A Theoretical Framework for Understanding Social Anxiety in the Context of Career Development

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Abstract

Anxiety disorders are highly prevalent across the lifespan and, if left untreated, are associated with negative outcomes in many domains of functioning. Nine subtypes have been identified, with social anxiety disorder (SAD) being one of the most common. Not only does SAD impact social functioning, there are also negative implications for functioning in the work and school domains. Despite this impact, little research has explored how to promote positive career outcomes for young adults with SAD. In order to identify ways to promote career development for youth with SAD, a theoretical framework to help conceptualize SAD in the context of career development is imperative. This paper presents, in detail, how the social cognitive career theory can provide such a framework. Implications for practice will also be discussed.

Anxiety disorders (AD) are the most common mental health concern across the lifespan (Kessler et al., 2005; Merikangas et al., 2010). Untreated AD in childhood and adolescence is associated with a host of deleterious effects, including increased substance use; lower academic performance and vocational achievement; adult psychopathology; decreased family cohesion; and interpersonal problems (Öst & Treffers, 2001). Costs of AD also impact society, including costs related to sick leave, unemployment, and remedial education services (Dupont, Rice, Miller, Shiraki, Rowland, & Harwood, 1996; Greenberg et al., 1999). In the most recent version of the Diagnostic Statistical Manual of Mental Disorders (DSM-V; American Psychiatric Association; APA 2013), nine anxiety subtypes are identified.

Social anxiety disorder (SAD) is one of the most common subtypes of anxiety disorder (Kessler et al., 2005). The impact of SAD, in a career context, is great. For example, there is evidence of a significant association between SAD and protracted unemployment (Himle et al., 2014). There is also evidence demonstrating that individuals with SAD are more likely to fail a grade or drop out of school (Dryman, Gardner, Weeks, & Heimberg, 2016). Despite the potentially severe ramifications of SAD on functioning in the career domain, little research has investigated how to help promote positive career outcomes for adolescents and emerging adults with anxiety (Miles, Szwedo, & Allen, 2018).

Adolescence is a time of significant change and transition in the biological (e.g., puberty) and interpersonal arenas. School transitions often involve disruptions to developed peer groups, the introduction of new authority figures (e.g., teachers), and typically a move to a different, potentially larger, school (LaGreca & Ranta, 2015). Such transitions provide opportunities for individuals to develop and mature socially and emotionally and to learn skills to cope with and adapt to change. Learning how to navigate transitions during adolescence can set the stage

for navigating other transitions in life, such as the transitions that occur throughout an individual's career development. In addition to these changes and the self-exploration taking place during this developmental stage, children and early adolescents are also exploring aspects of career. Career development occurs across the lifespan, although career development in late childhood and early adolescence is an area that is under-researched (Hirschi, Niles, & Akos, 2011).

Career development has been conceptualized in many ways, including person-environment models and developmental theoretical approaches. The social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994; Lent & Brown, 2013) was formulated as a complementary framework to such approaches. SCCT is based upon Bandura's (1986) social cognitive theory, which highlights the reciprocal interactions between people, their behaviours, and their environments. An individual's agency in career development results, in part, from the person's self-efficacy beliefs, outcome expectations, and personal goals. In addition to these three key cognitive-person variables, the SCCT involves four models: development of interests, making of choices, the role of performance, and satisfaction and wellbeing in the occupational domain. These models are conceptually distinct but overlap in their foci. Context plays a central role in these four models. This paper uses the SCCT to provide a theoretical framework from which to

understand how SAD impacts career development, particularly during adolescence. Applying this theoretical conceptualization in practice will also be addressed.

Social Anxiety Disorder

SAD is characterized by intense distress to social or performance situations in which evaluation or rejection from others may occur (APA, 2013). It is a persistent disorder that affects both children and adults, with the age of onset estimated at 11 years (Stein & Stein, 2008). Individuals with SAD report higher functional impairment in the work/academic and social domains of life compared to functional impairment in family life (Aderka et al., 2012). In addition to decreased functioning, there is also research suggesting that fear of evaluation is associated with lower quality of life in the domains of personal growth, achievement and social functioning (Dryman et al., 2016). Of great concern is the finding that most people experiencing SAD do not seek treatment until 15-20 years after the onset of symptoms (Stein & Stein, 2008). This finding indicates that although the onset of SAD is in late childhood to early adolescence, the effects, including the impact on career development, last long into adulthood.

Lifetime prevalence rates in the USA are estimated at 12% for adults (Kessler et al., 2005) and 9% for adolescents (Merikangas et al., 2010). In a world-wide mental health survey involving 26 countries, lifetime prevalence rates were estimated at 4% in adults (Stein et al., 2017). This difference in cross-cultural prevalence rates may provide credence to the view that SAD is a somewhat culturally bound concept. Despite the differences in

prevalence rates around the world, there are consistent patterns, including associations with the following socio-demographic characteristics: younger age, female gender, unmarried status, lower education, and lower income (Stein et al., 2017). Family studies and twin studies provide evidence suggesting that SAD is moderately heritable (see Stein & Stein, 2008 and Wong & Rapee, 2015). Taken together, it is clear that there are both hereditary factors and environmental factors influencing the development of SAD.

Several common factors have been identified in the extant literature as risk factors for developing SAD. These include genetic predisposition, temperament, cognitive biases, negative life experiences, parent-child relationships and peer relationships (Wong & Rapee, 2016). In addition to these etiological factors, models exploring how SAD is maintained have been proposed. Such models include cognitive processes such as maladaptive anticipatory and post-event processing, attributional biases, attentional biases (self-focus and external threat-focus), and negative self-processing. Avoidance and escape behaviours, safety behaviours, and performance or skills deficits have been suggested as behavioural factors maintaining SAD (Wong & Rapee, 2016). Contextual factors that can maintain SAD include parenting style, traumatic life events and negative peer experiences (Wong & Rapee, 2015).

Typically, the transition from childhood to adolescence brings with it an increased demand in social realms and exposure to new social settings, including educational, vocational and recreational (Wong & Rapee, 2015). The significant changes and transitions inherent in adolescence make this devel-

opmental stage one fraught with opportunities for evaluation and rejection. In fact, it is not unusual to experience heightened sensitivity to negative peer evaluation during this stage (Blöte, Miers, Heyne, & Westenberg, 2015). Thus, the school environment can be particularly challenging for socially anxious students, who experience this sensitivity to a greater degree.

SAD and Academic Functioning

Students with SAD often contend with lower peer acceptance, increased peer victimization, and fewer friendships (Blöte et al., 2015). They may fear or avoid asking questions, contributing to class discussions, giving presentations, taking tests, and participating in extracurricular activities, and generally lose out on many confidence-building opportunities and experiences of successful learning, both of curriculum and of life skills (Blöte et al., 2015). Many fall into a vicious cycle of perpetuating anxiety, a cycle that involves the way they think about themselves and others, how they feel emotionally and physically, and how they behave.

A qualitative study by Clarke and Fox (2017) of college students with SAD revealed that perceptions of self and others influenced participation in daily life activities as well as interactions with the environment. Students with SAD felt inferior to their peers and judged their abilities more harshly. They were also preoccupied with their performance in lectures and with how they would be perceived by their peers. Participation in activities was also evidenced by the avoidance of course work requiring oral presentations or small group work. Students with SAD also tended to favour studying in physical locations that allowed for anonymity, potentially impacting their ability to form meaningful relationships with their peers. The presence of close friends or parents in social settings decreased levels of distress, further highlighting how the interactions with the environment were negatively impacted.

SAD can also impact academic functioning through school refusal. While complicated, a relationship between social anxiety and school refusal has been established, with one study finding an eightfold increase in school refusal for those meeting criteria for SAD (see Blöte et al., 2015). An age effect has been suggested in the literature, with youth with SAD being more likely to report avoidance of socially aversive or evaluative situations as the function of school refusal compared to younger peers (Kearny & Albano, 2004). These findings demonstrate the far-reaching impairment of SAD on academic functioning.

SAD and Occupational Functioning

Occupational functioning is also impacted by SAD in several ways. The extant literature suggests absenteeism, lower academic achievement, turning down opportunities and promotions, indecision regarding career choice, and lower levels of career choice satisfaction as outcomes of SAD in the career domain (Himle et al, 2014; Miles et al., 2018). Taken together, these findings suggest a particular need to engage and support adolescents with SAD in their career development. Having a theoretical framework to understand these findings is valuable because it enhances our understanding of how SAD impacts the career domain and provides a basis from which to contemplate ways of

intervening. SCCT can provide such a framework and will be discussed in the following section.

Social Cognitive Career Theory

A basic tenet of SCCT is that career development is influenced by the interplay between person, behavioural, and environmental variables (Lent, 2013). Interests, values and abilities are considered, as are self-perceptions, expectations, and behaviours. Furthermore, socio-cultural context, such as social support and how the environment responds to an individual's gender and ethnicity, is also weighed. This theory assumes that people have some agentic capacity in their career development (Lent & Brown, 2013). It is important to note that although some personal agency is assumed, SCCT posits that individuals do not have complete control over their career development process and that environment and contextual factors must be investigated. The SCCT theory emphasizes the role of the key cognitive-person variables (self-efficacy, outcome expectations and personal goals) in allowing people to exercise agency in career development (see Figure 1).

Self-efficacy refers to self-beliefs people have about their capability to plan and execute actions in a particular performance domain or activity. These beliefs are shaped by past and future experiences and environmental conditions - in essence, their learning experiences (Lent, 2013). As success is experienced in a given performance domain, self-efficacy beliefs are strengthened. Similarly, repeated or significant failures can weaken a person's self-efficacy beliefs. Outcome expectations involve beliefs about the consequences of a particular action or performance behaviour.

Physical, social and self-evaluative outcomes are three types of outcome expectations described by Bandura (1986). Many aspects of human behaviour are determined by self-efficacy and outcome expectations.

SCCT outlines two distinct personal goals: choice-content goals, which refers to the type of activity a person wants to pursue, and performance goals, which refers to the level or quality of performance an individual wants to achieve in a particular activity or domain (Lent, 2013). Setting personal goals facilitates the organization and execution of sustained behavior. At times, this behavior can be sustained even in the absence of external rewards. Self-efficacy and outcome expectations influence personal goals, and progress towards personal goals can impact self-efficacy, outcome expectations, and feelings of satisfaction (Lent, 2013).

The Four Models of SCCT

Within SCCT, academic and career development is formed from the cognitive-person variables functioning together with aspects of the person (e.g., gender, ethnicity), the environment, and learning experiences (Lent 2013). Four models are used to further understand the development of career. They include the interest, choice, performance and satisfaction models. Because of the overlapping foci, these models interact with and influence one another.

Interests model. Interests in career-related activities are cultivated when people believe they are self-efficacious and expect positive outcomes. These beliefs, in turn, can foster goals for continuing or increasing participation in the activities. These goals can reinforce practice and are more likely to lead

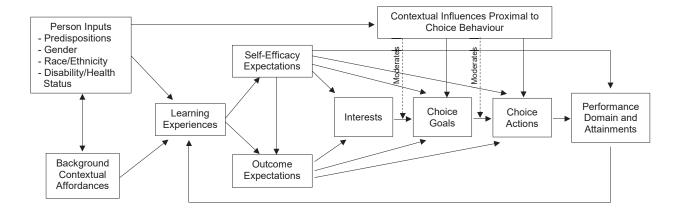


Figure 1. Social Cognitive Career Theory. Reprinted from Journal of Vocational Behavior, 45, R. W. Lent, S. D. Brown, & G. Hackett, "Toward a Unifying Social Cognitive Theory of Career and Academic Interest, Choice, and Performance," 79–122, Copyright (1994), with permission from Elsevier.

to the achievement of goals, forming a feedback loop. Similarly, disinterest or aversion to activities can be fostered by doubts of self-efficacy and the expectation of negative outcomes. Interests are able to shift as people gain exposure to learning experiences that may expand or restrict their self-efficacy beliefs or expected outcomes. SCCT accounts for contextual factors, such as genetics; socio-economic variables; health and disability status; gender; and ethnicity, that may influence the development of self-efficacy beliefs and expected outcomes.

Choice model. SCCT postulates that career choice is a dynamic process that requires the development of self-efficacy, outcome expectations, interests, and skills in different performance domains (Lent, 2013). As individuals and environments change, so too may their career choices change. Initial career choice is conceptualized as having three components: the expression of choice to enter a career or field (goal), the actions taken to help career choice come to fruition, and the resulting performance experiences. The interactions between goals, actions and performance form a

feedback loop, which shapes future career-related choice options. As illustrated in Figure 1, career development is not necessarily linear in progression. Rather, it is a process with multiple influences and points of choice.

Environmental factors play a potent role in shaping career choice. In the SCCT, there is explicit recognition that environment may not support people's interests. Distal background influences, such as gender socialization and culture, are those that shape the cognitive-person variables. Proximal environmental factors impact the components of career choice more directly (e.g., expressing career goals or taking action to implement goals). For example, lack of financial support may restrict an individual's ability to pursue interests. Therefore, interests, alone, do not determine career choice and socio-cultural factors may be another driving force in career choice.

Performance model. Performance can be described in terms of the level of attainment achieved in activities and tasks related to work and education, as well as persistence in the face of challenges.

A primary assumption in the performance model is that people who perform competently will persist and be allowed to persist (e.g., through continued employment) longer. As such, persistence is viewed as an indicator of performance success. Persistence may also shift as a result of a change in interests, and not just a result of performance.

The cognitive-person variables and objective ability are factors within the performance model. Again, a feedback loop is formed between performance attainment and subsequent behaviours. As the performance goals are successfully met, self-efficacy beliefs are reinforced, and subsequent outcome expectations are influenced. The opposite can also be true, where failure to achieve a performance goal may require a revision to self-efficacy beliefs, outcome expectations and/or behaviours. Context also influences this feedback loop. For example, the quality of education, role models present, and socialization of gender roles can all impact learning experiences, performance and the approach an individual takes to dealing with adversity.

Satisfaction model. Satisfaction in the career and educational domains is experienced to the degree that people are involved in activities they value, see themselves as making progress in their expressed goals, have strong self-efficacy to achieve their goals, and have access to resources in their environments for achieving their goals and promoting their self-efficacy. Contextual factors such as personality and work conditions (e.g., perceived organizational support, and fit between individuals' needs and what their work environment provides) can influence the level of satisfaction a person experiences, both directly, and indirectly. Furthermore, this model views work satisfaction and life satisfaction as bidirectional influences on one another (Lent & Brown, 2008). Using SCCT (Lent & Brown, 2013; Lent, Brown, & Hackett, 1994) as a framework to understand SAD in the context of career allows a comprehensive view of career development by considering person, behavioural, environmental, and socio-cultural factors.

Understanding SAD in a Career Context Through an SCCT Framework

Using the SCCT framework, SAD can be understood in terms of how cognitive-person variables impress upon other determinants in career development and interact with the individual and the individual's environment. Recall the vicious cycle of SAD where negative beliefs about the self and the expectation of feared outcomes increase the likelihood of avoidance behaviours, which then reinforces dysfunctional beliefs about the self and others. These cognitive-person variables interact with etiological and maintenance factors an individual may

be exposed to (e.g., over-protective parenting style, gender, maladaptive causal attributions), which can influence the degree to which an individual experiences SAD. These interactions may also impede career development in individuals with SAD via the four models.

It is important to reiterate that people's self-efficacy and outcome expectations may not align with their objective ability. This discordance can impact performance attainment levels. A characteristic of anxious thinking is underestimating one's ability to cope with feared situations and overestimating threat (Wong & Rapee, 2015). For example, it is unclear if individuals with SAD have social skills deficits, with research supporting both sides of the debate (Knappe, Sasagawa, & Creswell, 2015). Yet, many individuals with SAD have maladaptive beliefs about their ability to perform in the social domain. Although their social skills level may not match their self-efficacy (e.g., I am not good at talking to others), their expected outcomes are influenced (e.g., nobody will talk to me and I will be alone all lunch), despite the desire to be evaluated positively (e.g., I want people to like me). When the feared situation arises, people with SAD may engage in behaviours that facilitate the expected outcome, such as by using strategies to avoid interactions with others (e.g., wearing earphones, avoiding eye contact, speaking quietly). Such a situation then impacts their performance attainment and provides a learning experience to reinforce anxious behaviours, negative expected outcomes, and poor self-efficacy.

SAD and the Interest Model

To illustrate the interest model, an example of SAD can be

used. As previously discussed, a feature of SAD is negative self-processing in the social domain, or in SCCT terminology, low self-efficacy. Youth with SAD may hold the belief that they are not competent and, therefore, engage in practices that foster disinterest and/or aversion to activities involving various social aspects. For example, youth with SAD may believe themselves to be unskilled at speaking in large groups and expect a negative outcome in class, such as saying something embarrassing during a class discussion. As a result of this type of low self-efficacy and negative expected outcome, youth with SAD may view class discussions as a threat rather than a challenge that can be mastered. To cope with the distress of the expected negative outcome, youth with SAD may develop goals to reduce participation in class and engage in avoidance behaviours, such as not participating or skipping class. The relief from avoiding speaking during class discussion may then positively reinforce the avoidance behaviour, as well as strengthen their beliefs of low self-efficacy. Thus, disinterest in participating in class discussions is fostered. When faced with future class discussion situations, youth may then engage in avoidance behaviours. Additionally, they lose the opportunity to be exposed to learning experiences that may challenge the beliefs of low self-efficacy, as well as lose out on the academic learning. According to the SCCT framework, peoples' interests may be shaped through the interaction of cognitive-person variables and learning experiences.

As posited by SCCT, context must also be considered. Mentors, parents and other influential people in the youth's life can impact the degree to which interests can be shaped by SAD. Research

suggests that broad parent factors, such as parenting style, particularly over-protective and over-controlling parenting, play a maintenance role in SAD (see Wong & Rapee, 2015). It is possible that these parenting styles may limit opportunities for youth to build self-efficacy. Parental behaviour may also provide direct and indirect learning about the potential threat of certain activities (Wong & Rapee, 2016). Using the example of youth feeling distress about participating in a class discussion, direct learning can come from explicit verbalization of a negative outcome that can be expected (e.g., don't say anything dumb, or the class will laugh at you). Indirect learning can take place in the form of encouragement or modeling of avoidance behaviours (e.g., it's safer to not raise your hand and not give them a reason to judge). These types of learning experiences can impact the youth's expectations of negative outcomes and impede interest development.

Cultural factors may also influence the degree to which an individual's interests are shaped. For example, how assertiveness or extraversion is valued in a particular culture, may influence motivation to engage in social activities. More indirectly, how stigmatized mental health issues are within a particular culture may influence an individual's willingness to access effective treatment for SAD, thus reducing the negative impact on the person's functioning. For example, research exploring service utilization for SAD in an ethnically diverse sample of adolescents found that Asian American students were more likely to report higher levels of distress associated with SAD and scored in the clinical range of SAD measures more often compared to other ethnic groups, but were no more likely to

access treatment (Brice et al., 2015). How closely a person adheres to cultural values will also moderate the effects of various cultural factors on the development of interests. Clearly, cultural factors can interact with personal factors to varying degrees in individuals with SAD to intricately influence the development of their interests.

Finances are another example of a contextual factor that may influence the quality of support or opportunities an individual receives. For example, an individual with SAD who struggles to partake in activities in large groups may still be able to hone their skills and interests through private or individual lessons. In Canada, the ability to engage in treatment in a timely manner often depends on the financial freedom to access such resources, whether through fee-for-service treatment or through the use of extended health benefits provided by employers. These contextual factors are examples of how the development of interests may be impacted at any stage in the feedback loop.

SAD and the Choice Model

From the SCCT framework. SAD may serve as a distal background influence in the choice model. SAD can influence career choice based on beliefs of self-efficacy. In a study involving university students, career indecision was found to be associated with negative self-perceptions and negatively correlated with occupational self-efficacy (Jaensch, Hirschi, & Freund, 2015). Performance goals of those with SAD may also influence the choice model. Individuals with SAD may be limited, occupationally, by lower academic achievement (Himle et al., 2014b). Research also suggests that the types of jobs and professions

that people with SAD seek out are influenced by the amount of socializing required. Himle and colleagues (2014b) found that people with SAD are significantly more likely to aspire to the jobs that require less social interaction (e.g., manufacturing and janitorial) and less likely to seek out professions that are social in nature (e.g., hospitality and health care) compared to peers without SAD. The avoidance of social interactions reinforces performance experiences and further solidifies beliefs of self-efficacy in the social domain and career interests. Thus, when individuals with SAD do express career choice, they may limit their choices based on beliefs of low self-efficacy, performance goals, learning experiences and subsequent behaviour.

People with SAD may have more difficulty expressing their career goals. Indeed, research indicates that people with SAD have more indecision with career choice compared to peers without psychiatric disorders (Miles et al., 2018). Without a clear expression of goals, developing a plan of action becomes challenging and can hinder the career development process. SAD may also impact career choice through proximal environmental factors. For example, SAD can negatively impact the development of social relationships and the networking possibilities that may come with social relationships (Himle et al., 2014a). Supportive relationships with peers can also facilitate career development by fostering engagement. Adolescents who experience higher levels of attachment with peers are more likely to explore their environment and commit to career choices (Hirschi et al., 2011). The nature of SAD interferes with an individual's ability to form close relationships with peers. SAD then

serves to limit the types of actions that can be taken and the support received to implement career goals.

Contextual factors to consider in career choice include the socio-demographics such as income level and geographic region. Prevalence rates of SAD are highest in high-income countries and those located in the Americas and Western Pacific regions of the world, and lowest in low-income countries and those located in Africa and Eastern Mediterranean regions (Stein et al., 2017). Future research is needed to explore career indecision and satisfaction in cultural groups and geographic regions with lower SAD prevalence rates.

Gender differences in prevalence rates have been observed, with females being at higher risk of developing SAD compared to males (Stein & Stein, 2008; Merikangas et al., 2010). In community samples, females are twice as likely to develop SAD compared to males across all age groups (Wong & Rapee, 2015). Scant research has investigated the prevalence of SAD in individuals who identify as a non-binary gender. Gender may, therefore, play a role in the career choice model, not only by how an individual is socialized, but also through prevalence of SAD; with the implications of SAD on the cognitive-person variables being more prevalent in females.

SAD and the Performance Model

The level of attainment achieved in career development tasks are lower for people with SAD, as demonstrated by impaired functioning in academic, occupational, and social domains. Therefore, the performance model is influenced by SAD. Findings from research indicate that people with

SAD are 2.25 times more likely to be unemployed despite expecting to work (Moitra, Beard, Weisberg, & Keller, 2011). The discrepancy between employment rates and desire to be employed for those with SAD indicate how the difference between expected outcomes and objective outcome may reinforce low self-efficacy. In terms of financial performance, people with SAD have lower hourly wages compared to peers with no psychiatric disorders (Moitra et al., 2011). The behavioural response of avoidance or escape also fits within the performance model as it illustrates a deficit of the necessary skills to demonstrate resilience or persistence in the face of adversity. The negative impact of SAD on the performance model is supported by findings in research of an association between SAD and protracted unemployment (Moitra et al., 2011).

An example of how context can shape the feedback loop in the performance model is gender inequality. Statistics Canada (2017) demonstrated pay-inequity based on gender, with females earning less, per dollar, compared to males. The wage gap can provide external reinforcement for beliefs of low self-efficacy for women in the workplace, which may then impact their perception of reaching their performance goals. Their work may be of the same quality as their male counterparts, but they may perceive less pay as an evaluation of impaired quality of work or decreased value as an employee by their employer. The interpretations people make about the pay-inequity can lead to a perception of not attaining the desired level of performance and result in subsequent avoidance behaviours, such as absenteeism or further reduction in interaction with others.

SAD and the Satisfaction Model

Because people with SAD are typically lacking self-efficacy, not progressing at personally relevant goals, and may have limited access to resources in their environment, the SCCT posits that they would have less satisfaction in the career domain. As previously mentioned, SAD is associated with lower quality of life (Dryman et al., 2016). Moreover, SAD has been found to be a risk factor for low satisfaction with career choice (Miles et al., 2018). Career indecision. which was discussed previously in this paper, has been found to be significantly associated with a decrease in overall life satisfaction (Jaensch et al., 2015). These findings point to the bi-directional nature of work and life satisfaction.

The example of pay inequality as a contextual factor impeding on the satisfaction model illustrates how this type of inequality may add an additional barrier for females with SAD. They may have a lack of internal (i.e., skills or confidence) and external resources (e.g., social supports) to advocate for pay equality or raise the issue of pay with employers. This lack of resources, or access to resources, then limits their ability to progress toward their personal and performance goals. Not only are performance goals negatively impacted, but also psychological well-being.

Using SCCT to conceptualize SAD in a career context demonstrates how the models are distinct but overlap in foci, and how the cognitive-person variables and the functions of the models have repercussions on each other. The impact of SAD on career development can be severe, and complex. The interplay between these factors and variables must be contemplated

when helping, in order to practically support youth with SAD in their career development.

Practical Implications

The challenges in career development faced by those with SAD have been outlined in this paper. To promote career development, children and youth must be exposed to supportive environments and reduced barriers (Lent, 2013). Individuals with SAD are more likely to report lack of training, lack of interview skills, lack of work experience and limited education as barriers to employment (Himle et al., 2014b). It is crucial to consider these perceived barriers in career counselling practice for children and youth. Current research also underscores parents' "gatekeeper" role in accessing treatment for their children (Reardon et al., 2017). Therefore, involving parents in the career counselling process for children and adolescents with SAD may be warranted.

How to effectively involve parents and caregivers of children and adolescents with SAD in the career counselling process is an area of research requiring further investigation. There is evidence to suggest that parents value collaboration with professionals but ultimately prefer to make the final decision regarding their children (Mak, Hiebert-Murphy, Walker, & Altman, 2014). Providing parents with psychoeducation about the impact of SAD on career development and evidence-based practices to treat SAD may help to facilitate service utilization by families.

As previously stated, much of the research exploring career development in individuals with SAD focuses on adult populations. Career counselling services for this age-group often involve a reme-

dial service orientation approach. In research comparing the effectiveness of work-related Cognitive Behavioural Therapy (CBT) to vocational services-as-usual for unemployed individuals with SAD, the CBT-based intervention resulted in significant improvement in job-search behaviours, and jobsearch self-confidence over treatment-as-usual. However, given the early age of onset, the deleterious effects of untreated SAD, and the lengthy delay in seeking treatment, practitioners must also consider ways of encouraging preventative or early intervention strategies to help children and adolescents with SAD in their career development. CBT is an intervention that can be used to promote career development in children and youth with SAD.

Cognitive Behavioural Therapy is the recommended evidence-based psychosocial treatment for SAD (Himle et al., 2014a; Katzman et al., 2014). Treatment typically involves the following components: psychoeducation, relaxation training, cognitive restructuring, gradual exposures, and social skills and/or problem-solving training (for overview, see McLellan, Alfano & Hudson, 2015). From a SCCT framework, CBT can be thought of as targeting the cognitive-person variables and effecting change in all four models. Parents can play a crucial role in shaping their child's cognitive-person variables by modeling and encouraging the practice of the strategies and interventions described below.

Exposure-based strategies are arguably the central feature in most CBT for anxiety disorders (Seligman & Ollendick, 2011). They are therapeutic tasks that involve confronting anxiety-provoking situations in a graduated fashion with the support and assistance

from a trained therapist (Peterman, Read, Wei, & Kendall, 2015). Part of the process involves learning to set small and realistic goals, which also serves to help track and acknowledge progress (an important feature in the satisfaction model). The purpose of exposure-based tasks is for the client to face an anxiety-provoking stimulus, cope with the anxiety, and cultivate a sense of mastery in anxiety-provoking situations. Not only do gradual exposures allow opportunities for learning experiences to challenge and modify negative self-beliefs, shift expected outcomes from negative to more realistic in nature, and build the practice necessary to help meet expected outcomes, the process can help people with SAD build coping strategies to foster resilience. Therefore, exposures can serve as a preventative measure by targeting the cognitive-person variables, fostering interest and persistence in performance, and contributing to experiencing satisfaction in career development. Exposures can be used to target career-specific fears of performance and evaluation. For example, an individual can develop gradual steps to face the fear of making a mistake in an interview, carrying conversations with co-workers, or asking a supervisor for clarification. Exposures can also be designed to target fears of rejection (e.g., not attaining a job following an interview).

In general, cognitive restructuring and cognitive bias modification strategies, such as attentional training and evaluating and challenging faulty or mistaken beliefs, can help individuals with SAD develop more realistic ways of thinking. To assist with developing "realistic thinking" in the career domain, psychoeducation may also be helpful. Specifically,

children and youth with SAD should be educated, at a developmentally appropriate level, about the nature of the current job market and the increasing trend (and inevitability) for multiple occupational or job changes within their lifetime. This type of psychoeducation can help to normalize the challenges and transitions that occur within the career domain, and help to motivate young individuals to learn to manage SAD. Research supports the notion that anticipation of career change can be beneficial. Adults reported better experiences of career transitions and self-perceptions of better coping when they were able to anticipate career change and thoughtfully and realistically take action, even when they appeared to have job security (Ebberwein, Krieshok, Ulven, & Prosser, 2004). Normalizing difficulties in career development can help to dispute attributional biases that contribute to low self-efficacy and impact the choice and performance model for those with SAD. They can begin to consider career choice and changes in the career domain as challenges that can be mastered rather than threats.

To help reduce perceived barriers to employment, it would be beneficial to focus on skills training in career counselling with children and adolescents. As discussed in a previous section of this paper, the importance of practice has been highlighted in fostering interest. Social skills training can be implemented through instruction, modeling, and the use of active practice, such as role-playing (McLellan et al., 2015). To target career-specific challenges and socio-political contextual factors present in the workplace, social skills training should focus on the skills required to face the common types of social interactions in the workplace, for example, assertiveness and advocacy. In addition to general social skills, learning job interviewing, problem solving, and conflict resolution skills would be beneficial. The use of such skills training can help to improve beliefs of self-efficacy, shift expected outcomes, and improve performance attainment levels.

Resilience, and the ability to persist in the face of adversity can be learned (Alvord & Grados, 2005). In order to help children and adolescents with SAD build resilience and overcome the barriers that arise as a consequence of SAD, they must learn develop strategies and skills, including those that are career-related. Having these skills will promote the adaptability of the individual throughout career development and help to build the individual's internal and external (e.g., social networks) resources to persist in the face of adversity. The ability to successfully navigate the inevitable challenges in the career domain will also impact the satisfaction model, where daunting demands shift from insurmountable threats to achievable challenges.

Conclusion

SAD is a prevalent and disabling condition with impairment extending into the domains of social and occupational/academic functioning. To conceptualize how SAD impacts career development throughout the lifespan, the theoretical framework of SCCT can be applied. Using this lens, once can discern how SAD may impact an individual's beliefs of self-efficacy, expected outcomes and personal goals, and how these cognitive-person variables influence the development of interests, career choice, levels of performance, and satisfaction experienced within career development. In addition to

individual variables, the SCCT considers the role of environmental and contextual factors in shaping career development and helps to illustrate the intricacies of these variables and their interactions.

CBT can provide an effective vehicle for remedial services for individuals with SAD in the field of career counselling. However, to best support children and adolescents with SAD in their career development, a preventative service orientation would be most beneficial to address the unique challenges they face. CBT can be used to modify and shape cognitive-person variables, which then impact the interest, choice, performance and satisfaction models outlined in the SCCT. Children and adolescents may also learn that they are capable of learning to manage SAD and decreasing the extent to which it impairs their lives, including in the career domain. Although further research is necessary to better understand the mechanisms by which SAD influences career development across the lifespan and the contextual factors at play, grounding practice in theory allows the practice of career counselling to advance with rigor.

References

Aderka, I. M., Hofmann, S. G., Nickerson, A., Hermesh, H., Gilboa-Schechtman, E., & Marom, S. (2012). Functional impairment in social anxiety disorder. *Journal of Anxiety Disorders*, 26(3), 393–400. https://doi.org/10.1016/j.janxdis.2012.01.003

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC:

- American Psychiatric Association Publishing.
- Alvord, M. K., & Grados, J. J. (2005). Enhancing resilience in children: A proactive approach. *Professional Psychology: Research and Practice*, 36(3), 238-245. http://dx.doi.org/10.1037/0735-7028.36.3.238
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Brice, C., Warner, C. M., Okazaki, S., Ma, P.-W. W., Sanchez, A., Esseling, P., ... Lynch, C. (2015). Social anxiety and mental health service use among Asian American high school students. *Child Psychiatry and Human Development*, 46(5), 693–701. https://doi.org/10.1007/s10578-014-0511-1
- Blöte, Miers, Heyne, & Westenberg, (2015). Social anxiety and the school environment of adolescents. In: Ranta K., La Greca A., Garcia-Lopez LJ., Marttunen M. (eds) Social anxiety and phobia in adolescents (pp. 151-181). Cham, CH: Springer International Publishing
- Clarke, J., & Fox, J. (2017). The impact of social anxiety on occupational participation in college life. *Occupational Therapy in Mental Health*, *33*(1), 31–46. https://doi.org/10.1080/0164212X.2016.1222323
- Dryman, M. T., Gardner, S., Weeks, J. W., & Heimberg, R. G. (2016). Social anxiety disorder and quality of life: How fears of negative and positive evaluation relate to specific domains of life satisfaction. *Journal of Anxiety Disorders*, 38, 1–8.

- https://doi.org/10.1016/j.janx-dis.2015.12.003
- Dupont, R. L., Rice, D. P., Miller, L. S., Shiraki, S. S., Rowland, C. R., & Harwood, H. J. (1996). Economic costs of anxiety disorders. *Anxiety*, 2(4), 167–172. https://doi.org/10.1002/(SICI)1522-7154(1996)2:4<167::AID-ANXI2>3.0.CO;2-L
- Ebberwein, C. A., Krieshok, T. S., Ulven, J. C., & Prosser, E. C. (2004). Voices in transition: Lessons on career adaptability. *The Career Development Quarterly*, 52(4), 292-308. https://doi.org/10.1002/j.2161-0045.2004. tb00947.x
- Greenberg, P. E., Sisitsky, T., Kessler, R. C., Finkelstein, S. N., Berndt, E. R., Davidson, J. R. T., ... Fyer, A. J. (1999). The economic burden of anxiety disorders in the 1990s. *Journal of Clinical Psychiatry*, 60(7), 427–435. doi:10.4088/JCP. v60n0702
- Himle, J. A., Bybee, D., Steinberger, E., Laviolette, W. T., Weaver, A., Vlnka, S., ... O'Donnell, L. A. (2014a). Work-related CBT versus vocational services as usual for unemployed persons with social anxiety disorder: A randomized controlled pilot trial. *Behaviour Research and Therapy*, 63, 169–176. https://doi.org/10.1016/j. brat.2014.10.005
- Himle, J. A., Weaver, A., Bybee, D., O'Donnell, L., Vlnka, S., Laviolette, W., Levine, D. S. (2014b). Employment barriers, skills, and aspirations Among Unemployed Job Seekers With and Without Social Anxiety Disorder. *Psychiatric Services*, 65(7), 924–930. https://doi.org/10.1176/appi.ps.201300201

- Jaensch, V. K., Hirschi, A., & Freund, P. A. (2015). Persistent career indecision over time: Links with personality, barriers, self-efficacy, and life satisfaction. *Journal of Vocational Behavior*, *91*, 122–133. https://doi.org/10.1016/j.jvb.2015.09.010
- Katzman, M. A., Bleau, P., Blier, P., Chokka, P., Kjernisted, K., Van Ameringen, M., ... Szpindel, I. (2014). Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders. *BioMed Central Psychiatry*, *14*(*Suppl.* 1), 1–83. https://doi.org/10.1186/1471-244X-14-S1-S1
- Kearney, C. A., & Albano, A. M. (2004). The functional profiles of school refusal behavior: Diagnostic aspects. Behavior Modification, 28(1), 147-161. oi:10.1177/0145445503259263
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. Archives of General Psychiatry, 62(6), 593-602. doi:10.1001/archpsyc.62.6.593
- Knappe, S., Sagasawa, S., & Creswell, C. (2015) Developmental epidemiology of social anxiety and social phobia in adolescents. In K. Ranta, A. La Greca, L. J. Garcia-Lopez, M. Marttunen (Eds.), Social anxiety and phobia in adolescents (pp. 39-70). Cham, CH: Springer International Publishing.
- La Greca A.M., & Ranta K. (2015)

 Developmental transitions in
 adolescence and their implications for social anxiety. In

- K. Ranta, A. La Greca, L. J. Garcia-Lopez, M. Marttunen (Eds.), *Social anxiety and phobia in adolescents* (pp. 95-117). Cham, CH: Springer International Publishing.
- Lent, R. W. (2013). Social cognitive career theory. In S. D. Brown & R. W. Lent (Eds.), Career development and counseling: Putting theory and research to work (2nd ed., pp. 115–146). Hoboken, NJ: John Wiley & Sons, Inc.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45, 79–122. https://doi.org/0001-8791/94
- Lent, R. W., & Brown, S. D. (2008). Social cognitive career theory and subjective well-being in the context of work. *Journal of Career Assessment*, *16*(1), 6–21. https://doi. rg/10.1177/1069072707305769
- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557–568. https://doi.org/10.1037/a0033446
- Mak, L., Hiebert-Murphy, D., Walker, J. R., & Altman, G. (2014). Parents' decision making and their information needs concerning treatments for child anxiety: Implications for family-centered practice. *Journal of Family Social Work*, 17(1), 51–67. https://doi.org/10.1080/10522158.2013.809671
- Merikangas, K. R., He, J., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., . Swendsen, J.

- (2010). Lifetime prevalence of mental disorders in U.S. adolescents: Results from the national comorbidity survey replication--adolescent supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(10), 980-989. https://doi.org/10.1016/j.jaac.2010.05.017
- McLellan, L. F., Alfano, C. A., & Hudson, J. L. (2015). Cognitive-focused interventions for social anxiety disorder among adolescents. In K. Ranta, A. La Greca, L. J. Garcia-Lopez, M. Marttunen (Eds.), Social anxiety and phobia in adolescents (pp. 225-250). Cham, CH: Springer International Publishing.
- Miles, M. M., Szwedo, D. E., & Allen, J. P. (2018). Learning to cope with anxiety: Long-term links from adolescence to adult career satisfaction. *Journal of Adolescence*, 64, 1–12. https://doi.org/10.1016/j.adolescence.2018.01.003
- Moitra, E., Beard, C., Weisberg, R. B., & Keller, M. B. (2011). Occupational impairment and social anxiety disorder in a sample of primary care patients. *Journal of Affective Disorders*, 130(1), 209–212. https://doi.org/10.1016/j.jad.2010.09.024
- Öst, L., & Treffers, P. D. A. (2001).

 Onset, course, and outcome for anxiety disorders in children.

 In W. K. Silverman & P. D. A.

 Treffers (Eds.), Anxiety disorders in children and adolescents: Research, assessment and intervention. (pp. 293-312).

 New York: Cambridge University Press.
- Peterman, J. S., Read, K. L., Wei, C., & Kendall, P. C. (2015). The art of exposure: Putting science into practice. Cognitive

- and Behavioral Practice, 22(3), 379-392. doi:10.1016/j.cb-pra.2014.02.003
- Reardon, T., Harvey, K., Baranowska, M., O'Brien, D., Smith L., & Creswell, C. (2017). What do parents perceive are the barriers and facilitators to accessing psychological treatment for mental health problems in children and adolescents? A systematic review of qualitative and quantitative studies. European Child & Adolescent Psychiatry [serial online] 26(6), 623-647. doi:10.1007/s00787-016-0930-6
- Seligman, L. D., & Ollendick, T. H. (2011). Cognitive behavioral therapy for Anxiety Disorders in youth. *Child and Adolescent Psychiatric Clinics of North America* 20(2), 217-238. doi:10.1016/j.chc.2011.01.003
- Siegel, R. S., & Dickstein, D. P. (2012). Anxiety in adolescents: Update on its diagnosis and treatment for primary care providers. *Adolescent Health, Medicine and Therapeutics*, 3, 1–16. https://doi.org/10.2147/AHMT.S7597
- Statistics Canada (2016). Labour
 Force Survey estimates (LFS),
 wages of employees by type of
 work, North American Industry
 Classification System (NAICS),
 sex and age group, annual (current dollars unless otherwise
 noted), CANSIM (database)
 (http://www5.statcan.gc.ca/
 cansim/pick-choisir?lang=eng&
 p2=33&id=2820072, accessed
 June 20, 2018)
- Stein, M. B., & Stein, D. J. (2008). Social anxiety disorder. *Lancet*, *371*(9618), 1115–1125. https://doi.org/10.1016/S0140-6736(08)60488-2
- Stein, D. J., Lim, C. C. W., Roest, A. M., de Jonge, P., Agui-

- lar-Gaxiola, S., Al-Hamzawi, A., Scott, K. M. (2017). The cross-national epidemiology of social anxiety disorder: Data from the world mental health survey initiative. BioMed Central Medicine, 15(1), 143-164. doi:10.1186/s12916-017-0889-2
- Wong, Q. J. J., & Rapee, R. M. (2015). The developmental psychopathology of social anxiety and phobia in adolescents. In: Ranta K., La Greca A., Garcia-Lopez LJ., Marttunen M. (eds) *Social anxiety and phobia in adolescents* (pp. 11-37). Cham, CH: Springer International Publishing.
- Wong, Q. J. J., & Rapee, R. M. (2016). The aetiology and maintenance of social anxiety disorder: A synthesis of complementary theoretical models and formulation of a new integrated model. *Journal of Affective Disorders*, 203, 84–100. https://doi.org/10.3389/fpsyg.2016.01963