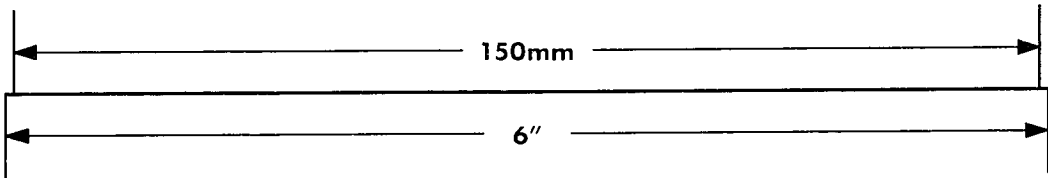
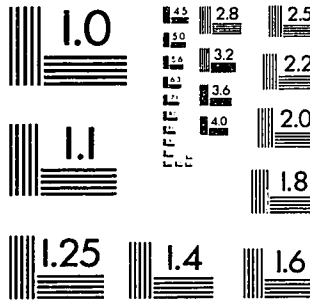
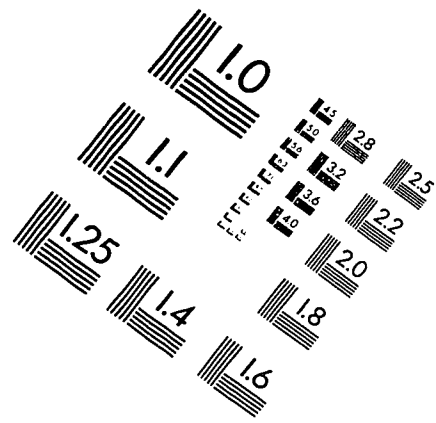
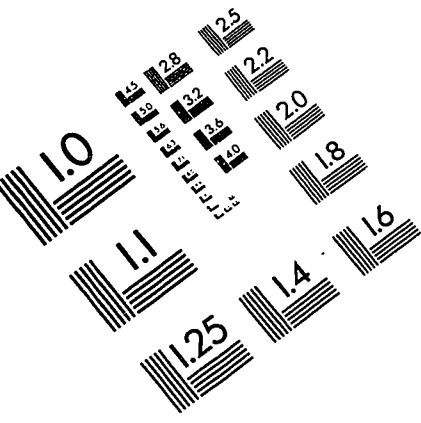
Signed:

Printed:

Date:

Researcher's Signature

# IMAGE EVALUATION TEST TARGET (QA-3)



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