Exploring Teachers' Perceptions of Perfectionism and Giftedness

by

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BSW, The University of Hong Kong, 2004 PGDE, The University of Hong Kong, 2007

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES

(Special Education)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

October 2010

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Abstract

Perfectionism is one of the issues which may be a great influence on the development of gifted students. Apart from conceptualizing perfectionism as neurotic, perfectionism can also be identified as normal. The measures of perfectionism also reveal that perfectionism can be perceived from multidimensional perspectives: intrapersonal, interpersonal and adaptive and maladaptive. This study is the first to study teachers' perceptions of perfectionism and giftedness. Six teachers with experience with gifted elementary students participated in this study. A semi-structured interview was used to elucidate participants' perceptions of perfectionism and giftedness. Content analysis was carried out and six themes emerged, including their definitions of giftedness and perfectionism, the relationship of the two constructs and development of best practice to cater to the needs and challenges of gifted students with perfectionistic traits. These findings showed that 1) teachers had different ideologies regarding understanding the relationship between giftedness and perfectionism than those in extant research; and 2) teachers' understanding of the issue of giftedness and perfectionism made them more willing to provide support and facilitate positive change for gifted students with perfectionistic traits.

Preface

Ethics approval was obtained from The University of British Columbia Behavioural Research Ethics Board on March $3^{\rm rd}$, 2010 and the Certificate Number of the Ethics Certificate was H10 – 00001.

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Acknowledgements

I would like to express my heartfelt gratitude to my supervisor, Dr. Marion Porath, for her unconditional support and pertinent questions which gave me room to reflect and grow. You helped me reconstruct my belief in learning so that I had the courage and right attitude to explore uncertainties and develop new knowledge. Without your support and guidance, this transformation would never have happened.

Special thanks to my advisory committee:

Dr. Marla Buchanan, who accompanied me on a wonderful journey of data analysis and increased my interest in doing qualitative studies.

Dr. Elizabeth Jordan, who expanded my vision and consolidated my knowledge in special education related issues.

Being 10,274 kilometres away from home, I need to thank A-dai, Cindy and Alfred who have supported, inspired and helped me in various aspects of life. It is my pleasure to have the angels surrounding me.

Dedication

To my parents, David and Wan Yuk, who have given me massive support so that I can pursue my goals and gain and develop new knowledge all the time. My strength, wisdom and accomplishment are all derived from you. Thank you so much for the love, trust and freedom that you grant me.

Chapter 1

Introduction and Literature Review

Being perfectionistic is often regarded as one of the personality characteristics of gifted students in non-empirical literature (Adderholdt-Elliott, 1987; Callard-Szulgit, 2003; L. K. Silverman, 1993; Sisk, 2009). However, there is little research support for the association between giftedness and perfectionism. This possible misrepresentation of perfectionism in gifted children may lead to misunderstanding of gifted students' abilities, attributes and emotions. Parker and Adkins (1995) pointed out that "the extent to which family and school exaggerate or minimize perfectionistic striving needs to be determined" (p. 14). In a school setting, what can be done to help teachers unpack the persistent myth?

Unlike educational psychologists or related professionals who receive training in psychology and assessment, educators may not have the clinical knowledge to fully understand the issue. Teachers may form their understanding of perfectionism in gifted children based on what they have acquired from teacher education, professional development opportunities or textbooks which may not provide in-depth coverage of pertinent issues. Other research findings show that teachers' attitudes, training and understanding of giftedness relate to their perceptions of support for gifted students (Geake & Gross, 2008; McCoach & Siegle, 2007; Moon & Brighton, 2008; Speirs Neumeister, Adams, Pierce, Cassady & Dixon, 2007).

Empirical research conducted to explore the relationship of giftedness and perfectionism mainly focused on the development of typologies of perfectionism (Dixon, Lapsley & Hanchon, 2004; Parker, 1997; Parker & Mills, 1996; Parker & Stumpf, 1995),

causes of perfectionism (Ablard & Parker, 1997; Speirs Neumeister, 2004b; Speirs Neumeister, Williams & Cross, 2009), influence of gender, grade level and birth order (Siegle & Schuler, 2000; Sondergeld, Schultz & Glover, 2007), motivation (Speirs Neumeister, 2004a; Speirs Neumeister & Finch, 2006) and parental influence (Ablard & Parker, 1997; Speirs Neumeister, 2004b; Speirs Neumeister et al., 2009; Speirs Neumeister & Finch, 2006). Existing research findings are theoretically based and teachers may find it difficult to relate them to practice without unpacking their own beliefs about perfectionism and giftedness. This is the gap that this study addressed.

Teachers have day-to-day contact with students and perhaps teachers are the first to notice or identify students' academic and social-emotional needs. This reflects the crucial role of teachers who are involved in students' educational growth. However, research shows that some teachers may not develop a solid understanding of students' needs in the school setting. Speirs Neumeister et al.'s (2007) research explored fourth grade teachers' conceptions of giftedness among ethnic minority and economically disadvantaged students. Twenty-seven teachers in an urban school system with an average of 17.4 years of teaching experience and an average of 4 years teaching gifted students completed a survey which required them to write their definition of giftedness in terms of characteristics and behaviours with reference to every gifted student in their classes. The findings showed that a majority of teachers hold a narrow conception of giftedness, equating giftedness with productivity and being unaware of the influence of cultural and environmental factors in the manifestation of giftedness.

Moon and Brighton (2008) used a survey and case studies to explore primary grade teachers' conceptions of giftedness. Four hundred thirty-four teachers from

kindergarten (34%), grade 1 (36%) and grade 2 (30%) from urban (28%), suburban (39%) and rural (34%) settings completed the survey. Teachers normally had more than 7 years teaching experience but teaching experience with gifted students was not specified. The socioeconomic levels of the schools where the teachers taught varied. The findings showed that a majority of participants endorsed a traditional definition of giftedness (such as strong work habits, advanced language skills and high ability to read) and believed that no observable deficits can co-occur with giftedness. Participants revealed they had difficulty in 'imagining' that students from ethnic minority groups who speak English as a second language or students with learning disabilities could be gifted. These findings reveal that teachers' uni-dimensional understanding of giftedness may pose a potential threat to gifted students who also have perfectionistic traits.

Connecting perfectionism with giftedness, Schuler (1999) found that the majority of gifted middle school participants who demonstrated perfectionistic traits reported that "some of their teachers had influenced their perfectionism, either positively or negatively" (p. 65). From the teachers' perspective, most of the participants displayed enabling rather than disabling behaviours in the classroom which indicated that teachers generally had a positive image of these students such as "being confident, mature, able to set goals and consistent in their work habits" (p. 61). What is remarkable about this finding is that teachers held a positive view of gifted students who demonstrated dysfunctional perfectionistic traits. Although research has showed how teachers' perceptions, attitudes and training may affect the level of support to students (Geake & Gross, 2008; Moon & Brighton, 2008; Speirs Neumeister et al., 2007), the core issue is how teachers understand perfectionism in gifted students. Is their understanding deep

enough to support students in handling perfectionistic thoughts and behaviours in the school setting?

When teachers perceive gifted students as 'model students' who always have good school adjustment, there is a potential risk that teachers may perceive it is acceptable to increase expectations of gifted students or support students in setting high goals and pursuit of excellence regardless of whether students hold healthy or dysfunctional views of perfectionism. Such over-generalization may pave the way to perfectionism-related distress. Hence, it is crucial for teachers to understand their own beliefs and expectations that may affect their interaction with and support to gifted students with perfectionistic traits.

Although typologies of perfectionism and giftedness are well developed, the fact remains that without including teachers' perceptions of perfectionism in gifted children, understanding of gifted students with perfectionistic traits in the school setting is still partial. The present study explores teachers' understandings of perfectionism in gifted children for factors that may contribute to teachers' conceptualizations. Literature relevant to the exploration of teachers' understandings of perfectionism in gifted children will now be reviewed.

1.1 What is Perfectionism?

Since the term 'perfectionism' contains a variety of meanings and is used to refer to different concepts, there is no consensus on the definition of perfectionism (Flett & Hewitt, 2002). In psychological and psychiatric literatures, perfectionism is often associated with neurosis and maladjustment (Burns, 1980; Flett & Hewitt, 2002; Pacht, 1984) such as depression, obsessive compulsive symptoms, eating disorder and anxiety

(Hewitt & Flett, 1991; Rice & Pence, 2006). Perfectionism is conceptualized as neurotic because perfectionists set unattainable goals and strive to perform in a perfect manner (Burns, 1980; Hollander, 1965). Flett and Hewitt stated that "this quest for perfectionism resulted in chronic self-doubt and anxiety" (p.9). The psychological distress intensifies when the gap between expectation and performance is wide. Unwillingness to do what is perceived as average work makes perfectionists psychologically and emotionally vulnerable such that they become defensive to criticism, procrastinate, withdraw and dropout of school (Burns, 1980; Pacht, 1984). Perfectionism is treated as uni-dimensional when the focus of the understanding of perfectionism is built on dysfunctional attitude only (Burns, 1980).

1.2 Dimensions of Perfectionism

When both personal and social components are taken into account, perfectionism can be viewed as multidimensional (Flett & Hewitt, 2002). Hewitt and Flett (1991) identified three dimensions of perfectionism based on intrapersonal and interpersonal manifestation of perfectionism: self-oriented perfectionism involves setting high standards for oneself and evaluating oneself against the standards with compulsive pursuit of perfection and improvement and avoidance of failure; other-oriented perfectionism involves imposing unrealistic expectations on others in their lives while socially prescribed perfectionism involves the perception that significant others impose high standards and expectations on oneself.

1.3 Types of Perfectionism

Hamachek (1978) held a different perspective on the dimensionality of perfectionism and stated that "perfectionism is a psychological phenomenon that remains

somewhat of a clinical mystery" (p.27). Hamachek emphasized that both thinking and behaviours affected the manifestation of perfectionism; he believed perfectionism could be multidimensional and positively constructed. Perfectionism could be identified as neurotic or normal depending on sense of satisfaction, ability to establish performance boundaries and attitude. Neurotic perfectionists set unattainable goals and focus on how not to make mistakes which results in them having difficulty in feeling satisfied and developing avoidance behaviours. It is inevitable that neurotic perfectionists get trapped in a vicious cycle because they think that they are not doing well enough to warrant achievement or satisfaction. Psychological distress, high unattainable goals and fear of failure reinforce the continuation of the vicious cycle which makes neurotic perfectionists feel emotionally drained. Normal perfectionists know how to set workable and manageable performance boundaries which reveal their strengths and limitations. They focus on how to do things right and accept that to be less precise and look for improvement result in a greater chance to be successful. Normal perfectionists have a healthy attitude about the acquisition of skills and satisfaction derived from performance which helps increase their self-esteem. Thus, normal perfectionists are more relaxed and feel good about themselves and their work.

1.4 Measures of Perfectionism

The measures of perfectionism also provide insight into how perfectionism is perceived as multidimensional. For example, the Multidimensional Perfectionism Scale (MPS) developed by Frost, Marten, Lahart and Rosenblate (1990) focuses on the intrapersonal nature of perfectionism. Two hundred and thirty-two undergraduate female students enrolled in psychology courses volunteered in the development of the measures

by filling in questionnaires. Factor analysis was used and 35 items were grouped into six subscales: CM (Concern Over Mistakes), PS (Personal Standards), D (Doubts About Actions) and O (Organization) are directed toward self while PE (Parental Expectation) and PC (Parental Criticism) reflect the perceived parental demands on oneself. MPS has high internal consistency with an alpha value for each subscale between .77 to .93 and high validity when compared to Burns' Perfectionism Scale (r = .846) (Burns, 1980).

Hewitt and Flett's (1991) measure was also named the Multidimensional Perfectionism Scale (MPS) and it contains three subscales on the dimensions of selforiented, other-oriented and socially prescribed perfectionism. The focus of Hewitt and Flett's (1991) MPS is on the interpersonal aspects of perfectionism. MPS was normed on 1106 university students (399 males and 707 females) and 263 psychiatric patients (121 males and 142 females) with affective disorders. Participants used a 7-point scale to rate their agreement with 45 items. Factor analysis was used and high internal consistency with alpha values for each subscale between .74 to .89 achieved. Hewitt and Flett (1991) also tested convergent and discriminant validity by comparing the MPS with personality measures: Attitudes Toward Self (Carver, LaVoie, Kuhl & Ganellen, 1988); Self- and Other-blame (Mittelstaedt, 1989); The Authoritarianism Scale (Heaven, 1985); The General Population Dominance Scale (Ray, 1981); Fear of Negative Evaluation (Leary, 1983); Irrational Beliefs Test (Jones, 1968); Locus of Control Scale (Rotter, 1966); The Narcissistic Personality Inventory (Raskin & Terry, 1988) and Symptom Checklist 90-Revised (SCL-90; Derogatis, 1983). The results provided evidence that self-oriented perfectionism was significantly correlated with various self-related constructs; otheroriented perfectionism was highly correlated with other-blame and other-directed patterns; and socially prescribed perfectionism was significantly related to measures of social behaviours.

Another example is the Almost Perfect Scale-Revised (APS-R) developed by Slaney, Mobley, Rice, Trippi & Ashby (1999) which consists of three subscales; High Standards and Order are used to measure adaptive perfectionism while Discrepancy is used to measure maladaptive perfectionism. Three hundred and forty-two academically talented students aged 11 to 15 (with 48% males) who completed either grades 6, 7 or 8 participated in the study. Participants enrolled in a summer program which required a high grade-point average and high standardized achievement test scores as well as academic products and a teacher recommendation. Participants completed the APS-R and three questionnaires. Factor analysis was used and high internal consistency with an alpha value for each subscale between .83 to .90 achieved. Only High Standards and Order were correlated (.58) but neither was correlated with Discrepancy (.10 and .07). Although the APS-R provides preliminary support for measuring perfectionism in gifted middle school students from a multidimensional perspective, cautious interpretation of results is necessary as the measure still needs further development (Vandiver & Worrell, 2002).

1.5 The Relationship between Perfectionism and Giftedness

Are gifted students more perfectionistic? Parker (2000) doubted this conventional wisdom that perfectionism is a trait of gifted students. Parker explained that because one of the major causes of the development of perfectionism is the compulsivity of striving for unattainable goals, it is very difficult to assess whether gifted students set unrealistic and unattainable goals or have high personal standards. It is possible that their high

ability may let them achieve what they strive for (Parker, 2000; Parker & Adkins, 1995). Since there was little research that explored the relationship between giftedness and perfectionism empirically, Parker and his colleagues conducted studies using national (US) samples of academically talented sixth graders who demonstrated academic excellence (scored at or above the 97th percentile on grade-level standardized tests and at least at the 70th percentile of eighth grade norms) to examine the issue.

In order to explore perfectionism in gifted and non-gifted cohorts, Parker and Mills (1996) used the MPS (Frost et al., 1990) to compare 600 academically talented sixth graders and 418 non-academically talented sixth graders. Gender was used to form subgroups. There was no statistically significant difference in gender and perfectionistic types between the two groups. Hence, Parker and Mill's (1996) finding pointed out the illogical syllogism derived from anecdotal evidence (Adderholdt-Elliott, 1987) that gifted students were more perfectionistic.

To further explore the relationship between giftedness and perfectionism, Parker (1997) carried out a cluster analysis of the MPS with the NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992) which measures five robust factors of personality (Neuroticism, Extraversion, Openness to experience, Agreeableness and Conscientiousness) and the Adjective Check List (ACL; Gough & Heilbrun, 1983) which is a self-evaluation using 300 adjectives and adjectival phrases to identify three types of perfectionists – nonperfectionists, healthy perfectionists and dysfunctional perfectionists.

Nonperfectionists manifested low Parental Expectations, the lowest amount of Organization and low total perfectionism scores. This matched the results of the ACL; nonperfectionists endorsed adjectives such as careless, disorderly and not organized. On

the NEO-FFI, nonperfectionists' average score was between the healthy and dysfunctional perfectionistic groups. The results indicated that nonperfectionists were not bound by perfectionistic ideas.

Healthy perfectionists scored the lowest in Concern over Mistakes, perceived Parental Criticism and Doubts about Actions which corresponded to the NEO-FFI where healthy perfectionists scored the highest in Extroversion, Agreeableness and Conscientiousness. In the ACL, adjectives such as organized, reliable, not careless and not disorderly were used by healthy perfectionists to describe themselves. The results revealed that healthy perfectionists had a positive attitude and parental support which equipped them to feel competent to face challenges, pursue high standards and be socially active.

Dysfunctional perfectionists scored the highest in total perfectionism and five out of six domains in the MPS apart from Organization. On the NEO-FFI, dysfunctional perfectionists demonstrated the highest Neurosis and lowest Extroversion and Agreeableness among the groups. On the ACL, adjectives such as gloomy, hostile and hurried were endorsed by dysfunctional perfectionists.

Parker (1997) concluded that it was inappropriate to equate perfectionism with neurosis. He stated explicitly that "the overriding characteristic of perfectionism in these talented children is conscientiousness, not neurosis" (p.556). The typology developed in this study supported Hamachek's (1978) view that both normal and neurotic forms of perfectionism exist.

Orange (1997) used another measure, the Perfectionism Quiz developed by Raudsepp (1988), to explore the relationship of giftedness and perfectionism among high

school students. However, the quiz measured the relationship of perfectionism and obsessive-compulsive behaviours. The higher the score, the greater the indication of obsessive-compulsive behaviours. The lowest score category indicated easy adaptation to new environments; the next indicated mild tendency towards obsessive-compulsiveness. The third highest category indicated exercising obsessive-compulsive behaviours in some areas and the highest category indicated that obsessive-compulsivenesss is a serious problem.

One hundred and thirty students with a mean age of 16 years who were mainly from gifted programs in the schools joined a workshop about perfectionism at an honours conference. One hundred and nine students voluntarily responded to the quiz. The results showed that 31% of participants scored in the highest category and 58% scored in the second highest category which supported that perfectionism (as associated with obsessive-compulsive behaviours) was a trait of this group of gifted high school students. Orange (1997) also carried out an exploratory factor analysis to investigate the dimensionality of perfectionism. Nine factors were extracted: 1) Need for Order, Organization; 2) Need for approval of others; 3) Obsessive, compulsive demands on self; 4) Anxiety and excessive worry; 5) Indecision; 6) High expectations of others; 7) Hurried, driven; 8) Procrastination and 9) Low interpersonal confidence. The findings provided some insights into how perfectionism was conceptualized, measured and identified.

Although Orange's (1997) findings showed that over 89% of gifted high school students were perfectionistic, it is dangerous to jump to the conclusion that all gifted students are perfectionistic without critically examining the design of the study. When a researcher regards perfectionism as uni-dimensional and equates perfectionism with

obsessive-compulsive behaviours, it creates misunderstanding and harm to perfectionists by equating perfectionism with psychological disorder (Hollander, 1965). In fact, perfectionism is not categorized as a mental disorder whereas obsessive-compulsive disorder is (American Psychiatric Association, 2000). Thus the generalization of Orange's (1997) finding that perfectionism is a trait of gifted students based on equating perfectionism with obsessive-compulsive behaviours is questionable.

However, as perfectionism is often linked with distress, Dixon, Lapsley and Hanchon (2004) replicated Parker's (1997) study to explore the relationship of perfectionism with mental health and adjustment outcomes in gifted adolescents. One hundred and forty-two gifted high school students with a mean age of 15.97 years from a residential academy which provided a rigorous and focused curriculum in science, mathematics and humanities participated in the study. In this study, the MPS (Frost et al., 1990) was used to measure level of perfectionism while the Reynolds Adolescent Depression Scale (RADS; Reynolds, 1987) and the Hopkins Checklist (HSCL; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) were used to measure mental health related symptoms. Two sub-scales of the Self-Image Questionnaire for Young Adolescents (Peterson, Schulenberg, Abramowitz, Offer, & Jarcho, 1984), Superior Adjustment and Mastery and Coping, were used to measure positive adjustment in terms of self-esteem whereas Perception of Academic Competence and Perception of Personal Security from the Self-Esteem Index (SEI; Brown & Alexander, 1991) were used to measure general adjustment. The Coping Inventory (COPE; Carver, Scheier, & Weintraub, 1989) was used to measure the frequency with which students used problem-focused, emotionfocused or dysfunctional-focused strategies to deal with stressful events. A cluster analysis was carried out and four types of perfectionism with adjustment were identified.

Similar to Parker's (1997) findings, Nonperfectionists scored low in all domains on the MPS. Pervasive perfectionists scored high in all domains in the MPS, similar to the dysfunctional perfectionists who scored high in five out of six domains identified by Parker. Dixon et al. (2004) identified two mixed types of perfectionists, Mixed-Adaptive and Mixed-Maladaptive. The first, Mixed-Adaptive, is similar to the healthy perfectionist Parker identified. These adolescents scored high on Parental Expectations, Personal Standards and Organization which were grouped as positive domains and scored comparatively low on Concern over Mistakes, Parental Criticism and Doubts about Actions which were grouped as negative domains. The second, Mixed-Maladaptive, a new type of perfectionism identified in this study, scored very high on Concern over Mistakes; perceived very high Parental Expectations and Parental Criticism; and had high Doubts about Actions but scored comparatively low on Personal Standards and Organization.

For adjustment, both the Mixed-Adaptive and Nonperfectionist groups reported few psychiatric symptoms. On the other hand, more psychiatric symptoms (i.e., low self-image, low sense of personal security and lack of coping skills) were reported by both the Pervasive and Mixed-Maladaptive groups. It is crucial to notice that the Pervasive and Mixed-Maladaptive perfectionists could be different from the dysfunctional perfectionists described in previous research. Pervasive perfectionists identified by Dixon et al. (2004) were similar to the dysfunctional perfectionists identified by Parker (1997). However, although Pervasive perfectionists scored high on the adaptive domains in the MPS, the

high score on negative domains overrode the adaptive advantages. Still, the Pervasive perfectionists were competitive and aimed at pursuing their best due to the high standards they set and high organization skills. On the other hand, Mixed-Maladaptive perfectionists scored high on negative aspects of perfectionism but low on positive domains. This revealed that Mixed-Maladaptive perfectionists failed to use positive influences such as personal standards and organization to regulate or cope with their perfectionism.

Academically, Mixed-Adaptive perfectionists scored the highest on Academic Competence under the Self-Esteem Index; Mixed-Maladaptive perfectionists scored the lowest; and Nonperfectionist and Pervasive perfectionists scored similarly. This finding revealed how perfectionism affected students' confidence in academic and intellectual pursuit positively and negatively. Hence, it is crucial to involve teachers to provide support and guidance to gifted students with perfectionistic traits in the school setting and assist them to deal with perfectionism in a positive, empathetic way by acknowledging strengths, weakness and coping strategies.

1.6 Causes of the Development of Perfectionism

Apart from understanding the relationship between giftedness and perfectionism, understanding the causes of perfectionism can provide additional information for educators to build connection between how other factors contribute to the development and manifestation of perfectionism in gifted students. From the psychological literature, Hamachek (1978) pointed out how emotional environments (i.e. non-approval and conditional positive approval) surrounding child and parent interaction affect the development of neurotic perfectionism. Non-approval, lack of necessary feedback and/or

lack of knowledge of external standards mean that the child is unable to compare his/her own performance with actual standards which results in doubts and anxiety. In order to compensate for the loss of acceptance and recognition, the child sets unreasonable high standards and actively strives for self-other acceptance. Hollander (1965) noticed that this may happen to a sensitive child who seeks affectionate acceptance from significant others by doing a lot to please.

Under the situation of conditional positive approval, a child over-values performance as a way to gain approval, resulting in under-valuing of self (Hamachek, 1978). Hollander (1965) and Burns (1980) mentioned how perfectionistic parents play a role in the development of neurotic perfectionism. Hollander stated that because perfectionistic parents give conditional responses such as love when the child reaches high standards or defer full approval to urge the child to perform better, the child feels anxious about him/herself and his/her abilities and personal achievement is belittled. The unending effort makes the child feel stressed. Burns held a similar view and highlighted that when the child perceives that making mistakes will lead to failure to gain approval, loss of acceptance, and feelings of anxiety, the child gradually learns to avoid failure. The accumulation of stress may lead to aversion to learning and development of psychological distress when the child gets older.

Research conducted by Speirs Neumeister (2004b) explored factors influencing the development of self-oriented and socially prescribed perfectionism in gifted college students through an in-depth, semi-structured interview. All participants had high SAT scores, were in honours programs and had been identified as gifted during elementary school. An inductive data analysis was used to code and categorize the data so that the

relationship among categories could be discovered and themes formed. Hewitt and Flett's (1991) definition of perfectionism was used. Aligned with Hamachek (1978), Hollander (1965) and Burns (1980), Speirs Neumeister found that parental perfectionism and parenting styles exerted an influence on the development of perfectionism. Socially prescribed perfectionists perceived that their parents imposed high standards on them due to the parents' own perfectionism. The findings revealed that one or both parents of the socially prescribed perfectionists adopted an authoritarian, rigid parenting style which stressed "obedience, trying to control their children's behaviours with punitive threats, and restricting communication and love" (p.263). The parenting style contributed to socially prescribed perfectionists' belief that they had to meet those high standards. In contrast, self-oriented perfectionists did not perceive high expectations from parents; rather they adopted their parents' perfectionistic attitudes and behaviours through modeling.

Another important finding from Speirs Neumeister's (2004b) study was the influence of early academic success. Socially prescribed perfectionists believed their early success raised their significant others' expectations which made them feel that continuing perfection in school was a must to keep gaining acceptance. Self-oriented perfectionists pointed out that early academic success increased their desire to improve by setting higher expectations for themselves with the result that they could not accept an average role in later academic development.

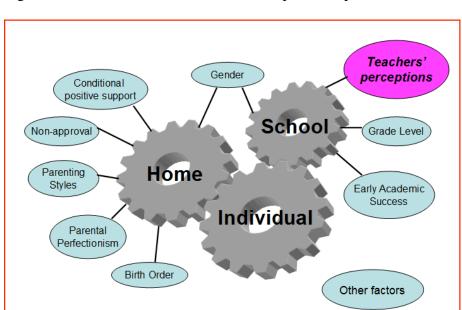


Figure 1.1 Factors that influence the development of perfectionism

The implications of the causes of development of perfectionism are crucial. Speirs Neumeister (2004b) suggested that educators have to recognize the learning needs of gifted students who manifest perfectionism and ensure that moderately to highly challenging tasks or curriculum are provided. Educators may also need to assist students to develop coping strategies to deal with less than perfect performance and/or 'failures'. Through assisting students to reinterpret academic disappointments, students may be able to free themselves from stress to be perfect. Moreover, from the family background information of students who manifested perfectionistic traits, educators can have a general picture about the factors contributing to the development of perfectionism and thus be able to decide best how to assist students to cope with perfectionistic traits.

1.7 Teachers' Understandings of Perfectionism and Giftedness

As children spend approximately five hours a day in school, the frequent and close contact with teachers may make students perceive teachers as significant others who provide guidance, support and care. Burns (1980) stated that

perfectionists might encounter problems in relationships because they fear criticism and anticipated rejection which results in them becoming defensive and resistant to share inner thoughts as well as alienating themselves from groups. Thus, teachers' understanding of gifted students who manifest perfectionistic traits is crucial. Pacht (1984) emphasized that teachers can assist students to understand their limitations and accept their imperfections. Teachers' open and supportive attitude can help students feel more relaxed and comfortable to face and handle their perfectionistic thinking and behaviours.

FRIENDS for life (Bareett, 1998) is the only evidence-based, school-based intervention and prevention program that aims to alleviate the level of anxiety and stress of students from kindergarten to grade seven and build emotional resilience.

This program is a recommended learning resource across British Columbia since 2004; over 95% of schools have implemented the program (Ministry of Children and Health Development, 2010). Practitioners undergo a one-day certification training session to learn the concepts, skills and techniques that they can implement 10 sessions to help students reduce the chance of developing anxiety disorders.

Handling perfectionism is only one of the components. Hence, teachers' understanding of perfectionism in gifted students is still limited as this program is not targeted at addressing the psychological, behavioural and social-emotional needs of gifted students with perfectionistic traits.

1.8 Students' Perspectives on Perfectionism

Understanding gifted students' perspectives on perfectionism can provide insight into how students view the issue. Schuler (1999) used a multiple-case research design to

explore perceptions of perfectionism and environment among gifted adolescents in a rural school. The research was conduced in two phases. Schuler first administered the Goals and Work Habits Survey (Schuler, 1994) with 112 grade 7 and 8 students who took accelerated courses in Mathematics, English and Science. The Goals and Work Survey was adapted from the MPS by Frost et al. (1990). The title of the measurement was changed to reduce response bias about perfectionism, and some statements were changed from past to present tense (e.g., "My parents never tried to understand my mistakes." was changed to "My parents never try to understand my mistakes") (Schuler, 1997). Students were categorised as nonperfectionist (12.5%), normal perfectionist (58%) or dysfunctional perfectionist (29.5%). Only normal and dysfunctional perfectionists were selected to participate in the case study. Twelve normal perfectionists and eight dysfunctional perfectionists, balanced for gender, grade level and birth order, were selected to have semi-structured interviews.

In the interviews, nearly all participants stated that perfectionism was healthy.

Normal perfectionists said they were more organized, worked harder and knew the importance of setting priorities which matched the characteristics of having high personal standards found in the Goals and Work Habits Survey (Schuler, 1994). Normal perfectionists had healthy pursuit of excellence as demonstrated by their high self-acceptance of mistakes, need for order and organization. Dysfunctional perfectionists were more performance-oriented and focused on not making errors which matched the characteristics of high Concern over Mistakes in the Goals and Work Habits Survey. Dysfunctional perfectionists always felt anxious and critical about not reaching high standards and thus doubted their own performance. Without effective coping strategies,

they did not know how to deal with failure. It is crucial to notice that dysfunctional perfectionists did not think their attitude and behaviours were unhealthy. Rather, the majority of normal perfectionists stated that perfectionism was negative sometimes, describing having a hard time to enjoy what was happening, burn-out, time constraints, setting priorities, and being critical of others.

Teachers' perceptions of perfectionistic behaviours were explored for additional information on students' manifestation of perfectionistic behaviours. The Empowering Gifted Behaviour Scale (Jenkins-Friedman, Bransky, & Murphy, 1986) was used to identify patterns of enabling and disabling perfectionistic behaviours of student participants during class time. The mathematics, English, social studies and science teachers rated participants' behaviours. The findings showed that teachers rated enabling behaviours more frequently than disabling behaviours regardless of whether the participant was a normal or dysfunctional perfectionist. This might be the result of dysfunctional perfectionists not wanting to reveal their distress in class. They may be good at masking their perfectionistic behaviours in terms of being a teacher pleaser. However, using the Empowering Gifted Behaviour Scale to identify gifted students who manifest perfectionistic behaviours may not be optimal. Some items (e.g., item 1 Sees things in shades of 'grey' versus 'black' or 'white'; item 4 Works patiently in stages toward a goal versus wants to reach goal immediately, impatient with intermediate steps) may not be relevant to perfectionistic thinking or behaviour.

1.9 The Relationship among Gender, Birth Order, Perfectionism and Giftedness

Siegle and Schuler (2000) used the Goals and Work Habits Survey (Schuler, 1994) to explore how grade level, birth order and gender affected perfectionism in gifted

adolescents who met the criterion of participating in programs for students with high abilities. Three hundred and ninety-one gifted grade 6 to 8 students from one rural school participated in the study. The results showed that as grade increased, gifted females' concern about making mistakes increased. First born gifted adolescents perceived the highest level of parental criticism and expectations while the youngest were least concerned with these two aspects. Gifted females had greater concern about organization than gifted males while gifted males perceived higher parental expectations than gifted females. This study provided insights into how perfectionism among gifted middle school students interacted with grade level, birth order and gender. It should be noticed that perfectionism was conceptualized as uni-dimensional in this study. Further research needs be done to explore how gender, birth order and grade level interact with multiple dimensions of perfectionism (e.g., healthy or dysfunctional; intra or interpersonal) so that a clearer picture can be achieved about the manifestation of perfectionism in gifted students.

Sondergeld, Schultz and Glover (2007) replicated Siegle and Schuler's (2000) study to explore how gender, grade level and birth order interacted with perfectionism in middle grade gifted students in a different geographical location which included urban, suburban and rural schools. Method of identification of giftedness among students was not mentioned. Four hundred and two gifted adolescents participated in this study. The MPS by Frost et al. (1990) was used. As Sondergeld et al. noted that the MPS was intended for adults, modifications in verb tense were made (e.g., "My parents never tried to understand me" to "My parents/guardians never try to understand me."). Parental Expectations and Parental Criticism were merged to become a Parental Pressures factor.

It was found that gifted females had higher Organization than gifted males which was consistent with previous findings (Parker & Stumpf, 1995; Siegle & Schuler). Sondergeld et al. also found that middle children manifested a higher level of perfectionism in Doubts about Actions than the oldest and youngest children.

The significance of this replicated study is its support for the influence of gender on perfectionism in gifted adolescents. At the same time, this study also provided new insight into how birth order plays an important role in the development of perfectionism.

1.10 The Relationship among Achievement Motivation, Perfectionism and Giftedness

What makes gifted students with perfectionistic traits become so persistent in their pursuit of high standards? Speirs Neumeister (2004a) believed that understanding the relationship between achievement motivation and perfectionism could help in examining this issue. Achievement goals defined by Elliot (1999) were used in Speirs Neumeister's (2004a) study: mastery goal (focus on how to develop competence or master a task), performance-approach goal (focus on demonstrating competence relative to others) and performance-avoidance goal (focus on avoiding looking incompetent at a task compared to others).

Two hundred and ninety first-year university students in the honours program, who were identified as highly able based on high ACT/SAT achievement test scores and high school GPA, took the MPS (Hewitt & Flett, 1991). Participants who scored one standard deviation above the mean on either self-oriented or socially-prescribed perfectionism qualified to be selected for in-depth semi-structured interview. The researcher ranked the scores and contacted those with the highest scores on each

dimension for interviews. Interviews continued until no new findings were found or existing findings were confirmed. Six participants with self-oriented and five with socially prescribed perfectionism were interviewed. Inductive data analysis was used to organize, manage and interpret data. Member checks such as emailing interview transcripts and a draft of analysis and interpretation were sent to all participants for verification.

The findings indicated that self-oriented perfectionists were more psychologically adaptive than socially prescribed perfectionists. Self-oriented perfectionists had high motivation to achieve and improve, as well as seek challenges; all these factors paved the way to the development of mastery goals. Competition with peers also drove them to set performance-approach goals in a healthy way. Clear vision and strong commitment to attain high standards also let self-oriented perfectionists develop healthy strategies such as better time management, seeking help from professors or peers, and self-monitoring their learning. For socially prescribed perfectionists, the fear-of-failure motive made them develop either performance-avoidance goals (avoid showing incompetence with the possible result of procrastination and avoidance of challenges) or performance-approach goals (prove their competence through taking challenges and using peers to evaluate performance). Speirs Neumeister (2004a) explained this might be how socially prescribed perfectionists maintained their reputation of being competent.

Speirs Neumeister's (2004a) study revealed that one of the keys to determining whether perfectionistic behaviours are adaptive or not is having a better understanding of students' motives for achievement. Speirs Neumeister noted that teachers should not simply jump to the conclusion that all perfectionistic behaviours are unhealthy. On the

other hand, teachers should become more aware of how perfectionism can harm students academically and cause psychological distress (Hewitt & Flett, 1991). It is crucial for teachers to help gifted students with perfectionistic traits to "look beyond performance outcomes to the goals and motives behind them" (Speirs Neumeister, 2004a, p. 228).

The development of achievement goals is described as dichotomous in Speirs Neumeister's (2004a) study; that is, self-oriented perfectionists may develop mastery goals or performance-approach goals while socially prescribed perfectionists may develop performance approach or avoidance goals. The possibility of developing mixed achievement goals should not be ignored. Also, achievement motivation is not static so it is crucial for teachers to be aware of the changes in motivation across time.

1. 11 Importance of Research on Teachers' Perceptions of Perfectionism in Gifted Children

Despite Parker and Adkins' (1995) recognition that little research has been done on teachers' understandings of perfectionism, to date there are no studies that address this need. When teachers are regarded as one of the significant others who support students' academic and socio-emotional development, the exploration of teachers' perceptions of perfectionism in gifted children can provide a platform to inform educators about what needs to be clarified and done in order to provide positive support for gifted students with perfectionistic traits.

In this study, the research questions were:

- 1. How do teachers understand giftedness and perfectionism?
- 2. How do teachers' understanding of perfectionism and giftedness relate to their perceptions of support for gifted students with perfectionistic traits?

The first question explored how teachers perceived giftedness and perfectionism; and how they understood the relationship between the two constructs. To bridge research into practice, the second question explored teachers' perceptions of needed support for gifted students with perfectionistic traits. Factors such as gender and achievement motivation were also probed in order to obtain a clearer picture of what teachers consider as factors that influence gifted students with perfectionistic traits.

Chapter 2

Methodology

A general qualitative approach using content analysis (Bogdan & Biklen, 1992; Krippendorff, 2004) was used to explore the research questions.

2.1 Participants

After obtaining ethical approval from both the university and the school district (Appendix A: Certificate of approval), the researcher contacted the coordinator of gifted education in a large school district in western Canada and requested that she make initial contact with potential participants through sending the request for participation and the letter of invitation (Appendix B: Letter of invitation). Participants were asked to contact the researcher directly by email or phone if they were interested in participating in the research. A consent form which listed the research purpose, study procedures, potential risk, confidentiality, contact information and rights of research participants was given to research participants (Appendix C: Consent form) and they had two days to consider their participation in the study.

The researcher also formally approached the principal of a private school for gifted children located in an urban city in Western Canada to recruit participants by sending an invitation email. The same procedures as described above were used. In order to ensure there was no coercion applied to teachers, the request to the principal included the following statement: "Your agreement is in principle. Individual teachers have the right to decide whether or not to participate in the research."

Six elementary teachers participated in this research. Five of them worked in the public schools in district programs for gifted students and one worked in a private school

for gifted students. Five participants were female and one was male. All the participants were Caucasian. Their backgrounds are summarized in Table 2.1.

Victoria is a district resource teacher / gifted education who mainly teaches in grades 4 to 7. She has been working with gifted students for 2 years. Victoria has Bachelors degrees in Psychology and Education. She also obtained a Masters degree in Human Resources and a Master of Arts degree in Special Education with a Gifted Education concentration.

Annette is a district resource teacher for twice exceptional learners (i.e., learners who are gifted and have another special learning need such as a learning disability) and she has worked in this position for 1 year. Her job involves doing pull-in challenge programs for kindergarten to grade 7 students and doing consultation with students and teachers. Before this job, Annette worked in a private school for gifted children for 4 years and mainly taught students from kindergarten to grade four. Annette has a Masters degree in Special Education with a Gifted Education concentration. She has been to several professional development workshops on gifted education.

Judy is a district resource teacher in gifted education and she has worked specifically with gifted education for more than 17 years, including running challenge centres which provide pull-in programs for students from kindergarten to grade 7, a mentorship program for students in grades 4 to 7 who have a passion in a specific area where they work with experienced individuals who are willing to share their interest and expertise, and a future problem solving program which provides a challenging setting for students to use creativity and critical thinking to solve real world problems through team work. The latter is for gifted or talented students throughout the district; they come for a

4-day program that teaches them how to do the 6-step problem solving process. Judy has a Bachelors degree in Psychology, a teacher certificate and a Diploma in Special Needs specializing in Learning Disabilities and Gifted Education.

Stephanie is a second language teacher who works in a private school for gifted children. She has 10 years experience teaching gifted children. She mainly teaches grades 1 to 12. She teaches French Immersion, Core French, Spanish, German and Language Arts. She has an honours Bachelors degree in Comparative Literature and Education. She also holds several extra qualifications as a teacher: guidance, co-operative education, primary as well as secondary certificates.

Fiona has been a consultant in gifted education in learning services in the school district for the past 3 years. She has been working in gifted education for about 15 years; she started as a challenge centre teacher and then taught and organized a future problem solving program. She has a Bachelors degree in Education and a Diploma in Teacher Librarianship. She has attended a lot of yearly training workshops, national conferences related to giftedness and lectures run by professionals in the gifted education field.

Jacob is a gifted challenge centre coordinator / facilitator. He teaches French learning systems and music. He has been in this position for 1 year though he worked in district multi-age cluster classes of gifted children and assisted in the district screening process off and on for the last few years. He has Bachelors degrees in Fine Arts and Education. He taught at the university in Media Studies and Cultural Analysis for a few years.

Table 2.1 Participants' background

Name	Job title	Years of	Qualification
		experience	
Victoria	District resource	2	Bachelors degree in Psychology and
	teacher in gifted		Education
	education		Masters degree in Human Resources
	(Grade 4 – 7)		Masters of Arts in Special Education
			with Gifted Education Concentration
Annette	District resource	5	Masters degree in Special Education
	teacher for twice		with Gifted Education Concentration
	exceptional learners		
	(kindergarten to		
	Grade 7)		
Judy	District resource	17	Bachelors degree in Psychology
	teacher in gifted		Diploma in Special Needs (Learning
	education		Disabilities and Gifted Education)
	(Grade 4 – 7)		
Stephanie	Second Language	10	Bachelors degree in Comparative
	Teacher in private		Literature and Education
	school for gifted		Several extra qualifications
	children		
	(Grade 1 – 12)		
Fiona	Gifted education	15	Bachelors degree in Education
	consultant		Diploma in Teacher Librarianship
	(school district)		
Jacob	Gifted challenge	1	Bachelors degree in Fine Arts and
	centre coordinator /		Education
	facilitator		
	(Grade 1 to 6)		

2.2 Sampling Procedures and Sample Size

Criterion sampling was considered appropriate for this study. Participants were selected who met the predefined criterion of teaching experience with gifted students. Because the participants had similar teaching experiences, they were key informants who allowed the researcher to understand the topic and issues comprehensively through elucidating participants' points of views about their experiences (Altheide & Johnson, 1994). Even though the number of participants was small, as Morse (1995) argued, "Richness of data is derived from detailed description, not the number of times something is stated" (p. 148).

2.3 Ethical Considerations

There were no known risks in participating in the interview. Participation in this study was entirely voluntary and participants could refuse to participate or withdraw from the study at any time without jeopardy to their employment. Participants had the opportunity to ask questions about their participation in this study at any time. A copy of the consent form was provided to participants. Pseudonyms were given and used so research participants would not be identified by name in any reports of the completed study and any publications that result.

Any information resulting from this research study was kept strictly confidential. Transcripts were locked in a filing cabinet in the Principal Investigator's research lab.

Data used for analyses were stored under password protection in a computer file to maintain confidentiality. All data will be stored for five years. Computer data will be erased after the storage period and transcripts shredded.

2.4 Research Design

This was an exploratory study that focused on understanding teachers' perceptions of perfectionism and giftedness and how they support gifted students with perfectionistic traits. It was important to capture participants' understandings, assumptions and interpretations and also to respect the uniqueness of the information provided by each participant about the research topic so that insights could be developed based on participants' perspectives and their interpretation of their world (Bogdan & Biklen, 1992). Hence, an interview was chosen to elicit participants' understandings and perspectives on the subject matter.

2.5 Interview

Teachers in the study participated in a semi-structured interview (Appendix D: Interview questions). The researcher guided the discussion by asking specific questions so that more specific information from the participants could be obtained (Rubin & Rubin, 1995). Through a purposeful conversation which is coauthored and coproduced between the interviewee and the interviewer, data (such as participants' feelings, thoughts and experiences) arise from the interpersonal relationship (Kvale, 1994; Rubin & Rubin, 1995). Thus, an interview is an intentional way of learning from participants (Rubin & Rubin, 1995).

An interview guide with a predefined range of topics or questions was used. As this is a pioneer study in the field and no established psychometric measures or interview protocols could be followed, the development of the interview questions was guided by the literature review conducted for this study. Clarification of the interview questions was sought by conducting pilot interviews with two teachers who fulfilled the criterion to

participate in the study (i.e., teaching experience with gifted students). Probing was used when necessary to extend the interviewee's response, clarify the interview questions, and/or to ensure the answer obtained correctly represents the interviewee's intent.

It was critical to provide a way for the participants to freely express what they thought about the research topic; thus the interview format remained flexible so that new topics relevant to giftedness and perfectionism could be introduced. Participants were encouraged to use their own words and terms to describe their experiences so that understanding derived from their perspectives and worlds could be achieved (Rubin & Rubin, 1995). Knowledge was actively constructed and coauthored because of the interflow of the questions and responses between the participants and interviewer (Fontana & Frey, 2005; Kvale, 1994).

Because of the flexibility and open-ended nature of the interview, the researcher was able to understand how the participants themselves structured the topic and revealed their perspectives (Altheide & Johnson, 1994; Bogdan & Biklen, 1992). The major concern was understanding the process and meaning derived from the interviews instead of examining cause and effect (Bogdan & Biklen, 1992).

2.6 Procedures

A semi-structured interview which lasted approximately one hour was arranged at participants' convenience. The location of the interview was negotiated with the participants (e.g. coffee shop, classroom or office). All interviews were conducted by the researcher. Participants' responses were not assessed or judged at the time of the interview. The researcher took notes about specific key points in order to trace the flow of the interview and ask follow up questions. It was mandatory that the interview was

audio recorded so that all verbal information could be captured accurately. The interview was then transcribed for data analysis.

2.7 Transcription

The social world is an interpreted world (Altheide and Johnson, 1994, p.284) so it is understandable that transcription is an interpretive act when language is not transparent (Lapadat & Lindsay, 1999; Rubin & Rubin, 1995). Lapadat and Lindsay argued that transcription is inherently theory laden: the researcher's reflexivity, such as positionality and beliefs, and how representations are created or co-constructed should be examined in order to constrain over-interpretation of the data. Hence, it is crucial to examine the data and explicate the researcher's selectivity in transcription in terms of his/her knowledge beliefs and interpretations when transcription is also a part of analysis (Lapadat & Lindsay, 1999; Rubin & Rubin, 1995; D. Silverman, 1993). Such openness in the process of transcription allows the audience to examine the trustworthiness of the transcript as an interpretive act. Therefore, transcription is more than a total representation of the taped conversation (Lapadat & Lindsay, 1999).

Technically, D. Silverman (1993) noted the importance of transcribing the conversation in detail because this can "overcome the tendency of transcribers to 'tidy up' the 'messy' features of natural conversation" (p.117) so that analytical biases and preconceptions can be reduced. Therefore, a verbatim transcription was made in this study. Through the repeated steps of listening and re-listening, viewing and reviewing, this close attention to transcription reflects how analysis takes place where interpretive thinking is needed to make the data become comprehensible (Lapadat & Lindsay, 1999).

A transcription key to reveal the interviewees' expression was developed by the researcher (Appendix E: Transcription key). Including and analysing unarticulated expressions could help the researcher explore participants' perceptions and contextual understanding of the topic (Altheide & Johnson, 1994). For example, bold text was used to indicate strong emotion, ellipses were used for pauses or to indicate hedges; a bracket was used to indicate interviewees' body languages or expression such as laughing, giggling, exhalation or snapping fingers.

2.8 Analysis

According to Krippendorff (2004), a text does not contain any message until someone reads it and gives it meaning. Thus the researcher needs to have a strong methodological understanding and reflexive mindset to do analysis. Content analysis was chosen to analyze the data in this study. The key to answering the research question included familiarization with the text, careful design of analysis, non-judgmental description of the textual elements and sensible interpretation of inferences and results.

The researcher read and reread the transcripts and searched for regularities and patterns to form the codes, such as repeated words or phrases, patterns of behaviours and prominent ways of thinking which answered the research question. Then the researcher reviewed all the codes and clustered the codes into categories. Under this systematic approach, all categories were reviewed and the concepts that emerged from then informed the generation of themes (Bogdan & Biklen, 1992; Krippendorff, 2004; Rubin & Rubin, 1995).

2.9 Member Checks and Expert Checks

Rubin and Rubin (1995) mentioned that the credibility of qualitative research can be established by increasing transparency (i.e., revealing the process of data collection) and communicability (i.e., revealing the 'realness' of the participants' experiences). Hence, three questions about clarity, comprehensiveness and accuracy were sent to participants by email with the interview transcript approximately 2 to 4 weeks after the interview for verification and feedback.

- 1. Is the interview transcript clear to you? If no, what would you like to have clarified?
- 2. Does the interview transcript accurately reflect what you shared in the interview? If not, please suggest what should be changed.
- 3. Does the interview transcript reflect your thinking about giftedness and perfectionism? If not, please suggest what should be changed.

A summary table of codes, categories and themes was sent to participants approximately 4 months after receiving all the responses and feedback from the participants. Then, an expert who had knowledge of the research topic was asked to verify the credibility of the themes identified. Only the themes were given to the expert. The expert did not have access to raw data.

2.10 Researcher's Reflexivity

Kvale (1994) pinpointed that it is the researcher's effort to reflect on his / her biases, presuppositions and prejudices that is important in reducing the researcher's influence on the research process and findings. Altheide and Johnson (1994) emphasized that the accountability of researchers' claims can be increased when researchers

acknowledge awareness about what prevented and hindered them to reach adequate understanding of the research question and data during the research process.

In this study, as the researcher was interested in understanding the relationship between giftedness and perfectionism, an extensive literature review was conducted which helped the researcher become more familiar with the conceptualizations of giftedness and perfectionism. The researcher was conscious of and reflective that her prior working experiences as a high school teacher for 4 years and the background knowledge obtained from the literature review should not be used to compare, judge and evaluate interviewees' responses during the interview process. The researcher monitored her influence by delineating and elucidating her conceptions of perfectionism systematically through writing down her thoughts before all the interviews were conducted. This made the researcher alert to the possible danger of immersing personal opinions in the research process. By reducing this bias, the researcher constantly reminded herself to have an open attitude and accept all interviewees' ideas.

As the interview was a co-constructed process between the interviewee and the researcher, the researcher was conscious and acknowledged the influence of asking leading questions. Kavle (1994) noted that "the decisive issue is not whether to lead or not to lead, but where the interview questions lead, whether they lead in important directions, yielding new and worthwhile knowledge" (p.156). With the guidance of the research supervisor, the researcher critically examined and excluded from analysis data that were collected under the influence of leading questions. The researcher also kept memos of comments, thoughts and enquiries that arose from each interview, as well as

during transcription and data analysis. These memos facilitated the researcher's reflection on methodology, preconceptions or assumptions (Bogdan & Biklen, 1992).

Chapter 3

Results

In this chapter, the findings are presented relevant to teachers' understanding of 1) the definition of giftedness and perfectionism and 2) the relationship between giftedness and perfectionism. These findings pave the way to informing 3) needed support for gifted students with perfectionistic traits.

Six major themes emerged from the data analysis that sought to capture / reflect teachers' understanding and experiences of giftedness and perfectionism. The themes were: complexity of giftedness; perfectionism: a vicious cycle; giftedness and perfectionism: a tangible link; giftedness and perfectionism: an uneasy relationship; students' personal and academic challenges; and developing best practice (Table 3.1).

3.1 Complexity of Giftedness

Defining giftedness is complex because there is no universal and standardized definition of giftedness which could guide the participants to provide a 'correct' answer. Participants used their prior knowledge and working experiences to illustrate their operational definition of giftedness. They considered various perspectives, dimensions, measures and possible ambiguity in order to define giftedness.

3.1.1 Struggling with the Definition.

The researcher adopted a straightforward approach to capture the perception of the participants, that is, asked the participants directly how they defined giftedness.

Spontaneous responses such as laughing and having a long pause after hearing the question were common among the participants. Except for Stephanie, the participants used various adjectives (i.e., hard, difficult and complex) to comment on the difficulty of

the question. Fiona explained, "Not even the experts agree on what giftedness is. There are many definitions so I take bits and pieces from all of them." Victoria stated that "(giftedness) is almost undescribable[sic]" while Jacob believed that "it (giftedness) was pretty amorphous."

3.1.2 Various Perspectives Adopted.

Although the participants expressed difficulty in defining giftedness at the very beginning of the interview, they then soon shared their thoughts by adopting various perspectives to illustrate what giftedness was. Some abstract terms, such as natural, a potential, and more than talent, were used to describe the general image of giftedness.

None of the participants related academic excellence as a criterion for defining giftedness.

Some participants provided a definition with theoretical or research support:

Annette adopted Renzulli's (2002) idea of task commitment to help define giftedness while Fiona adopted L. K. Silverman's (1994) stand of asynchronous development of gifted students. Jacob focused more on using psycho-educational diagnostics that he compiled with critical examination to form his definition.

Contextual influences were considered when defining giftedness. Fiona pointed out that different cultures had different perceptions of what giftedness was, "First Nations value certain traits differently and might consider giftedness differently." She added how gender played a role, "Some students, especially girls, they go underground and may be hiding their giftedness." Jacob shared a similar view in terms of socio-economic status from his working experience with students from the poorest neighbourhood in the city.

I worked with gifted kids on the east side. And they don't come from any privilege and yet here is this child with some amazing mind and they are fortunate if they get the resources we provide. They're fortunate because they don't come with any, to put a bad word on it, pedigree.

Uniqueness of gifted children was an idea with which all participants agreed. The participants repeatedly conveyed a message that not all gifted students would be necessarily like the typical gifted child the general public assumed. Fiona stated that the intensity of how gifted students think, behave and present themselves could reveal the differences between gifted students and their peers. Fiona and Judy made the same argument that the asynchronous development of gifted children marked the uniqueness of giftedness.

Victoria gave a good illustration of how the uniqueness of giftedness related to the degree of manifestation of giftedness which could result in making definition difficult:

I mean each child is so incredibly remarkably different and yet when you come across a child who may or may not be gifted, or at least extremely intellectually skilled, it's so latently not obvious, so to define it is very hard. This is ya ... it can be really really difficult.

3.1.3 Dimensions of Giftedness.

There was a consensus among the participants that gifted students demonstrated exceptional abilities in one or more areas or across disciplines which were beyond the group or above the average. Judy provided a concrete example:

Like lots above average in any, any given area. So a student can be gifted in one area but not in another. The student may be gifted in languages or gifted in computer technology but not in mathematics or leadership. So you know, different types of giftedness.

Victoria stated that weakness of gifted students could be manifested behaviourally: "You can have a brilliant child who is extraordinary talented and always thinks extremely well and yet (he) can't sit still for 5 seconds and he's bouncing all over the place." Fiona echoed this statement, describing how weakness could be manifested socially too: "A

grade 1 student might cognitively work at a grade 6 level which I have seen many times but socially at a lower grade."

Apart from seeing giftedness from multiple dimensions, Stephanie perceived that "(giftedness) can be cross-disciplinary where children demonstrate an extraordinary ability in all subject areas, which is very rare" whereas Victoria recalled her gifted students who helped her see giftedness globally:

This is more than just a ... specifically in one area, has to be global ... you know the 'g', that's always talk about the simple 'g' for giftedness that really helps how I see it. It's not only being able to take in information but being able to understand, assimilate, summarize it and then create something brand new out of it.

Jacob noted that some diagnostics provided a binary definition of giftedness such as the bright child versus the gifted child which might over-simplify the definition of giftedness. He had some disagreement but he also recognized "those (diagnoses) are a helpful starting point."

3.1.4 Measures of Giftedness.

Identification of giftedness was another area that participants stressed. Jacob used diagnostics to look for the traits of giftedness. He agreed that using diagnostics was helpful to provide a preliminary idea for 'lay' teachers to know what giftedness was.

Judy used different definitions based on circumstances:

When I do the mentorship program, I use Tannenbaum's definition of giftedness ... you know if it's like for an academic program, I would use you know, two standard deviations away from the norm in an IQ (intelligence) test ..."

Fiona held a comprehensive view of measures of giftedness:

¹ Tannenbaum's (1983) definition of giftedness included five factors: general ability; special aptitude; nonintellective requisites; environmental support; and chance.

You actually need to use multiple criteria. If you're going to label a child gifted, you need to use a cognitive ability test, student achievement records, student portfolios, teacher observations, often parents' interviews too. Sometimes their peers even have a good understanding of that child.

3.1.5 Ambiguity when Defining.

Definition of giftedness is not absolute and simplistic. Victoria noted that the definition of giftedness could be 'tricky' because there was a difference between gifted children and those who were extremely academically skilled and wanted to please but people might regard the latter as gifted as well. Jacob commented on how the binary definition of gifted child versus bright child invented an invisible line which made the definition of giftedness over-simplified.

Fiona shared her experience about identifying gifted students, "I can go in and talk to students sometimes within 30 seconds, 'Wow! I think this kid is highly gifted' and (sometimes) you can't tell until they are tested." By the same token, Annette stressed that some students were missing out from identification as gifted, such as underachievers and students with a disability, because "they never had the opportunity to show it so you don't see." Hence, the prevalent low achievement or disability masked the giftedness.

Although Jacob used diagnostics to help him form a definition of giftedness, he was conscious about the application of measures. He criticized one of the diagnostics he had come across:

Gifted children tend to have difficulty learning (a) second language. Er ... and not in my experience, they don't so ... I'm actually, currently trying to work on, going through these diagnostics and revising them a bit for teachers to say this student may or may not exhibit this, meaning ... ya you might see this but it doesn't mean, it's not a catch-all, it doesn't mean anything.

3.1.6 What Giftedness is Not.

All participants tried to answer the definition of giftedness directly by providing examples. Jacob also used elimination to provide a broader perspective about how to define giftedness. First of all, there was no monolithic definition of giftedness. A 'straight A' student might not be identified as gifted because without the expression of passion to learn more and go further, the student was "just a very competent kid who knows how to deliver according to the criteria." He disagreed that "giftedness smacks with elitism" because gifted education was "not about to elevate children to some elite" or "a special group of children who do really good work." "I don't believe that a child who is generating a lot of polished product is necessarily gifted." Lastly, he pinpointed that 'the perfect child' who was assumed as gifted by many teachers might not be gifted in reality because "there's a lot of context you have to investigate before you make that pronouncement."

Table 3.2 Themes, categories and codes for the interview data

Theme	Category	Code
1. Complexity of Giftedness	Struggling with the Definition	Difficulty of the questionDifficult to articulate
	Various Perspectives Adopted	 Natural A potential More than a talent Theoretical / research-based Relationship with academics Individual differences / Uniqueness Contextual influences (e.g. Socio-economic status, culture)
	Dimensions of Giftedness	 Global dimension Multi-dimensional Antagonistic / binary
	Measures of Giftedness	 Comprehensiveness of the assessment Use of diagnostics Depends on context
	Ambiguity when Defining	 Can gifted students be recognized immediately? Reliability of the diagnostics
	What Giftedness is Not	 Elitism A monolithic definition Academic competence Being productive The perfect child

Theme	Category	Code
2. Perfectionism: A Vicious Cycle	Negative Perspective Adopted	 Psychiatric related The dominant influence of fear / anxiety Negative psychological manifestation Negative behavioural manifestation Children's limited understanding of 'perfect'
	Source of Perfectionism	 Self Home environment School Socio-economic status Culture
	Reasons for Developing Perfectionism	 Refuse to start when not sure of being the best The fear of mistakes / failure makes student not want to take any risks Do things repeatedly because of fear of mistakes Never feel like the work is done because the work produced doesn't meet the standard / expectation Underachievement results in part when students do not hand in work Always hard to self and the feeling of imperfection may increase the level of anxiety The parents drive the child to be the best and the child drives himself / herself
	Exceptions to the Negative Perspective	Healthy perfectionismIndividual differences

Theme	Category	Code
3. Giftedness and Perfectionism: A Tangible Link	Similarities between Giftedness and Perfectionism	 Higher awareness of what can be produced Higher expectation of what should be able to do Students' capacity to thrive encourages them to set higher standards Go beyond teachers' expectations and push themselves more Critical thinking and global perspectives pave the way to be self-motivated and set higher standards Huge motivation to push
	Teaching Experiences that Inform Teachers	 Perfectionistic children tend to be gifted children in the regular classroom See most gifted children as perfectionists
	Possible Link between Giftedness and Perfectionism	- Teachers who work with giftedness may have an understanding that perfectionism is a trait of gifted students
	Reflections on Teaching Practice	- Providing challenges / struggles to gifted students may motivate perfectionism

Theme	Category	Code
4. Giftedness and Perfectionism: An Uneasy Relationship	Caution when Forming a Relationship	 Some relationship but probably for very individualistic reasons Limiting and dangerous to link perfectionism with certain traits Inappropriateness of generalizing the relationship
	No Relationship	 Giftedness comes before the perfectionism and anxiety Perfectionism is not a symptom of giftedness

Theme	Category	Code
5. Students' Personal and Academic Challenges	- Psychological Issues	 Fear of being mediocre in the gifted environment Fear of not meeting own standards Fear of not meeting significant others' expectation Not sure what can be produced with effort Fear of parental disappointment
	- Social-emotional Issues	 Highly sensitive / intense emotion Unwilling to cooperate with others as they may not live up to the standard High expectations of others may take a toll on friendship
	- Academic Issues	 Learning needs are not met Procrastination Difficult to work in group settings

Theme	Category	Code
6. Developing Best Practice	Noticing Students' Learning Needs	 Students who act out Girls who work quietly Perfectionism masks giftedness Underachieving / students who don't have a chance to show the talents Increase time to get to know the students
	Providing a Supportive Learning Environment	 Work with classroom culture Increase chance of exposure Provide information related to giftedness and perfectionism to regular classroom teachers
	Practicing Useful Teaching Techniques	 Show empathy and recognition Acknowledge self as the owner of learning Encourage creativity Create more collective work Emphasize self-reflection Be more sensitive when giving praise Intervene when necessary Modify assessment rubrics State / clarify expectations
	Explaining Personal Dimensions of Learning	 Respect ideas Accept, welcome and learn from mistakes Focus more on process than the product Ownership of learning
	Teaching Students Effective Coping Strategies	 Set manageable goals Learn self-assessment and get to know self-progress Find resources Increase problem-solving ability

3.2 Perfectionism: A Vicious Cycle

Perfectionism was negatively perceived among most of the participants. Through identifying the source of perfectionism, participants spontaneously linked the source of perfectionism with negative psychological and behavioural manifestations which helped to explain the reasons for developing perfectionism. A vicious cycle with which the perfectionistic student struggled was 'visualized'. Exceptions to the negative perspective of perfectionism were also considered.

3.2.1 Negative Perspective Adopted.

Two teachers described perfectionism as neurosis and mental illness. Stephanie described perfectionism as a mode of thinking that required that the child never be flawed but "that could be a neurosis on the part of the child because the world is not perfect ... a child's output is far from perfect." Victoria first described perfectionism as "almost like a disability" and later used 'mental illness' to refer to perfectionists:

They (students with perfectionistic traits) are highly anxious. It has to be flawless. They will go over and over and over something until it is good. Hmm I've seen children erase to the point of cutting through the paper ... hmm it was almost, hmm meant mental illness. It's a strong word but that's a high level of anxiety attached to whatever they are making."

Fear, afraid and anxious were the most frequently used adjectives when describing students with perfectionistic traits. All participants agreed the dominant factor of perfectionism was the influence of fear / anxiety which manifested in the areas of making mistakes, failure, incapability, taking risks, effort that didn't pay off and meeting expectations from self and/or others.

Fiona precisely expressed:

The negative prospect of perfectionism always is when I guess it is a student motivated by fear of failure. You have very unrealistic standards, high standards

that you are trying to achieve and which may never be achievable, never good enough and you are driving yourself crazy.

Thinking from a child's perspective about perfection, Jacob understood that children have a very limited definition of 'perfect.' To children, perfect means complete, polished. For some kids, I think perfect means finished and complete. Impermeable, nothing can be added or taken away. ... but that's a very hard thing to always achieve.

3.2.2 Source of Perfectionism.

"I'm sure pure perfectionism is an internal thing; it's an internal drive." Victoria believed that perfectionism was self-imposed and she added, "Perfectionism is really coming from the anxiety, and it's the self-drive to make things perfect." Fiona shared a similar thought and explained, "You (students with perfectionistic traits) are not comparing yourself to other people but rather (the perfectionism) comes from within. You see yourself as never good enough and create your own internal standards of what you should be or achieve."

Jacob believed perfectionism was rooted in anxiety, self-criticism and meeting expectations. Students with perfectionistic traits used self-criticism as a way to elicit praise from someone in the position of authority, looking for them to say:

'No, you are wrong. This is wonderful! This is perfect! And then they (students) can say 'Yes, you knew I'm perfect! But I still have to be perfect!' But then it's created the loop of, 'Ok, now what do I do next time?' Children who demonstrate perfectionistic tendencies get caught in this loop of ... 'Ok, that was perfect that time. Oh now I have to raise the bar, what do I do next time? And so it's gotta go up and up and up next time. This is where the anxiety arises in some kids I think.

Students with perfectionistic traits might seek perfection in some areas only.

Victoria noted:

I'm thinking a little boy here at the moment. He's a good, skilful writer and he still has difficulty in writing ... hmm his writing has to be flawless, and the printing has to be perfect, spelling has to be perfect, grammar has to be perfect. In the artroom, it doesn't matter, paints everywhere, whatever.

Home environment also played a vital role and Annette supported that the development of perfectionism "really depends on how they've (students with perfectionistic traits) been brought up." According to Victoria's observation, "Sometimes you can tell if the perfectionism is being driven by the parents." Stephanie provided a reason, "(Students) with perfectionistic traits do seek perfectionism, where often this is the result of the culture that they grew up at home, namely that they need to have A-plus which is a perfect mark." Fiona added, "(Parents) want the child to be perfect, get the perfect answer."

Judy shared a case about how parental support could become extreme: I had one student in mentorship who took every Friday off school to do the mentorship product. Now this is something that it's part of the program but it's not the be-all-end-all. But she ... and her parent I think contributed a lot to this. Every Friday, they took off and they said we have to work on the mentorship program and they wanted to be the best product ever and, you know, that's extreme.

Fiona commented that parents did not know their involvement and support could be negative:

It can be very destructive if parents are giving messages to the child about what is good, what is excellence, what is perfect. If the parent is driving the child, and the child is driving themselves, it's not gonna be in a good situation. It's a pretty destructive situation, unhealthy.

Stephanie pointed out the limitation that how much a teacher could get to know the family background of a student, "We don't know what their (students with perfectionistic traits) culture is at home, we don't know what kind of rhetoric the parents are feeding them."

Apart from home, Jacob commented that the expectations of the school, teachers, school community, parents and socio-economic neighbourhood all gave stress to students "who think they need to demonstrate perfect work." According to Jacob's experience in an upper middle class school, the school environment was shaped by "stars, stars, stars, stars, the best athlete, the best this, the best that." Meanwhile, the school and education system also experienced a great demand on products which led to the following situation:

There's a lot of anxiety that students need to produce good work in school. The anxiety to perform and this amount of anxiety to perform and to produce excellent work becomes separated from the child's metacognitive joy of just learning for the sake of learning or being for the sake of being, that's when perfectionism becomes really problematic.

When the culture fostered "people who do really good polished work stand out here and then they get claps and the awards," Jacob believed this would increase the level of anxiety of students who were perfectionistic:

The perfectionistic child will put a lot of work into presentation. Er ... certain perfectionistic children that presentation involves hmm ... dressing up, something that may or may not be of that much ... cognitive value so, depends on the kid that puts glitter, or lot of or some computer ... computer generated documentation onto a poster and so on.

Jacob also shared his sociological perspective about how North American and other industrialized cultures shaped perfectionism among boys and girls. For boys, "the culture educates boys to be perfectionist through action, that's why there are sports stars." For girls, more factors needed to be considered.

(Girls were) educated at an early age that they can assert social power through aesthetics – dressing well, knowing the right food, wearing the right jewellery, er ... presenting the right ideas, making the prettiest posters, having the prettiest bedroom, have the best birthday party.

The socialization process and gender stereotyping mentioned above made the girls "realize that they do what's valued aesthetically, they will succeed, they will have some sort of power and so I think they bring some of that into the perfectionism" with the result that "a lot of girls are obsessed with doing what's right and following things."

3.2.3 Reasons for Developing Perfectionism.

Linking the source of perfectionism with the psychological and behavioural manifestations of students with perfectionistic traits, a number of reasons which could explain the development of perfectionism were uncovered. It should be noted that although the interview questions clearly asked about teachers' perception of students with perfectionistic traits, participants spontaneously described the experience of gifted students with perfectionistic traits.

Stephanie shared she had a student who would physically run away when he found he could not be the perfect one. She explained the influence of perfectionism and self-deprecation which made students with perfectionistic traits avoid taking any risks:

If he (student with perfectionistic traits) can't be perfect, he's not gonna take that risk. And the risk is making mistakes and some people reach perfectionism by making errors. And other children won't try and take those risks because that risk involves error ... errors and, it could be flawed. And he or she doesn't want to go that route so they have to do everything in the right way according to them. And the right way is the perfect way.

Judy recalled that she had a student who was doing a good job in the mentorship program but finally dropped out because of the uncertainty and fear of not being the best: "He was with a group of very, very able students and he was just so intimidated. He quit." Judy understood his situation and commented that "if he didn't think that he could be the best, he didn't want to be here."

Annette shared how doubting one's ability interacted with perfectionism. Her student was a 6-year-old boy and he had lots of great ideas and insight but when he was actually asked to do a task, he said, "I know I'm not going to be able to do this very well." He worked very slowly and was very meticulous such as producing letters because his motor skills were not yet well developed. In fact, Annette noticed her student's inner fear, "He's afraid to write or to, you know, to go through the process of improving his writing because he knows it's not the way he wants it to be." This reflected how students with perfectionistics traits suffered from self-created unattainable, unreasonable standards and doubted their ability.

Judy pointed out how meeting high standards was closely related to the development of perfectionism,

When they (gifted students with perfectionistic traits) take goals away above and beyond, what the requirements are? So if you give the student criteria for an assignment and they can't just meet that, they have to do it more, better, longer, harder, faster. I see that as perfectionistic.

Jacob had a similar experience; students with perfectionistic traits "ask a lot of questions about what they are expected to produce." He explained the students were "suffering anxiety, they wanna do it just right to please you (teachers)." Having high standards and wanting to please others fostered the development of perfectionism.

Regardless of whether students with perfectionistic traits attempted or refused to do the work, Annette noticed that they were not satisfied with the work and the dissatisfaction might cause psychological stress to self and others: "(They are) very hard on themselves, often, sometimes they – it could also translate towards how they treat others. Those kids who are very perfectionistic and they hmm, they criticize everyone around them." The imperfection might increase the level of anxiety.

Four participants mentioned that students with perfectionistic traits did things repeatedly and, actually, this was a reflection of imperfection which was derived from self-doubt. Fiona provided an explanation of the relationship and the negative, undesirable consequences "(The work is) never good enough and you (students) gonna try over and over and over again. And you wear yourself out. There's self-doubt, low self-esteem, it's not good." Annette supported Fiona's argument and stated:

They (students with perfectionistic traits) never feel like it (the work) is done. (Be)cause they, they are not producing the work they want to produce. So they become underachievers partly because they are just not handing in their work or not, not able to finish it. Or there's the kid who just doesn't start. They just don't, they are afraid.

Development of perfectionism could be partially explained when students with perfectionistic traits sought praise and validation from the teachers to assure their work or performance 'paid off.' Three participants mentioned that students constantly asked, "Is this perfect?" or "Am I doing right?" Jacob described the way students with perfectionistic traits criticized their work "might be actually fishing for me to go, 'No, it's amazing!' because they need that reassurance."

Except for Annette, all participants mentioned that home culture played a role in the development of perfectionism. Stephanie described that when parents let their children with perfectionistic traits know that "they need to have 'A+' which is a perfect mark" this would lead the children to seek perfectionism by thinking, "I want it (the work) to be perfect. How do I get an 'A+'?" Judy and Fiona both agreed that too much parental involvement and help with students' work might increase the level of pursuit of perfectionism. Judy described a student from her mentorship program who received support from her parents to take every Friday off so that the parent and her child could

work on the program together to produce the best product. The over-involvement in the mentorship program caused Judy to intervene. In the end, the student withdrew and Judy heard from other teachers later that "it sounded like (the student has) a mental health issue."

Stephanie shared that giftedness could be one of the motivators because parents might have "inordinate expectations of their only child" especially knowing they were in a gifted program:

Well, the parents require, because they are spending the money, sending them (their children) to the school for giftedness. They are looking at the child as a model of excellence so that they expect the child to attain the highest possible level which is 'A+.'

Perfectionism was not static; rather many factors interacted and supported the development of the vicious cycle. In order to capture the bigger picture, the source of perfectionism should be linked to psychological and behavioural manifestations of perfectionism.

3.2.4 Exceptions to the Negative Perspective.

Only one out of six participants pointed out that perfectionism could be positively perceived. Fiona used L. K. Silverman's (1994) definition of perfectionism and stated, "Silverman thinks it's positive to have standards for excellence and without those standards, we would not have Olympic champions. These are the standards (that keep people) striving to be better and better." Jacob noted that "the idea of being perfectionist, there is[sic] too many (reasons), you have to address it case by case."

Stephanie interpreted 'perfect' differently and she made an analogy:

It's like a piano student performs Rachmaninoff's Fifth perfectly. They (students) can perform it technically perfectly, but musically it may be lacking, depending on their interpretation. Do you understand the difference? So we are looking at the

structure and the form, and the function as opposed to their interpretation, which is a creative thing, which involves you know, emotion rather than the intellect.

Lack of maturity in terms of cognitive growth and intellectual development made the students not "able to appreciate a concept (of perfection)." When students became more mature intellectually, their presentation skills were well developed enough and their answers or performance "would probably be closer to what we are defining as perfection." Under Stephanie's interpretation, perfectionism was not about a cycle of self-defeat.

3.3 Giftedness and Perfectionism: A Tangible Link

After the elucidations of the definition of giftedness and perfectionism, some similarities between the two constructs were revealed with vivid examples to support the relationship between giftedness and perfectionism.

3.3.1 Similarities between Giftedness and Perfectionism.

According to participants' descriptions of the characteristics of giftedness and perfectionism, the two conceptions shared some common ground. "I wouldn't be surprised that a gifted child is perfectionistic," Victoria explained. Their intellectual skills, critical thinking and global perspective let them think "beyond the teacher, figure out beyond what the teacher is expecting and that's where their standards and that self-motivation could be coming from." Victoria continued, "They want more because perhaps they know, they push themselves more, they know their brains can go somewhere else."

Annette emphasized that the awareness of gifted students might lead them to aim higher and seek perfection. "They have higher awareness of what could be produced and they have a higher expectation that they should be able to do it." Fiona also believed that

"gifted children have that capacity to thrive and that drive can be based on perfectionism."

Stephanie provided a very different perspective about the relationship of giftedness and perfectionism. "Gifted students are neurotic in general, meaning they develop neuroses and obsessive compulsive behaviours about their work and the quality of their work."

3.3.2 Teaching Experiences that Inform Teachers.

Two teachers who had worked in gifted education more than 15 years believed there was a relationship between giftedness and perfectionism according to their teaching experiences. "Most gifted kids I taught I see are perfectionists." Fiona explained what informed her about the association, "You (gifted students) have got a great intellect, you've got this huge motivation, and you wanna do something within that is pushing you." Judy shared her experience between gifted students and students in a regular class, "T've seen it more in my life as a teacher of gifted students as opposed to teaching in a regular classroom." She noticed that one or a couple of students who manifested perfectionistic traits in a regular class were "those kids (who) tended to be the gifted ones."

3.3.3 Possible Link between Giftedness and Perfectionism.

Fiona noted, "I think it's a trait that maybe people who have worked with gifted children have an understanding that the regular classroom teacher doesn't." This implied that teachers who had the professional knowledge about giftedness would share a common understanding and notice that there was a link between giftedness and perfectionism.

3.3.4 Reflections on Teaching Practice.

While describing the challenges provided to gifted students, Annette believed it was for students' benefit to have "something which is really challenging for them (gifted students), not just challenging for other people." Then she wondered whether because of their giftedness, a high enough level of challenge should be provided for students to tackle, "But if they (gifted students) have to struggle, I don't know if that would motivate the perfectionist." Annette's concern and consideration of how gifted students would be affected revealed the association between giftedness and perfectionism.

3.4 Giftedness and Perfectionism: An Uneasy Relationship

Association between giftedness and perfectionism was not a must. Two teachers were aware of the danger of linking giftedness and perfectionism.

3.4.1 Caution when Forming a Relationship.

"I don't like to necessarily link perfectionism with certain traits." Fiona expressed her concern that forming a relationship between giftedness and perfectionism "can be a little bit limiting and almost dangerous because in trying to define these children, each child is different basically." Jacob supported Fiona's argument and stated, "Not all gifted children are perfectionists." He agreed that there might be some but "it has probably very individualistic reasons." He noted the inappropriateness of generalizing the relationship between giftedness and perfectionism because "perfectionism is not something that we (teachers who worked in gifted education) see a lot of." Although Jacob acknowledged that there were some gifted students who had perfectionistic traits, he believed "(perfectionism is) not that directly related to giftedness."

3.4.2 No Relationship.

Only Jacob stated that there was no relationship between giftedness and perfectionism because he did not think perfectionism was a symptom of giftedness. He noticed that perfectionism would manifest in gifted students but "I don't think it's (perfectionism) a particular salient marker that a kid is gifted. I think in this case, the egg comes before the chicken. Giftedness comes before the perfectionism and the anxiety." Hence, he stressed that it was inappropriate to use perfectionism as one of the indicators / criteria to "diagnose a kid as gifted."

3.5. Students' Personal and Academic Challenges

The challenges gifted students with perfectionistic traits faced were not a simple combination of the problems faced by gifted students or students with perfectionistic tendencies. The unique challenges included psychological, social-emotional and academic issues.

3.5.1 Psychological Issues.

Fear was the most common feature that participants highlighted. As gifted students with perfectionistic traits were not gifted in every discipline, Stephanie explained that the high standards they aimed for and which might not be reached could likely result in having "fear of being the mediocre in a gifted environment." Fiona also supported the argument that fear of not being good enough had a significant psychological impact on gifted students with perfectionistic traits.

Fear of not meeting expectations was another area which required attention.

Victoria stressed that if gifted students with perfectionistic traits expected that every activity needed to be ideal, then every activity could "become a major issue." This could

increase the difficulty of asking gifted students with perfectionistic traits to confidently show their work because "getting through the day well can be hard if everybody has to be flawless."

Gifted students with perfectionistic traits also needed to meet parental expectations, which could also be understood as fear of parental disappointment, as Stephanie noted. Jacob recognized that it could be hard for gifted students with perfectionistic traits to just do what was right for them and not gain approval from significant others. He stated, "It is so complex because most adults go in their forties before they finally say, 'I'm not doing this for other people's approval anymore!'"

Annette found that when gifted students with perfectionistic traits were not sure what they could have produced if they had put in effort, this made them want to give themselves an excuse:

For example, studying for a test: If they don't study, then they can say when they get a poor mark, it's not because there is something wrong with them. It's because they didn't study so (they) give themselves an indisputable excuse. Hmm ... they might be afraid that if they work hard, and then still do poorly.

Judy saw the limitations and the great amount of stress that gifted students with pefectionistic traits imposed on themselves. She provided some specific examples of how girls were affected,

I think it can take many forms, anorexia, bulimia or hmm prevention from doing things or it's just working themselves into a fancy, an expensive social life or uh, a balanced life. I think it just puts a lot of pressure.

3.5.2 Social-emotional Issues.

Fiona described that gifted students with perfectionistic traits "feel so strongly, because they think and behave differently. They are very emotional. They are very sensitive." When teachers did not understand and were not aware of the intensity of

emotion and heightened sensitivity that gifted students with perfectionistic traits had, Victoria noted that gifted students with perfectionistic traits might shut down, stop working or give up.

Gifted students with perfectionistic traits could be critical and self-deprecating because they were unsure about their abilities and had low self-esteem. Jacob mentioned that the brightness could let the students see that their ideas "don't jive with the rest of people" which led to self-doubt, "There must be something wrong with my ideas" or "There must be something wrong with me." In order to prevent 'losing face,' Jacob described that gifted students with perfectionistic traits struggled:

Oh! If I criticize myself and say something which is not very good. If it turns out it isn't very good, then I'm OK (be)cause I've already said that. Whereas if it turns out it's good, I haven't sounded in vain.

Social problems could result because of the unwillingness of gifted students with perfectionistic traits to cooperate with others in a group. Getting irritated by having to work with others who were not up to their standards, Judy described that gifted students with perfectionistic traits would go to find her and complain, "I don't want to be with this kid." or say, "Why are you going that slow? Can we just get on with this?" Meanwhile, other students also expressed that they did not work with gifted students with perfectionistic traits either. Poor social relationships could hinder the social development of gifted students with perfectionistic traits. High expectations of others by gifted students with perfectionistic traits might take a toll on friendship.

3.5.3 Academic Issues.

"Very often, nobody knows that your (gifted students with perfectionistic traits) are focusing so much on perfectionism." Victoria noticed that gifted students with

perfectionistic traits might "try to be understood, try to be explained" but they did not have good verbal skills to articulate this. It was hard for teachers to actually recognize that gifted students with perfectionistic traits were asking for help and this made the learning needs of gifted students with perfectionistic traits partially implicit. For example, Victoria shared that teachers might not notice that gifted students with perfectionistic traits were seeking scaffolding. Annette pointed out that underachievement might mask both giftedness and perfectionism.

Gifted students with perfectionistic traits might limit themselves by not attempting work until they were assured that they could be the good at it or the best. Judy agreed that it could be "a problem in itself." However, this could be a sign of difficulty working in groups when this mentality affected other people's interest:

If other people, you know, have to work in a project with them, they don't get their work completed. They don't think of the end. You know, they're stifled. Other kids don't want to work with them as well because they're not going to get it done.

Four participants mentioned that procrastination could be a problem for gifted students with perfectionistic traits. It could manifest in different forms, such as not producing work, waiting until the last minute to do the work or not handing in assignments at all.

3.6. Developing Best Practice

With an understanding of the constructs, relationship of giftedness and perfectionism, and difficulties faced by gifted students with perfectionistic traits, participants shared what they believed could support students at the school level, that is noticing learning needs, providing a supportive learning environment and practicing

useful teaching techniques, and at the personal level, that is explaining personal dimensions of learning and teaching students effective coping strategies.

3.6.1 Noticing Students' Learning Needs.

Participants noted that sometimes they might overlook the learning needs of gifted students with perfectionistic traits because perfectionism, gender and underachievement might cover up their 'real' needs. Through the interview process, participants gradually noticed that they paid more attention to students who acted out (e.g., having a temper tantrum, weeping, doing silly things or running away) but they might not be able to understand the intention or behaviours. As there were some similarities between perfectionism and giftedness, teachers might focus more on negative traits of perfectionism and disregard those traits that could be a manifestation of giftedness. Fiona expressed:

Negative behaviours going on in the classroom are right away easy to pick. Let's say this child, again he's acting out, he's aggressive or he's frustrated or anxious er they (teachers) are going to put him into er a different category. Perhaps these behaviours are coming from because the child is gifted and that child has a perfectionistic tendency. They (teachers) are going to miss that completely and hmm that child's needs won't be met.

All participants pointed out that boys with perfectionistic traits were more likely to act out and Victoria agreed, "It is easier to notice that little boys are perfectionistic because they acted out" but not girls because "they are good hard little workers. They are quiet. If they are experiencing any classroom issues, it's going to be quieter." Annette mentioned that underachievers and students who did not have a chance to show their talents were somehow not being noticed in the classroom but that they could be gifted and perfectionism hindered their pursuit of trying their best.

Victoria suggested, "You (teachers) have to really know your class, spot and know" the student who needed support. Three participants stated that even though they had a heavy workload, it was crucial for them to increase the time to get to know the students and their implicit learning needs.

3.6.2 Providing a Supportive Learning Environment.

Most participants believed that teachers could support gifted students with perfectionistic traits by creating a supportive, respectful, open-minded learning environment where ideas would not be judged and making mistakes was allowed, encouraged and celebrated.

Judy adopted "no praise, no criticism, just accept everything" in her teaching which could increase confidence and train critical thinking skills of gifted students with perfectionistic traits and other students. Some students expressed that they had a hard time not to say 'it's a good idea' when they found the idea was good or after someone shared an idea. Judy explained to her students:

Say 'no' because if you (all students in the class) don't say, 'That's a good idea!' to them (students who might be gifted and perfectionistic), they still might feel like, 'Oh! My idea wasn't good enough to warrant that.' So I say, say nothing, just everything is accepted. Later on, use your critical thinking skills to evaluate ideas.

Annette and Fiona shared that they put a big sign (i.e., "All errors are accepted here. Interesting errors are admired.") on the classroom wall to remind gifted students with perfectionistic traits and all the students in the classroom to view mistakes positively. Victoria highlighted that teachers could give perspective to gifted students with perfectionistic traits by explaining that great people, historical figures, even teachers made mistakes. This would help to reduce the anxiety to be flawless. Annette supported

this idea and believed that understanding the meaning of making mistakes could lead gifted students to think about making mistakes from a broader perspective:

Talking about famous people in history, I think of Leonardo Da Vinci who's famous for making huge, massive mistakes. He had took all those amazing products, half of which failed dramatically. Yet he's considered as one of the geniuses in the world because he had so many successes as well. So teaching them (gifted students with perfectionistic traits) about what mistakes can do and how a mistake can lead to something else.

Jacob suggested that teachers could emphasize more social responsibility and do more collective, whole class activities which helped to promote that "a class is a community and it is interdependent." Shifting the focus from being individualistic to collective might help reduce a lot of anxiety of gifted students with perfectionistic traits as they realize that they do not have to be the stars in the school.

Meanwhile, Judy and Jacob believed that teachers could help students to expand their horizons and create the idea that thinking processes, effort and collaboration were highly valued and more important than solely making a polished product. Jacob remarked, "Process and creation and development is actually more important than the end." He also suggested that teachers could "try to approach things as 'I'm interested in … how you are doing what you are doing?' Not this thing at the end that I say '10 out of 10.'

Teachers could create a challenging but safe learning environment to let gifted students with perfectionistic traits reveal their talents without much anxiety or hesitation. When students understand making mistakes is a way to learn and process is more important than product, Annette noted that teachers could "put up a topic to talk about what it (marks / grades) means" so the fear of failure could be reduced. This might encourage gifted students with perfectionistic traits, or underachievers, to attempt a task and extend their abilities further.

Fiona pointed out that "most regular classroom teachers don't recognize giftedness as a social need;" the behavioural manifestations of gifted students with perfectionistic traits which were mostly negative could be misunderstood by regular classroom teachers because "it is right easy to pick up (negative behaviours)." Hence, providing information related to giftedness and perfectionism to regular classroom teachers could reduce the chance that regular classroom teachers would miss or misinterpret those manifestations completely and the needs of gifted students with perfectionistic traits could be addressed and met.

3.6.3 Practicing Useful Techniques.

A supportive learning environment could be improved when teachers address the learning needs of gifted students with perfectionistic traits and practice useful, tailor-made techniques. Showing empathetic understanding and recognition to gifted students with perfectionistic traits could encourage and support them. Judy commented that "people have to feel good about themselves and give what they can." For example, Victoria shared that she would allow a gifted student with perfectionistic traits to "keep away from work, do something else, calm down, then start it (the work) again." Judy acknowledged the effort gifted students with perfectionistic traits put in and provided a direction to them to think whether they had to be 'perfect' every time:

You (gifted students with perfectionistic traits) have to redo things so that they look neat all the time, so more value on the ideas. Sometimes, it's OK. Some of these things we're gonna take to completion and we are going to have something that looks really good because we're going to present it to an audience, for example. But for everything that you do, I think there's a time and place for everything.

Gifted students with perfectionistic traits might do things to please their parents or gain approval from significant others. Jacob disagreed and emphasized that gifted

students with perfectionistic traits should acknowledge themselves as the owner of learning:

It doesn't matter what I (teacher) think, it's what you (gifted students with perfectionistic traits) think. You have to do what pleases you, not mom, not dad. You have to do intellectually what you feel is right, not what will get you the approval from the other people.

Because of the fear of mistakes, failure and expectations, gifted students with perfectionistic traits might procrastinate and be self-critical. They might feel anxious or frustrated about expressing their ideas so Jacob used an 'idea book' to let his students express their ideas without judgment. Gifted students with perfectionistic traits could write down their ideas. "It's private and no one asks to see what they are thinking so they can approach their mind in a healthy way so they will be less critical." Judy used the strategy 'no praise, no criticism, just accept every idea' in brainstorming which could let gifted students with perfectionistic traits learn how to respect others' ideas and promote creativity in a non-judgemental learning environment.

Jacob highly recommended that teachers ask careful, self-reflection questions of gifted students with perfectionistic traits that would "get them to interrogate why they feel they need to be perfect." He provided an example that if a gifted student with perfectionistic traits got 10 out of 10 in an assignment, a self-reflection sheet could be given to the student which said, "What do you think if I (the teacher) had given you 8 of 10 on this assignment? How would you feel about that?" These questions might force the student to confront and address self consciousness and might stimulate students to think about why they felt the need to be perfect and always produce excellent work.

Annette also supported that teaching students self-assessment was important as it could encourage gifted students with perfectionistic traits to "learn how to monitor his or

her own progress and learn how to catch areas where they may be struggling" by assessing each step in an assignment or project.

Noticing that "in Canadian society, teachers generally give praise for things that look good." Judy noted that praise might reinforce girls who were gifted and perfectionistic to please teachers as girls were "raised to please others" and "generally given kudos for being pleasers." Judy believed that the "little carrot and the stick" would not help gifted students with perfectionistic traits to learn for themselves as learning needed to be intrinsically motivated. Hence, Judy stressed that teachers needed to be more sensitive about their intentions, wording and consequences when giving praise.

When learning or psychological health of gifted students with perfectionistic traits were negatively affected due to perfectionism, both Stephanie and Judy stressed that teachers should intervene. Stephanie had a student who would physically run away when he could not be the best in a situation. Judy had a student who was over-involved in the mentorship program as she received support from her parents and took every Friday off to work on the mentorship product. Stephanie and Judy noticed that both students had a lot of stress and strange reaction so they intervened. They talked to the school principal, the classroom teacher and the parents in order to understand the background of gifted students with perfectionistic traits. Stephanie's student was seeing a child psychiatrist while Judy's student "sounded like (they had) a mental health issue." Hence teachers' heightened sensitivity to the negative aspects of perfectionism and early intervention could draw more attention from various resources such as parents, school principal, school counsellor or child psychiatrist to assist gifted students with perfectionistic traits to face personal and academic challenges more appropriately and positively.

In order to encourage gifted students with perfectionistic traits to attempt a task that they might not be familiar with or good at, take 'risks' and be creative, Judy advised that teachers could modify the assessment rubrics:

Rather than marks for neatness, there should be marks for trying something new, taking a risk, something like that. You have to make a focus on something different besides the final product, or the process has to be worth more.

Annette reinforced that teachers could mark students' work in a respectful way that might help them to learn and improve more positively:

You (teachers) are not just putting the cross (X) all over the work but hmm writing suggestions or hmm may be giving a separate sheet of paper where you can write suggestions that does not cover all the work and so ruining what the child did.

As the brightness of gifted students with perfectionistic traits lets them go beyond what teachers or parents expect, they might think too much within themselves, set higher standards than were required or unattainable standards and do extra work. They might also want to use polished work to please others. Stating and clarifying expectations could help release the stress gifted students with perfectionistic traits hold. When gifted students with perfectionistic traits asked Jacob, "What do you want?" Jacob said:

I don't want anything. What I would like you to do is explore this idea but I don't want anything. You are not doing this for me. I'm just here to help you. I'm interested in your thoughts, not your work. I'm interested in your creativity, not your final product. I'm interested in what you have to say after you have implemented your problem solving or solutions. What worked? What didn't?

Judy shared how she clarified expectations and pointed out the students needed to bear the responsibility of their own learning in the mentorship program:

I taught them (gifted students) the finished product is not the most important thing; the process is more important. And it's their mentorship, they need to figure out what they want. They are not doing something to please me, to get a mark, to do something like that.

3.6.4 Explaining Personal Dimensions of Learning.

Some gifted students with perfectionistic traits had a distorted view that they strived to meet others' expectations, please others or gain praise. In order to raise the consciousness of gifted students with perfectionistic traits that learning should not be driven by fear and dissatisfaction (mentioned in section 3.5), all participants agreed that teachers had the responsibility to explain the meaning of personal dimensions of learning and let students establish a positive view and be owners of their learning.

When Fiona worked as a challenge centre teacher, she held a discussion with her students and let them know, "All errors are accepted here; interesting errors are admired!" which would significantly give a sense of relief, specifically to gifted students with perfectionistic traits:

I told my children over and over, in my class, there are no right or wrong answers in this classroom, only ideas. I want to hear what your ideas are and we accept all ideas especially with brainstorming. You let the ideas flow. You do not criticize. Afterward, you just start sorting things out. But all ideas are important. Everyone has something to contribute.

Respecting ideas and effort from self and others helped gifted students with perfectionistic traits become more open-minded. Understanding needs and strengths from their own and others' perspectives could help gifted students with perfectionistic traits become more empathetic, mature and less demanding. The high or unattainable standards that gifted students with perfectionistic traits had could be minimized when they did not "look at their needs negatively," as stated by Stephanie.

All participants agreed with the ideology that people learn from mistakes so they greatly supported gifted students with perfectionistic traits to make mistakes and learn from them. Teachers could provide a perspective that everyone, including teachers,

historical figures, successful persons and gifted people, make mistakes and people learn from mistakes. Annette and Fiona pointed out that sometimes mistakes might lead people in a new direction and to success when they kept on improving themselves instead of being worried and frustrated due to imperfection. Victoria remarked that having a positive attitude towards perfectionism was the key to handling challenges maturely.

Clarifying expectations from self and others plus understanding that thought processes were more highly valued than products could let gifted students with perfectionistic traits understand their own learning needs so they would spend time and energy on something they were interested in and satisfied with. Jacob remarked that gifted students with perfectionistic traits had to learn how to confidently perceive their accomplishment instead of imperfection, "I've taken this as far as I think I can, and it feels really good. I'm going to move on another direction."

3.6.5 Teaching Students Effective Coping Strategies.

With an understanding of personal dimensions of learning, teachers could help gifted students with perfectionistic traits acquire effective coping strategies and determine what is worth their devotion. Students could recognize their needs, ability and limits; and thus they could strengthen themselves by assessing the situation, their psychological readiness and the influence of negative perfectionistic thoughts.

Teaching gifted students with perfectionistic traits to set manageable goals could reduce the frustration of not reaching high or unattainable standards. Judy suggested teachers could help by giving a time limit to gifted students with perfectionistic traits so that they could learn how to manage time appropriately. "This is the amount of time I can put into it and so I will try within the time constraints." Teachers could teach gifted

students with perfectionistic traits to select the 'battles' that are worth their time and effort. Judy noted that gifted students with perfectionistic traits had to realize, "You can do your best in that but not say, you know it has to be the greatest thing all the time."

Annette and Jacob believed that teaching gifted students with perfectionistic traits self-assessment was important because these students would take up ownership of learning and reflect their own learning needs. Jacob described that when gifted students with perfectionistic traits took the initiative to assess their ideas, they could evaluate which ones they found more effective. Annette believed that through learning how to monitor their progress and address the difficulties encountered, gifted students with perfectionistic traits could encourage themselves that they could handle their work positively.

Gifted students with perfectionistic traits might get trapped in their own bubble of challenges from fear of revealing their 'imperfection' in terms of inabilities or frustration. Annette highlighted that it was essential to teach gifted students with perfectionistic traits how to ask for help. Strengthening problem solving skills could be another way for gifted students with perfectionistic traits to overcome the challenges they faced. Stephanie emphasized that gifted students with perfectionistic traits needed to learn how to be flexible and get to know alternative or multiple ways to reach the goal. Fiona taught her students to ask themselves, "What's the worst thing that can happen if you don't do such and such perfectly?" The nature of the question could assist gifted students with perfectionistic traits to reflect and reduce their psychological stress when they realized, "It's not a big deal. The world is not going to an end. It's gonna be OK." An optimal

solution which matched the learning needs and strengths of gifted students with perfectionistic traits might come up when they left the 'zone of perfection.'

Teachers could serve as role models and teach gifted students with perfectionistic traits how to learn from mistakes and laugh about it. Annette believed that using humour was important because it could reduce the embarrassment of making a mistake. Teaching them relaxation exercises such as deep breathing could help gifted students with perfectionistic traits physically relieve stress and then they could think about a solution when they clamed down.

In this chapter, descriptive findings which captured interviewees' viewpoints, understandings and experiences were organized and presented in a systematic and thematic way. Six themes emerged that addressed the research questions. Interpretations and implications of the findings will be discussed in the next chapter.

Chapter 4

Discussion

This chapter summarizes the findings and reflects on their significance in relation to the literature on the topic. Educational implications and limitations and strengths of the research are noted. Future research directions are suggested and examined.

This study focused on exploring teachers' perceptions of perfectionism in gifted children in order that elucidation of the relationship between giftedness and perfectionism can inform the development of support for gifted students with perfectionistic traits.

Six themes emerged from the data analysis. Theme 1 (Complexity of giftedness) and theme 2 (Perfectionism: A vicious cycle) answer the question of how teachers define giftedness and perfectionism respectively. The relationship of giftedness and perfectionism is reflected by theme 3 (Giftedness and perfectionism: A tangible link) and theme 4 (Giftedness and perfectionism: An uneasy relationship) while support provided to gifted students with perfectionistic traits is addressed by theme 5 (Students' personal and academic challenges) and theme 6 (Developing best practice).

4.1 Reflection on the Literature

As all participants were heavily involved in gifted education due to the nature of their jobs and completion of graduate courses or professional workshops related to giftedness, they were all well informed about what giftedness is. This study is aligned with Campbell and Verna's (1998) work based on visits to 86 schools (49 elementary schools and 37 secondary schools) where interviews were conducted with teachers, administrators and students who participated in school gifted programs. Interviews focused on identification of giftedness, gifted program development and evaluation, and

staff involvement. Campbell and Verna found that teachers' experience with gifted students helped them conceptualize characteristics of gifted students and thus caused them to develop their own operational definitions of giftedness. This finding is consistent with the current findings where participants' conceptions of giftedness are multifaceted. Apart from the influence of their work experiences, their educational background in psychology, sociology or literature allowed them to perceive giftedness from different standpoints. They considered contextual factors (e.g., family, culture and gender), dimensions of the manifestation of giftedness (e.g., multi-dimensional, global dimension or binary definition), and theoretical support and used elimination of "non-giftedness" to define giftedness. Consensus was reached that, first, there is no universal definition of giftedness, a conclusion supported by Borland (2005); second, different types of giftedness should be considered (Feldman, 2005); and third, significantly above average abilities and passion to learn are major characteristics manifested among gifted students. Participants also addressed the ambiguity that arises when defining giftedness in terms of reliability of identification criteria or diagnostics and assumed traits of gifted individuals.

Definition of perfectionism was less complex and more concise as the majority of the participants adopted a negative perspective of perfectionism which is consistent with Burns (1980), Flett and Hewitt (2002), Hollander (1965) and Pacht (1984). All participants mentioned the expectations and stress that gifted students with perfectionistic traits impose on themselves and others and how they perceive that significant others set high and salient expectations for them. This finding relates to Hewitt and Flett's (1991) Multidimensional Perfectionism Scale which defines perfectionism as self-oriented, other-oriented and/or socially-prescribed. This negative view of perfectionism also

matches Hamachek's (1978) neurotic perfectionism. Although only one participant pointed out the positive aspect of perfectionism which aims at improvement, this perception is consistent with Hamachek's (1978) view that perfectionism can be normal. Teachers' descriptions of behavioural and psychological manifestations of gifted students with perfectionistic traits matched the perspective and content of Frost et al.'s (1990) subscale (Personal Standards, Doubts of Ability, Parent Expectation and Parental Criticism, and Organization) of their Multidimensional Perfectionism Scale. Gifted and perfectionistic college students' perceptions of perfectionism and related experiences in Speirs Neumeisters (2004a; 2004b) work is consistent with the current finding that participants were able to capture the experiences and psychological and behavioural manifestations of gifted students with perfectionistic traits neatly.

Participants' perceptions of the relationship between giftedness and perfectionism were not informed by any empirical research. Rather, there were three main arguments that supported the relationship: 1) the majority of participants noticed the co-occurrence of psychological and behavioural characteristics in both gifted and perfectionistic areas such as setting high standards, being highly critical, and being aware of what can be done according to their abilities; 2) two highly experienced teachers in gifted education shared that their daily classroom experiences and interactions informed them that gifted students manifest perfectionism very often or that students who exhibited perfectionism in regular classrooms are always the gifted ones; and 3) one highly experienced teacher noted that there is a general understanding among educators who worked in gifted education that perfectionism is a trait of giftedness. Thus, there is a tangible link between giftedness and perfectionism. The interpretation of the relationship is worth attention as the association

made in the current findings is based on participants' negative view of perfectionism only while Schuler's (1999) conclusion that 87.5% of gifted students were perfectionistic was built on the consideration of both negative (29.5% were dysfunctional perfectionists) and positive (58% were healthy perfectionists) aspects of perfectionism.

The uneasy relationship established between giftedness and perfectionism was noted by two participants. They found it is limiting, inappropriate and dangerous to link perfectionism with certain traits or generalize the link as the occurrence of giftedness and perfectionism should be addressed case by case. One participant emphasized that there is no relationship between giftedness and perfectionism with the reason that perfectionism is not a symptom of giftedness and giftedness comes before the perfectionism and anxiety. This finding is supported by Parker and Mills' (1996) findings that academically talented students are not more perfectionistic compared with their non-academically talented peers as the percentage of non-perfectionists (30.5% and 23.7%), healthy perfectionists (43.2% and 48.6%) and dysfunctional perfectionists (26.3% and 27.8%) were similar. Hence, this study's articulation of the teacher participants' thought processes about how they made connections between the two constructs and became acutely aware of the implications involved is significant.

Participants' concerns about the link between giftedness and perfectionism were quite different from previous research. Although all participants stated the significance of parental influence on the development of perfectionism in gifted students, a finding which matched with previous research (Ablard & Parker, 1997; Speirs Neumeister, 2004b; Speirs Neumeister & Finch, 2006), gender was mentioned infrequently. Another example is that participants expressed a literal meaning of 'motivation' (i.e., something

that causes gifted students to act in a perfectionistic way) and did not make reference to motivation as learning and mastery goals as in previous research (Speirs Neumeister, 2004a).

Bridging definition and relationship of giftedness and perfectionism with practice, participants identified personal and academic challenges faced by gifted students with perfectionistic traits which are consistent with Adelson's (2007) findings. Adelson used an experienced gifted teacher perspective to document different types of perfectionists found among gifted students and provided suggestions for how to promote healthy perfectionism in the classroom setting. However, the collective perspective shared by the six participants in the current study provided a broader and more credible view of how empathy and caring are essential in dealing with perfectionism from both preventive and intervention points of view due to the diverse nature of their jobs which are closely related to gifted education. Participants had direct, regular contact and interaction with gifted students in diverse settings. Thus they had a better sense of gifted students manifestation of perfectionistic traits in terms of psychological issues such as the fear of being mediocre in the gifted education environment, fear of not meeting their own standards and/or significant others' expectations, worry about parental disappointment and doubts about ability with social-emotional issues such as being highly sensitive, being unwilling to cooperate and setting high expectations for others which combine with academic issues such as difficulty working in groups and procrastination. This combination can result in the complexity of the learning needs of gifted students with perfectionistic traits.

Perfectionistic tendencies are not static; Parker's (2000) findings showed that perfectionistic tendencies could switch from one type to another over time. Parker retested 317 participants from his previous research (1997) with the MPS (Frost et al., 1990) and found no significant differences between the MPS scores from the first administration. However, Parker found that cluster membership (i.e., non-perfectionists, healthy perfectionists and dysfunctional perfectionists) changed over time. Healthy perfectionists had the highest stability (63 % of the original members remained in the group) while 24% shifted to dysfunctional perfectionists and 14 % shifted to nonperfectionists. Dysfunctional perfectionists had slightly lower stability with 56% retained in the group, 26% shifted to healthy perfectionists and 19% shifted to non-perfectionists. Non-perfectionists were the least stable group with only 41% retained and a similar percentage of participants shifted to the other two clusters. It is unfortunate that Parker (2000) did not identify which factors predicted the shifts of perfectionistic tendencies as it was not part of the research question. Nevertheless, Parker's (2000) findings revealed that perfectionistic tendencies can be malleable so developing best practice to help gifted students with perfectionistic traits to minimize the negative aspects or influence of perfectionism is valuable and practical.

Participants were greatly involved in sharing the development of best practice to assist gifted students with perfectionistic traits. Although most of the participants viewed perfectionism negatively and identified perfectionistic characteristics according to the negative view of perfectionism, they held a positive and responsible attitude in supporting the betterment of gifted students with perfectionistic traits in terms of noticing students' learning needs, providing a supportive learning environment, practicing useful

teaching techniques, explaining personal dimensions of learning and teaching students effective coping strategies. Participants believed that handling perfectionism with gifted students should be addressed both collectively and individually so that gifted students with perfectionistic traits could receive a consistent message that making mistakes is part of the learning process and they are the owners of their learning. The reduction of fear of meeting unattainable standards or expectations, the acceptance of being imperfect and the empathetic understanding of emphasizing effort rather than outcome can help gifted students with perfectionistic traits relieve their social-emotional burden and stress of being 'perfect'.

Noticing that some gifted students with perfectionistic traits always looked for praise for ability (e.g., "You are smart.") or emphasized final products rather than process (i.e., outcome is more important than effort), participants believed that these attitudes might facilitate the development of negative aspects of perfectionism in gifted students as gifted students with perfectionistic traits were looking for satisfaction from extrinsic rather than intrinsic rewards. Muller and Dweck's (1998) study of praise for ability and effort addressed participants' concern. The researchers conducted six studies among fifth graders to find out the relationship between praise for ability and effort and students' achievement motivation. Although Muller and Dweck did not make an explicit connection to gifted students with perfectionistic traits, their findings provided insight that as gifted implies ability, praise could undermine motivation and performance. When gifted students only care about how to justify the label and are less concerned about acquiring skills, improving or meeting challenges, worry about making mistakes and failing increased which might cause poor performance. Eventually, gifted students might

feel and assume that they were not worth labelling as gifted and their self esteem may be affected. Hence, participants' concerns about the danger of praising for ability rather than effort in the current study should not be ignored.

Participants demonstrated heightened sensitivity to the issue of giftedness and perfectionism, and they revealed that they intervene when gifted students with perfectionistic traits exhibited serious psychological or emotional problems such as over-involvement or running away. It seems that if negative aspects of perfectionism among gifted students do not cause any serious trouble, teachers may not notice and no intervention will occur. Participants also expressed that it was difficult for them to give gifted students with perfectionistic traits priority when there were different classroom problems (e.g., behavioural issues, Attention Deficit Hyperactivity Disorder or learning disabilities) occurring at the same time. This may result in putting gifted students with perfectionistic traits at risk as their psychological, social-emotional and academic needs may not be well addressed and thus the vicious cycle of perfectionism can hardly be broken.

4.2 Educational Implications

Being frontline professionals who spend most of their time working closely with gifted students with perfectionistic traits, teachers' viewpoints are credible and insightful. These viewpoints can expand and enrich a more comprehensive understanding of the issue of giftedness and perfectionism. The exploration of teachers' perceptions of the relationship between giftedness and perfectionism is the major contribution of this study as there is no research which includes teachers' perspectives on this relationship.

This study showed that teachers had different ideologies regarding understanding the relationship between giftedness and perfectionism than those in extant research.

Through articulation of the definition and relationship of giftedness and perfectionism, participants demonstrated that they were alert to how perfectionism may influence gifted students based on their work experiences and educational background. Participants' open, empathetic and supportive attitudes let them accept differences of gifted students with perfectionistic traits. Their understanding made them more willing to provide support and facilitate positive change for gifted students with perfectionistic traits. This support can significantly assist students to broaden their views on perceiving and setting reasonable standards and understanding their needs and responsibilities. Ultimately, gifted students with perfectionistic traits acquire effective coping strategies and recognize personal dimensions of learning because of teachers who provide supportive learning environments and practice useful techniques to address perfectionism. Both students' and teachers' levels of stress and negative aspects of perfectionism can be reduced.

Educators who do not have background knowledge related to giftedness and perfectionism may feel frustrated and find it difficult and challenging to handle gifted students with perfectionistic traits as they are uncertain about what the issue is and what works. This study provides some insights and allows educators to gain an adequate understanding of experienced gifted teachers' perceptions of giftedness and perfectionism from an in-depth discussion of the two constructs and pick up practical skills (such as modification of assessment rubrics, creating a supportive classroom culture and effective teaching practices) to assist gifted students with perfectionistic traits to tackle negative aspects of perfectionism. Addressing the most specific feature of gifted students with

perfectionistic traits, that is setting high standards or unattainable goals, educators should state their expectations explicitly; provide concrete guidance to gifted students with perfectionistic traits and check students' understanding of the expectations in the beginning and throughout their completion of assignments and/or projects. Thus, stress and worries of handling gifted students with perfectionistic students can be reduced and educators can be more ready to offer help to students.

This study provides the platform for educators who work with gifted students to reflect on how their expectations of students are affected by self, school and culture which may facilitate the development of perfectionistic tendencies among gifted students. When gifted students have the ability to achieve higher, does it imply that teachers have legitimate reasons to set higher standards for gifted students? How do teachers determine whether a goal set by a gifted student with perfectionistic traits is 'realistic' and 'attainable'? Teachers know intervention should occur when a gifted student with perfectionistic traits acts out but how about those who manifest dysfunctional behaviours which are not obviously observable such as having suicidal thoughts? How do school environment and culture influence teachers' perceptions of a link between giftedness and productivity and success?

Increased understanding of the issue of giftedness and perfectionism from teachers' perspectives does not assume that teachers have to take up more responsibility; rather teachers' sensitivity to the needs and adjustment of gifted students with perfectionistic traits should be heightened. Teachers can do preventive work in a whole class approach (e.g., learning from mistakes, emphasizing self-reflection and assessment, accepting personal best, seeking help when necessary) which benefits all students.

Teachers should be alert to how gifted students with perfectionistic traits may understand help-seeking. Flett and Hewitt (2002) noted that the act of seeking help can impose a threat to self esteem when the perfectionistic individual perceives it as an open admission of failure to significant others.

Making contact with parents to aid understanding possible reasons for the development of perfectionistic tendencies in gifted students is crucial as the manifestation of perfectionistic traits can be similar or different at home and school. Collaboration between teachers and parents can facilitate positive change in gifted students with perfectionistic traits to a greater degree when both parties increase sensitivity and responsibility to work on the issue. Moreover, teachers should be aware that referring gifted students with perfectionistic traits to counsellors or other health professionals is sometimes necessary for students' betterment in the long run.

4.3 Limitations of the Study

Although it was expected that having only one criterion for participation in this study (i.e., teachers with experience with gifted students) would increase the chance of recruiting more participants, the low response rate and similar teaching background of the participants ultimately limits the scope of the study. All participants were either teaching at elementary schools or had previous experience as elementary school teachers: their perceptions of giftedness and perfectionism were solely drawn from particular age groups due to the grade levels they work with. In addition, all participants are Caucasian; they may hold similar cultural values in perceiving giftedness and perfectionism.

The researcher's interviewing skills developed during the research process.

Inexperience at the beginning of the interview process may have resulted in missed

chances to prompt further responses or ask better follow up questions. This may have reduced the comprehensiveness and coherence of the collected data.

Last, due to the low response rate, only one male teacher participated in the study. The voice and perspective shared by male teachers are limited. The dominant voice in the study was female.

4.4 Strengths of the Study

This study is the first to link teachers' perceptions of giftedness and perfectionism. It expands the existing research focus from gifted individuals' perspectives and parental influence to a school level. Including teachers' understanding of giftedness and perfectionism sheds a new light on how teachers' values, beliefs and attitudes about giftedness and perfectionism affect their interaction with and/or support for gifted students with perfectionistic traits. With increased knowledge of what teachers understand and contribute in the area of giftedness and perfectionism, this study offers a remarkable insight into what teachers can do to assist gifted students with perfectionistic traits at personal, family and school levels. This study also provides solid evidence to support further research in the area of giftedness and perfectionism.

Using a semi-structured interview to elucidate teachers' perceptions of giftedness and perfectionism is one of the strengths of this study. The interview guide provided a direction which helped capture essential data and perspectives from the participants.

Participants could freely express and articulate their thoughts and experiences so a detailed exploration took place. During the interview process, participants consciously organized their thoughts by retrieving and selecting relevant examples to support their arguments. The scope of understanding giftedness and perfectionism not only remained at

the level of teacher-student relationship or classroom setting, it expanded to a broader level where participants' attitudes, beliefs, working experiences, educational background, and cultural influence were all integrated and reflected in the interview. All these perspectives were captured and explored because an appropriate qualitative research methodology was used.

The diverse nature of the jobs in the field of gifted education (such as working as district resource teachers in general and for twice exceptional learners in particular, coordinator of school based gifted programs, challenge centre and mentorship program, teaching foreign languages or working as a consultant) and the professional knowledge that most of the participants had (obtaining a diploma or masters degree in gifted education; attending professional development workshops) reflected the participants' high level of experience and devotion to the field of gifted education. Their everyday experience with gifted students allowed them to develop their own definitions of giftedness and perfectionism from their ability and sensitivity to notice or identify manifestations of perfectionism among gifted students. Their understanding and sensitivity to giftedness and perfectionism is highly credible as they provided the lens for outsiders to know more precisely how giftedness and perfectionism interact. The similarity of participants' understanding of giftedness and perfectionism, acquired in different settings, also enhanced the credibility of the findings.

Finally, this study may be helpful to educators who would like to increase their knowledge about the issue of giftedness and perfectionism. The study's findings may help them unpack their own beliefs about perfectionism and giftedness and apply the practical suggestions to their teaching.

4.5 Future Directions

This study marks the beginning of including teachers in the study of giftedness and perfectionism. Other research methods (e.g., classroom observation of teacherstudent interaction, interviewing gifted students with perfectionistic traits) can be adopted to triangulate the findings and increase the level of understanding of the role, attitude and influence of teachers in the issue of giftedness and perfectionism. Recruitment of participants can be broadened to allow teachers from different backgrounds (such as preservice teachers, regular classroom teachers, high school teachers) to share their perceptions.

A broader scale of study which includes the exploration of gifted students', parents' and teachers' perceptions of perfectionism could reveal how perfectionism is understood, exaggerated or minimized from different stakeholders' perspectives and how these perspectives exert influence on gifted students' learning and functioning. The research focus of giftedness and perfectionism could be extended to link with creativity, dual exceptionalities, underachievement or other social-emotional issues such as self-concept, depression and suicide. This study could also be conducted in different cultural settings to explore the influence of cultural values on teachers' perceptions of giftedness and perfectionism and gifted students' manifestations of perfectionistic traits.

When the number of gifted students with perfectionistic traits in a class or program is hardly identified, their needs may not be addressed while teachers may not be alert to how to deal with these students. In practice, the findings of this study can help develop checklists or a brochure about giftedness and perfectionism which can assist regular classroom teachers to have a better understanding of the manifestation of

perfectionism undertaken. Professional development workshops, prevention programs focused on addressing the needs of gifted students with perfectionistic traits, and opportunities to share effective teaching practice and coping strategies for students can be developed and promoted among schools which may help clarify some myths or misconceptions and ease the worries and stress of teachers who struggle with the issue of how to support gifted students with perfectionistic traits.

4.6 Conclusion

Research in giftedness and perfectionism has long been focused at the individual level and this is the first study which expanded the scope to include teachers' perspectives. The findings revealed that teachers' perception of giftedness and perfectionism matched previous research literature. Without relating to any empirical research findings, teachers used their working experience and educational background to support their arguments about the link between giftedness and perfectionism. This study also integrated the wealth of experience from participants to provide remarkable insight into the development of best practice for gifted students with perfectionistic traits. Educators who are relatively inexperienced can use the results of this study to increase their understanding of the issue and acquire some practical skills.

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Appendices

Appendix A

Certificate of Approval from UBC



The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - FULL BOARD

DDINGIDAL INVESTIGATOR:	INCTITUTION (DEDARTMENT:	LUDG BBED NUM	IDED:	
PRINCIPAL INVESTIGATOR:	INSTITUTION / DEPARTMENT: UBC BREB NUMBER:		IBER:	
	UBC/Education/Educational &			
Marion J. Porath	Counselling Psychology, and Special	H10-00001		
	Education			
INSTITUTION(S) WHERE RESEARCH	WILL BE CARRIED OUT:	7		
Institution		Site		
N/A Other locations where the research will be cond	N/A			
schools, location determined by teacher pa				
	radipants			
CO-INVESTIGATOR(S):				
SPONSORING AGENCIES:				
N/A				
PROJECT TITLE:				
Exploring Teachers' Perceptions of Perf				
REB MEETING DATE:	CERTIFICATE EXPIRY DATE:			
January 28, 2010	January 28, 2011			
DOCUMENTS INCLUDED IN THIS AP	PROVAL:	DATE APPROV	/ED:	
		March 3, 2010		
Document Name		Version	Date	
Protocol:		VIL. 122		
Thesis Proposal		N/A	January 5, 2010	
Consent Forms:		32		
Teacher Consent Form	n m n n	2	February 4, 2010	
Questionnaire, Questionnaire Cover	<u>Letter, Tests:</u>	A178		
Interview Questions		N/A	January 5, 2010	
Letter of Initial Contact:		•	F 1 0010	
Invitation Letter		2	February 4, 2010	
Other Documents:		N/A	March 2 2010	
approval		IN/A	March 2, 2010	
The application for ethical review and the	ne document(s) listed above have been	reviewed and the p	procedures were found	
to be acceptable on ethical grounds for				
-	TA 850			
		0 W_MUMB ES		
Approval is issued on behalf of the Behavioural Research Ethics Board				
and signed electronically by one of the following:				
Dr. M. Judith Lynam, Chair				
Dr. Ken Craig, Chair Dr. Jim Rupert, Associate Chair				
Dr. Jim Rupert, Associate Chair Dr. Laurie Ford, Associate Chair				
Dr. Anita Ho. Associate Chair				
	51. Allita 110, Associate Oliali			

Appendix B

Letter of Invitation

Date

Dear Teacher:

I am a graduate student in the Department of Educational and Counselling Psychology, and Special Education in the Faculty of Education at the University of British Columbia, working under the supervision of Dr. Marion Porath. I am writing to ask for your participation in a research project I will be conducting as partial fulfillment of my Masters degree. The project, entitled *Exploring Teachers' Perceptions of Perfectionism and Giftedness*, will explore how teachers understand perfectionism in gifted students.

The project involves your participation in an interview which will take approximately one hour. The date and time will be arranged at your convenience. It is mandatory that the interview will be recorded so that all information is captured accurately. The interview will be transcribed. A transcript, a draft of the analysis and a list of themes identified in the interviews will then be sent to you either by post or email for verification and feedback. You will be asked to respond to three questions which focus on your opinion of the clarity, comprehensiveness and accuracy of the themes identified.

Participation is completely voluntary and you may refuse to participate or withdraw at any time without penalty or jeopardy to your employment. You will not be identified by name in any reports of the completed study. Pseudonyms will be used and responses will be coded and locked in a filing cabinet. Data used for analyses will be stored in a password-protected computer file to maintain confidentiality.

I would greatly appreciate your involvement in this research. If you consent to participate in this study, please sign the attached letter and return it to me at the time of the interview. Should you have any questions, I would be pleased to discuss them with you. You may also call Dr. Porath. If you have any concerns about your rights as a research participant, you may contact the Director of Research Services at UBC at 604-822-8598.

Thank you very much for your interest and cooperation. I would be pleased to provide you with a summary of the general findings upon completion of the study.

Yours Sincerely,

Man Kit Joe (Kailey) Ng

Appendix C

Consent Form

Teacher Consent Form

Exploring Teachers' Perceptions of Perfectionism and Giftedness

Principal Investigator: Dr. Marion Porath, Department of Educational and Counselling Psychology, and Special Education, University of British Columbia.

Co-Investigator: Man Kit Joe (Kailey) Ng, graduate student in the Department of Educational and Counselling Psychology, and Special Education, University of British Columbia.

Study Purpose: The purpose of this research project is to study how teachers understand perfectionism in gifted students. We are interested in teachers' perspectives on giftedness and perfectionism and their perceptions of how best to support students who are perfectionistic. This project will help to inform educators what needs to be done in order to provide positive support for gifted students with perfectionistic traits. The study is being done by the co-investigator in partial fulfillment of the requirements for a Master of Arts in Education.

Study Procedure: The study involves an interview which will be conducted at your school or another location convenient to you. The interview lasts approximately one hour and will be arranged at your convenience. The interview will be conducted by the coinvestigator. Interview questions focus on your perceptions of perfectionism and giftedness. Your responses will not be evaluated or judged during the interview. During the interview, notes about specific key points will be taken so that the flow of the interview can be traced and follow up questions planned. It is mandatory that the interview will be recorded so that all information is captured accurately. The interview will then be transcribed for data analysis. An interview transcript and a draft of the analysis and interpretation will be sent to you either by post or email for verification and feedback.

Risk: There are no known risks for participating in the interview.

Confidentiality: Any information resulting from this research study will be kept strictly confidential. You will not be identified by name in any reports of the completed study. Pseudonyms will be used in the entire study. Transcribed responses will be coded and locked in a filing cabinet at UBC. Data used for analyses will be stored in a password-protected computer file to maintain confidentiality. All data will be stored for five years, after which it will be erased from the computer and paper copies shredded.

Contact for Information about the study: If you have any questions or desire further information with respect to this study, please contact Man Kit Joe (Kailey) Ng. You may also contact Dr. Porath.

Contact for information about the rights of research participants: If you have any concerns about your participation in this study, you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: You participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time without jeopardy to your employment.

I have read the above information and have had the opportunity to ask questions about my participation in this study.

Your signature indicates that you consent to participate in the interview and have received a copy of this consent form for your records.

Printed Name	Date
Participant Signature	

Appendix D

Interview Questions

Giftedness

- How do you define giftedness?
- What are characteristics that make you think a student is gifted?

Perfectionism

- How do you define perfectionism? Can you give some examples that you've noticed in your classroom?
- Have you noticed or identified a student (students) who has (have) perfectionistic traits?
 - (Probe: How can you tell? How do (does) the student(s) behave?)
- What are characteristics that make you think a student is perfectionistic?
- Have you noticed more boys than girls, or more girls than boys, being perfectionistic? Why / Why not?
- What motivates students who are perfectionistic?
 (Probe: Do they try to meet high standards and master the curriculum or do they avoid challenging tasks?)

Giftedness and Perfectionism

- Do you think there is a relationship between giftedness and perfectionism? Why / Why not?
- What are the challenges that gifted students who are perfectionistic face?

(Probe: Have you noticed when gifted students who are perfectionistic run into difficulties?)

- What do you think teachers can do to support gifted students with perfectionistic traits?

Appendix E

Transcription Key Code

Symbol	Example	Explanation
	I guess would be	Pauses / hedges
Bold	Doing more better longer	With strong emotions
()	Oh no (laugh)!	Body language or expressions
Umm / Uh	I think umm	Expressing doubt
(unclear)		Transcriber could not hear