The Psychological Benefits of Risk Taking in Individuals with and without Attention Deficit/Hyperactivity Disorder: A Phenomenological Case Study of Skydiving

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Abstract

This study explored the psychological experience of risk taking among experienced skydivers, with and without Attention Deficit/Hyperactivity Disorder (ADHD). A novel multi-perspectival (2-group), multi-case qualitative design was employed using a 3-interview series model of semi-structured interviews. Interviews explored the participants' personal history leading up to their experience in skydiving, their experience of skydiving, and the meanings that skydiving had in the participants' lives. Themes were analyzed and compared between sample groups from a critical phenomenological perspective using Interpretative Phenomenological Analysis (IPA). Achievement, Self-Esteem, Thrill and Adventure Seeking, and Status were emergent themes common to both the ADHD and non-ADHD group participants. ADHD group participants more heavily endorsed themes of Identity, Social Context, Risk Taking, Boredom Susceptibility, Disinhibition, Experience Seeking, Sense of Well-Being, Experience and Management of Stress, and Psychological Dialectic, which refer to simultaneous but opposing psychological experiences. Non-ADHD group participants more heavily endorsed themes of Risk Management and Control. The constellations of emergent themes suggest that ADHD group participants are motivated by the experience of a sense of well-being that results from the integration of risk taking into identity while non-ADHD group participants are motivated more by a sense of achievement. The findings in this study offer a rich exploration of the subjective lived experience of risk taking in the sport of skydiving.

Keywords: Risk taking; Attention Deficit/Hyperactivity Disorder; interpretative phenomenological analysis; skydiving; psychological benefits

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List of Acronyms

AAD	automatic activation device
ADHD	Attention Deficit/Hyperactivity Disorder
AFF	Accelerated Freefall
APA	American Psychiatric Association
BOC	bottom of container
CoP	Certificates of Proficiency
CSPA	Canadian Sport Parachuting Association
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
IAD	Instructor-Assisted Deployment
IPA	Interpretative Phenomenological Analysis
NCS-R	National Comorbidity Survey Replication (United States)
PCC	Parachute Club of Canada
USPA	United States Parachuting Association
USSR	Union of Soviet Socialist Republics

Chapter 1.

Introduction

Risk taking is often viewed in a negative light. The concept evokes images of individuals engaged in reckless behaviours (e.g., car racing, skydiving, drug use) that have a high probability of negative consequences to the risk-taker's health or life. Much of the research into risk taking has aligned with this negative stereotype, emphasizing adverse outcomes and need for controls over such activities (Douglas, 1994; Larkin & Griffiths, 2004). Many studies have considered the impacts of risk taking in driving (e.g., Doane, 2013; Iversen, 2004), sexual behaviours (e.g., Berhan & Berhan, 2013; Martin, 2006), and substance use (e.g., Baskin-Sommers & Sommers, 2006; Feldstein & Miller, 2006), or some combination of these activities (e.g., Lejuez, Simmons, Aklin, Daughters, & Dvir, 2004; Turchik, Garske, Probst, & Irvin, 2010).

Although risk is often associated with negative outcomes, the process of risk taking is motivated by anticipated positive outcomes (Van Brunschot, 2009; Zuckerman, 2007). Outcome expectancies theories suggest that individuals frame risk taking around beliefs about potential benefits from engaging in the activities (Fromme, Katz, & Rivet, 1997). This suggests individuals employ a risk-benefit analysis of their decisions to participate in risky activities (Zuckerman, 2007). Studies have suggested that risk takers are often motivated by the hedonic experience and social acceptance (Celsi, Rose, & Leigh, 1993).

A relatively unexplored area of risk taking is the possible motivating force of psychological benefits. It has been suggested that participating in risky activities may provide psychological benefits and promote psychological balance (Cowan, 1982; Willig, 2008; Yeoman, 1998). Studies have shown that skydiving, an extreme form of risk taking, has been associated with hypoarousal and the extinction of anxiety (Csiksentmihalyi, 1974; Fenz & Epstein, 1967; Pierson, le Houezec, Fossaert, Dubal, & Jouvent, 1999). There is also evidence that risk taking is associated with increased positive affect (Matthies, Philipsen, & Svaldi, 2012). This association raises the possibility further that risk taking may provide some psychological benefit.

To advance understanding of the potential psychological benefits of risk taking, the current study explored the experience of risk taking amongst individuals with and without attentional difficulties. Specifically, this study used Interpretative Phenomenological Analysis (IPA) to examine how adult male skydivers make sense of their skydiving experience and how the experience of skydiving differs between individuals with and without symptoms of Attention Deficit/Hyperactivity Disorder (ADHD). The sport of skydiving was selected for this study on the basis that it is a paradigmatic exemplar of high risk taking (Hetland & Vittersø, 2012). Skydiving is a so-called "extreme sport" involving physical activity that carries a risk of serious physical injury and death (Willig, 2008). ADHD, a disorder characterized by inattention, hyperactivity, and impulsivity, was selected as it is often associated with risk-taking behaviours (Garland, 1999; Zuckerman, 1994). It has been suggested that individuals with ADHD will go to extreme measures to satisfy their need for stimulation (Garland, 1999). Additionally, it has been suggested that risk taking regulates affect for individuals by altering an adverse state of boredom (Matthies et al., 2012). An adult sample was chosen because over the past few decades it has been determined that ADHD does not completely remit as an individual ages (Buitelaar, Kan, & Asherson, 2010) but the research on adult ADHD has been under-developed (Biederman & Faraone, 2005). Additionally, by focusing on adult risk takers with ADHD, the study is less affected by neurochemical fluctuations that often affect child and adolescent risk-taking behaviours (Steinberg, 2008).

The study is novel in that the psychological benefits of risk-taking behaviours are considered. It is of interest to determine if risk taking has a unique positive function in mental health. Evidence of this role will challenge the negative stereotype of risk taking, as well as open new areas of research for exploration. Positive findings will also expand the understanding of the role of risk taking in the management of adverse symptomatology in individuals affected by ADHD. Additionally, this study contributes to the development of the IPA approach. While the study adhered to the principles of IPA, as outlined by Smith, Flowers, and Larkin (2009), a multi-perspectival design was employed which involves the examination of two groups of participants that are relative homogeneous with the exception of the feature under investigation. Smith et al. (2009) consider the multi-perspectival approach to be a "bolder" design that offers a more

detailed and multifaceted account of a phenomenon. However, this comparative approach is still rather novel (e.g., Clare, 2002; Larkin & Griffiths, 2004).

1.1. Risky Behaviours

Risk (2016b) is defined as a "situation involving exposure to danger" (para. 1) or "the possibility that something unpleasant or unwelcome will happen" (para. 1.1) as a result of one's actions. Risk is also defined as engaging in an activity where there exists a "possibility of loss or injury" ("Risk," 2016a, "Full Definition of Risk," para. 1). Regardless of the definition, one definitional aspect of risk is the possibility of loss or harm. There are various types of losses or harms associated with risky behaviours. Risks, and their potential negative outcomes, have been categorized as financial, performance, physical, sexual, psychological, social, and time (Horvath & Zuckerman, 1993; Yates & Stone, 1992).

Yates and Stone (1992) have identified three characteristics of risk in any activity. *Potential losses* refer to the subjective estimate an individual gives to the probability of a loss occurring. The *significance of losses* is variable and unique to the individual and their perspective of the impact of a particular loss in their life. There is also a subjective estimate of the *uncertainty of potential losses*. Additionally, there are degrees of loss (or gain) associated with risky activities (e.g., buying a lottery ticket versus betting your life savings in a card game). It is the subjective evaluations of these aspects that result in different individuals assessing the nature of risk differently for particular activities (Van Brunschot, 2009).

Although the concept of risk is typically linked to the negative outcomes of the activity (Douglas, 1994), all risks have some anticipated positive outcome (Van Brunschot, 2009; Zuckerman, 2007). Larkin and Griffiths (2004) prefer to label risky activities as being "risky-but-rewarding" (p. 217). Individuals who consider engaging in a risky activity usually appraise the risk using a risk-benefit ratio (Zuckerman, 2007), with perceived risks inversely related to perceived benefits (Slovic, Fischhoff, & Lichtenstein, 2000). An individual's evaluation of the positive and negative impacts of participating in a risky activity determines the individual's willingness to engage in the activity (Gullone, Moore, Moss, & Boyd, 2000; Rolison & Scherman, 2003; Van Brunschot, 2009). Once

participation in the activity has begun, the individual continually assesses the potential for losses or gains. This ongoing assessment determines if the individual will continue in the activity and to what degree (Van Brunschot, 2009). After completing a risky activity, the individual assesses the outcomes of the activity, which impacts the likelihood the individual will re-engage with the activity (Van Brunschot, 2009). Zuckerman (2007) concludes that individuals who take risks are either willing to accept the potential losses or have determined that the benefits outweigh the risks.

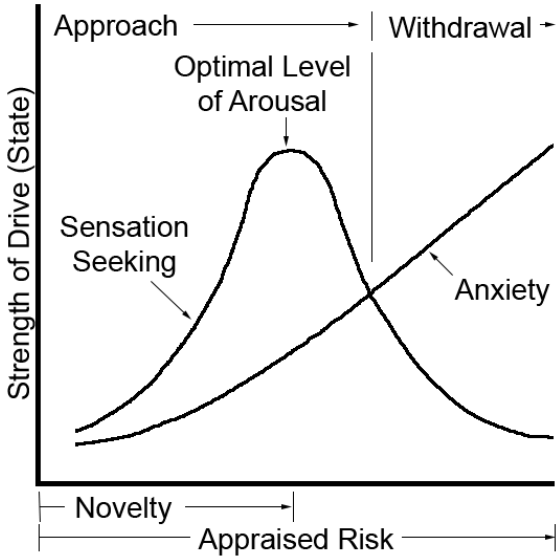
While some risks can be calculated (e.g., odds of winning a lottery), risks influencing behaviour do not conform well to objective statistics because of the risk appraisal conducted by the individual (Zuckerman, 2007). The risk appraisal is influenced greatly by factors linked to the voluntariness of the activity and the extent to which one is safety oriented. Voluntary activities are perceived as more beneficial and the associated risks are perceived as more acceptable than are involuntary activities (Slovic et al., 2000). This suggests that the appraisal includes assessing the degree of control the individual has in the activity. Individuals also tend to have a prevention or promotion orientation to risk (Grant & Xie, 2007). Individuals oriented to prevention pursue safety and security by minimizing losses, while individuals oriented to promotion pursue growth and advancement by maximizing gains (Grant & Xie, 2007).

1.2. Theories of Risk Taking

Various theories of risk taking have been proposed. Zuckerman (1976, 2007) has proposed a general theoretical model of risk that considers the relationship of novelty, appraised risk, affective states of anxiety (negative arousal), and affective states of sensation seeking (positive arousal). In Zuckerman's (1976, 2007) model (see Figure 1.1), anxiety increases linearly as a function of appraised risk. Positive arousal increases with novelty and appraised risk up to some maximal level and then arousal decreases as a function of further appraised risk. Up to the point where the risk appraisal and the anxiety it induces reduces the positive arousal, an individual tends to approach the activity. After that juncture, the tendency is for the individual to avoid or withdraw from the activity. Individuals willing to engage in riskier activities generally have an anxiety gradient that is lower and a positive arousal curve that peaks at a higher

level of appraised risk compared to individuals who limit themselves to less risky activities (Zuckerman, 2007).

Figure 1.1. Theoretical Model of Relationship between Novelty and Appraised Risk and Affective States of Anxiety and Sensation Seeking



Note. From Stress and Anxiety (Vol. 3, pp. 141-170), edited by I. G. Sarason and C. D. Spielberger, 1976, Washington, DC: Hemisphere Publication Services. Copyright 1976 by Hemisphere Publication Services.

The research literature on risk taking has tended to categorize the motivation to participate in risky activities as coming from within the individual (e.g., impulsivity, self-control, and sensation seeking) or from the relationships that an individual has with others (e.g., status seeking or social recognition) or with the larger society around them (e.g., peer or societal expectations; Van Brunschot, 2009). There are three overarching categories of risk-taking theory: sociological, psychological, and economic.

Sociological theories of risk taking consider the context in which behaviours occur. *Opportunity Theory*, which is derived from the research on criminal behaviours, suggests that the probability that an individual will participate in a risky activity increases when opportunities to do so are increased (e.g., government legalization of gambling; Cohen & Felson, 1979; Hindelang, Gottfredson, & Garofalo, 1978). *Differential Association Theory* suggests that the participation in a risky activity leads to an indirect positive gain regardless whether the activity has a direct positive or negative outcome

(e.g., media attention from participation in the risky activity; Malaby, 1998). An extension from Differential Association Theory suggests that risk taking may be a learned behaviour and that individuals may be socialized to participate in those activities (Czerny, Koenig, & Turner, 2008). *Lifestyle or Exposure Theories* suggest that opportunities to participate in risky behaviours are the result of habitual routines or by leading certain lifestyles (e.g., street youth involvement in violence; Baron, Forde, & Kay, 2007). *Anomie Theory* explains risk taking as a result of socio-structural conditions that contribute to "anomie", a state of normlessness with few rules or expectations (Wallisch, 1998). For example, it has been suggested that individuals who experience less control in the primary aspects of their lives (e.g., at home or work) are drawn into risky activities in which they perceive they have control (e.g., consuming alcohol; Lyng, 1990). The *Theory of Symbolic Interactionism* suggests that risk takers attribute a significant personal and life meaning to the activity in which they are engaged (Adams, 2001). For example, Le Breton (2000) suggests that some individuals engage in risky activities (e.g., extreme sports) as a means of testing strength of character and personal resource, which, in turn, gives those individuals a *legitimacy* to life in a society that they perceive is in crisis with regards to values.

Psychological theories suggest that risky behaviours are the result of particular deviations from the norm (e.g., higher levels of impulsivity) or reduced cognitive dissonance within the individual (Van Brunschot, 2009). Impulsivity, self-control, and factors are grouped together in many of the psychological theories of risk taking (Zuckerman, 2007). Impulsivity refers to an individual taking "actions that are poorly conceived, prematurely expressed, unduly risky, or inappropriate to the situation and that often result in undesirable outcomes" (Daruna & Barnes, 1993, p. 23). Self-control refers to an individual's ability to refrain from impulses. Sensation seeking is the "seeking of varied, novel, complex, and intense sensations and experiences and the willingness to take physical, social, legal, and financial risks for the sake of such experiences" (Zuckerman, 1994, p. 27). It is suggested that individuals high on impulsivity or low on self-control are more likely to participate in risky activities. Additionally, individuals with high sensation-seeking characteristic are likely to structure their lives to include more risk-taking experiences (Zuckerman, 2007).

Reversal Theory (Apter, 2001; Kerr, 1997) offers a theoretical model of motivation, emotion, and personality as a psychological basis to understanding risk

taking. In the Reversal Theory model, there are four pairs of opposing metamotivational states, each with its own characteristics: *telic* (i.e., serious, goal-oriented, arousal avoiding) and *paratelic* (i.e., spontaneous, playful, and arousal seeking), *conformist* (e.g., compliant and agreeable) and *negativistic* (i.e., rebellious, unconventional, and defiant), *mastery* (i.e., competitive and dominating) and *sympathy* (e.g., harmony, unity, cooperative), and *autic* (i.e., egoistic) and *alloic* (i.e., altruistic). Individuals are believed to move back and forth between paired metamotivational states (Apter, 2001). Kerr (2007) suggests that risk takers (e.g., extreme sport participants) can only accept a risk if the individual can maintain a "paratelic protective frame" (p. 338) This frame is a cognitively based and subjectively determined interpretation of the risk-taking experience that creates a "psychological bubble" (p. 338) that leads to a reduced sense of danger, an increased sense of safety, and an increased confidence in ability (Kerr, 2007).

Other psychological theories are framed around addiction and pathology models. *Addiction Theories* suggest that risk taking may be a compulsion whereby the individual repeatedly engages in a risk-taking activity (e.g., gambling) despite harmful or negative consequences because the behaviour provides a continuous reward (Griffiths, 1998). Pathology-based theories emphasize cognitive dysfunction (e.g., illusion of control; Dannewitz & Weatherly, 2007; Laurendeau & Van Brunschot, 2006) and psychological disorders (e.g., irrational thinking in depression; Delfabbro & Winefield, 1999) as potential factors leading to participation in risky activities.

Economic theories of risk fall into two frameworks. In the consequentialist framework, the decision to participate in a risky activity is based on an attempt to maximize the utility of the decision outcome. *Expected Utility Theory* involves a calculation that considers factors related to participation in the risky activity with the individual making a decision based on the calculations (Mongin, 1998). *Prospect Theory* makes use of heuristics or mental scripts which individuals use to assess the potential losses or gains of a risky activity (Christie, 2003). In the non-consequentialist framework, the individual is oriented to short-term gains at the exclusion of longer-term utility (Van Brunschot, 2009).

1.3. Extreme Sports

The general classification of sports by risk (e.g., skydiving is high risk, running is low risk) is arbitrary (Zuckerman, 2007). For example, there are many more injuries in running than skydiving but when something goes wrong in skydiving the outcome is quite serious or fatal. Studies comparing high-risk and low-risk sports are often fraught with anomalies. For example, swimming is generally classified as a low-risk sport but swimmers share many sensation-seeking features of individuals in high-risk sports (e.g. swimmers rank at a moderate level of sensation seeking; Zuckerman, 2007). Likewise, race car drivers, considered a high-risk group, have been found to share characteristics with low-risk groups (e.g., impulsivity levels are similar between low-risk and high-risk groups; Zuckerman, 2007). Rowland, Franken, and Harrison (1986) found that individuals who frequently participated in high-risk sports also often participated in non-risky activities like pool, target shooting, and chess, suggesting that there may be a more "cerebral" reason for individuals being drawn to these benign activities. These anomalies suggest that the "riskiness" of sports is not the sole or even the main feature attracting individuals to participate (Zuckerman, 2007).

Extreme sports are defined as recreational physical activities that carry a risk of serious physical injury or death (e.g., skydiving, BASE jumping, rock or ice climbing; Willig, 2008). Participation in extreme sports requires physical abilities as well as psychological strength wherein the individual has a special belief or confidence in their ability to confront danger and survive (Apter, 1992; Pain & Kerr, 2004). Sports that are high risk also tend to provide novel sensations and experiences (e.g., freefall of skydiving; Zuckerman, 2007). Skydiving is considered one of the most extreme sports and skydivers are considered some of the highest sensation seekers (Breivik, Roth, & Jorgensen, 1998; Zuckerman, 2007). Although extreme sports are becoming more popular (Celsi et al., 1993; Hetland & Vittersø, 2012; Puchan, 2004; Slanger & Rudestam, 1997; Soreide, Ellingsen, & Knutson, 2007; Willig, 2008), psychological research into the area of extreme sports has been very limited (Willig, 2008).

Existing psychological research has considered the relationships of extreme sport participation with personality traits, birth order, and interpersonal and intrapersonal processes. The studies on the relationship of extreme sports participation and personality traits have shown significant correlations (Castanier, Le Scanff, & Woodman,

2010; Diehm & Armatas, 2004; Franques et al., 2003; Kerr, Frank-Ragan, & Brown, 1993; Rowland et al., 1986; Shoham, Rose, Gregory, & Kahle, 1998) but the size of the correlations have been modest, only explaining approximately 10 percent of the variance in behaviour (Furnham, 2004). High risk takers generally present with low conscientiousness, high extraversion, and high neuroticisim (Castanier et al., 2010). A few dated studies have considered the role of birth order (Casher, 1977; Nisbett, 1968; Seff, Gecas, & Frey, 1993; Yiannakis, 1976) but those findings were found to be inconsistent (Willig, 2008). Interpersonal and intrapersonal process research considers factors that enable and define participation in extreme sports (e.g., motivation, risk perception, cost-benefit outcomes; Celsi et al., 1993; Larkin & Griffiths, 2004). Willig (2008) suggests that involvement in extreme sports is "a dynamic process of motive evolution and risk acculturation leading to the formation of a high risk identity" (p. 693) (e.g., extreme athlete, criminal). Themes that have been identified from qualitative studies of interpersonal and intrapersonal processes include desire for personal challenge, awareness of potential suffering as a result of engaging in the activity, value of comradery, mastery and skill, experience of contrast (e.g., calming scenery contrasts with physically challenge of the sport), compulsion, pleasure, and being in the present, leading to the exclusion of all other thoughts, feelings, and perceptions (Willig, 2008).

Willig (2008) suggests that participation in extreme sports holds meanings and fulfills psychological benefits beyond those that have been explored in the existing research literature. It is within this gap in the literature that the current study is framed. Adoption of an extreme sport may be a way for an individual to achieve psychological balance (Cowan, 1982; Yeoman, 1998). In particular, a question that exists is whether participation in an extreme sport might alleviate adverse symptomatology of some mental health disorders (e.g., ADHD). There has been some research to suggest that the mitigation of adverse symptomatology may be a motivating factor for an individual to participate in an extreme sport. Pierson et al. (1999) found in a sample of Canadian skydivers that participation in the act of skydiving led to states of emotional hypoarousal. Celsi et al. (1993) have suggested that individuals may initially participate in skydiving for the "hedonic motives" (p. 14) but Larkin and Griffiths (2004) have suggested that once acculturation into skydiving activity occurs individuals are increasingly directed towards the "flow" (Csiksentmihalyi, 1974, p. 58) a transcendent low-arousal state rather than thrills (Csiksentmihalyi, 1974). Fenz and Epstein (1967) showed that experienced

skydivers' arousal levels decrease at the final altitude prior to jumping illustrating the extinction of anxiety as a function of the experience.

1.4. Attention Deficit/Hyperactivity Disorder

ADHD is considered a cognitive and behavioural developmental disorder, where all clinical criteria are behavioural (Sagvolden, Johansen, Aase, & Russell, 2005). According to the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5; American Psychiatric Association [APA], 2013, pp. 59-60), a diagnosis of ADHD requires an individual to meet five criteria. If the individual is a child, he or she must present with a minimum of six symptoms in Sections A1 (inattention) or A2 (hyperactivity and impulsivity). If the individual is an adolescent or adult (age 17 or older), he or she must present with a minimum of five symptoms in Sections A1 or A2. Several of the symptoms must have been present prior to the age of 12 (Criterion B). Several of the symptoms must be present in two or more settings (Criterion C; e.g., school, work, home). The symptoms must interfere with or reduce the quality of the individual's social, academic, or occupational functioning (Criterion D). The symptoms must not occur exclusively during the course of schizophrenia or another psychotic disorder, and are not better explained by another mental disorder (Criterion E).

Inattention manifests behaviourally as wandering off task, lacking persistence, having difficulty with focus, and being disorganized, and is not the result of defiance or lack of understanding (APA, 2013). The inattention symptoms included in Criterion A1 are:

a. often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities;
b. often has difficulty sustaining attention in tasks or play activities;
c. often does not seem to listen when spoken to directly;
d. often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace;
e. often has difficulty organizing tasks and activities;
f. often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort;
g. often loses things necessary for tasks or activities;

h. is often easily distracted by extraneous stimuli;

i. is often forgetful in daily activities

(p. 59)

Hyperactivity refers to excessive motor activity when it is not appropriate or excessive fidgeting, tapping, or talkativeness (APA, 2013). The hyperactivity symptoms included in Criterion A2 are:

a. often fidgets with or taps hands or feet or squirms in seat;

b. often leaves seat in situations when remaining seated is expected;

c. often runs about or climbs in situations where it is inappropriate (in adolescents or adults, may be limited to feeling restless);

d. often unable to play or engage in leisure activities quietly;

e. is often "on the go" acting as if "driven by a motor";

f. often talks excessively

(p. 60)

Impulsivity refers to hasty actions that occur without forethought and that have the potential for harm to the individual (APA, 2013). The impulsivity symptoms included in Criterion A2 are:

a. often blurts out an answer before a question has been completed;

b. often has difficulty waiting his or her turn;

c. often interrupts or intrudes on others

(p. 60)

Individuals who present at least six (five for adolescents or adults) of the nine clinically significant inattentive symptoms would be diagnosed with the *inattentive* subtype. Individuals who present with at least six (five for adolescents or adults) of the nine clinically significant hyperactive or impulsive symptoms would be diagnosed with the *hyperactive/impulsive* subtype. Individuals who present at least six (five for adolescents or adults) clinically significant symptoms in each category would be diagnosed with the *combined* subtype.

1.5. ADHD in Adults

ADHD was long considered a childhood disorder (Sudderth & Kandel, 1997). ADHD in adults has been under-recognized, underdiagnosed, and thus, under-treated (Biederman & Faraone, 2005). Over the past several decades, research has focused on characterizing ADHD and there has been a consistent finding that ADHD does not completely remit as affected individuals age (Buitelaar et al., 2010). In particular, the cognitive features of inattention and distractibility are likely to endure. Age does appear to be significantly associated with symptom decline but the mean number of total symptoms presented does not fall below the required threshold level in any age group studies (Biederman, Mick, & Faraone, 2000). Symptoms of inattention have been shown not to fall below threshold by 20 years of age, whereas symptoms of hyperactivity and impulsivity have been shown to fall below the full threshold level between the ages of 9 and 11 (Biederman et al., 2000). Persistence of ADHD appears to be contingent on continued inattention more than on hyperactivity or impulsivity (Biederman, Faraone, Milberger, Curtis, & Chen, 1996; Buitelaar et al., 2010; Hart, Lahey, Loeber, Applegate, & Frick, 1995).

While criteria for ADHD have not been developed specifically for adults (Adler & Cohen, 2004; Biederman et al., 2006; McGough & Barkley, 2004; Wender, Wolf, & Wasserstein, 2001), Buitelaar et al. (2010) suggest that ADHD is a chronic disorder with symptoms that persist over a long period of time and over a wide range of domains. The cardinal symptom clusters (i.e., inattention, hyperactivity, and impulsivity) found among children with ADHD appear to shift in adulthood with inattention becoming most prominent (Buitelaar et al., 2010). Other symptoms such as affect lability, explosive temper, stress intolerance, and dysphoria also emerge as more prominent in adulthood than childhood (Faraone, Biederman, & Friedman, 2000; Riccio et al., 2005; Wender, Reimherr, Wood, & Ward, 1985; Wolf & Wasserstein, 2001). Clinical evidence suggests that an adult ADHD diagnosis offers value in predicting symptom persistence, progression, and severity, as well as treatment response (Resnick, 2005; Seidman, Valera, & Makris, 2005; Wilens, Faraone, & Biederman, 2004).

Faraone, Biederman, and Mick (2006) have suggested that 62% of children diagnosed with ADHD during childhood continue to be symptomatic and 19% continue to meet full diagnostic criteria at age 25. The United States National Comorbidity Survey

Replication (NCS-R) found an ADHD prevalence rate of 4.4% in adults aged 18-44 (Kessler & Merikangas, 2004). It has been suggested that adults with ADHD symptoms experience greater impairments than children with ADHD, because adult settings tend to be more complex and provide less structure than childhood settings (Adler, 2004a; Millstein, Wilens, Biederman, & Spencer, 1997; Murphy & Adler, 2004). Impairments experienced by adults with ADHD stem from problems with executive function (non-verbal working memory), internalization of speech (verbal working memory), self-regulation of affect, motivation, and arousal, and reconstitution of cognitive structures (Barkley, 1998). Adults with ADHD have demonstrated difficulties in manipulating and organizing information, completing tasks, and interacting with others (Achenbach, Howell, McConaughy, & Stanger, 1998; Barkley, 1997; Kessler & Merikangas, 2004; Millstein et al., 1997; Wilens et al., 2004).

Many studies have suggested that adults with ADHD demonstrate functional impairments in multiple domains (Biederman et al., 2006). Borland and Heckman (1976) have suggested that adults with ADHD experience lower socioeconomic status, more employment difficulties, and more employment transitions than their non-ADHD siblings. ADHD adults have been shown to have fewer years of education and lower rates of professional employment compared to non-ADHD adults matched for age and sex (Barkley & Murphy, 1998; Fletcher, 2014; Morrison, 1980a, 1980b).

ADHD has been shown to predict social maladjustment, immaturity, fewer social assets, and high rates of separation and divorce (Alterman, Petrarulo, Tarter, & McGowan, 1982; Barkley, Fischer, Smallish, & Fletcher, 2004; Barkley & Murphy, 1998; De Obaldia & Parsons, 1984; Eyre, Rounsaville, & Kleber, 1982; Tarter, 1982; Wilens, Biederman, & Mick, 1998). ADHD adults have been shown to have more psychological maladjustment and more marriages compared to non-ADHD adults (Murphy & Barkley, 1996). Adults with ADHD often present with mood lability and low self-esteem (Wender, 1995; Wolf & Wasserstein, 2001). ADHD in adults is associated with difficulties fulfilling parental responsibilities (Adler, 2002; Adler & Chua, 2002) and managing and sustaining intimate relationships, and with higher rates of divorce or separation (Adler & Chua, 2002; Weiss, Hechtman, & Weiss, 1999). Additionally, ADHD has been associated with increased criminal involvement and susceptibility to anti-social personality disorder (Groman & Barzman, 2014; Mannuzza, Klein, Bessler, Malloy, & LaPadula, 1998).

Studies have shown that adults with ADHD often present with histories of school problems, a well-known correlate of ADHD in childhood (Hinshaw, 1992). Adults with ADHD have experienced a significantly higher rate of repeated grades, tutoring, attendance in special classes, and reading disabilities than non-ADHD adults (Biederman et al., 2006). Adults with ADHD have reported poorer educational performance and more frequent disciplinary problems compared to adults without ADHD (Barkley, 1998; Barkley et al., 2004; Murphy & Barkley, 1996; Wolf & Wasserstein, 2001). Adults with ADHD who have continued into postsecondary education have shown a much lower graduation rate than non-ADHD students (Barkley, 2002; Barkley et al., 2004; Barkley & Murphy, 1998).

ADHD in adults often presents comorbid with other disorders. Lifetime comorbidity rates have been determined for learning disorders at 20%, mood disorders, including major depressive disorder, bipolar disorder, and dysthymia at 45%, antisocial personality disorder at 9%, anxiety disorders at 59%, impulsive disorder at 70%, intermittent explosive disorder at 21%, and substance use disorders at 36% (Barkley & Murphy, 1998; Kessler et al., 2006; Roy-Byrne et al., 1997).

1.6. The Link between ADHD and Risk Taking

Research on ADHD and risk taking has been limited. One group of studies has focused on the transitive link between ADHD and risk taking via sensation-seeking personality characteristics (Garland, 1999). Often studies that examine ADHD and sensation seeking consider risk taking as being analogous to sensation seeking (Garland, 1999) but risk taking is only part of the sensation-seeking trait (Zuckerman, 1994). Individuals with ADHD are often characterized as sensation seekers and risk takers as a result of their inattention and impulsiveness (Garland, 1999; Zuckerman, 1994).

Research on the link between ADHD and sensation seeking has been inconclusive. Shaw and Brown (1990) completed a study of children with ADHD and found a link between ADHD and sensation seeking. Zentall and Mayer (1987) also found a link between ADHD and sensation seeking in children which they extrapolated to adults with ADHD. Shaw and Giambra (1993) studied adults with ADHD but did not find

a generalizable link between ADHD and sensation seeking. Robbins (1966) and Satterfield (1987) found adult criminality to be related to a diagnosis of hyperactivity in childhood. Farmer and Peterson (1995) found that adolescent and young adult males predicted less severe consequences following risky behaviour and reported fewer active methods of injury prevention.

A second group of studies has focused on the direct link between ADHD and risk taking but within three specific risk-taking behavioural domains (i.e., substance use, sexual behaviours, and risky driving). Adults with ADHD have been shown to be at a higher risk for substance use disorders (Charach, Yeung, Climans, & Lillie, 2011; Lee, Humphreys, Flory, Liu, & Glass, 2011; Molina, 2011). Young adults with ADHD have been shown to be more likely than non-ADHD young adults to report engaging in risky sexual behaviours (Barkley, Fischer, Smallish, & Fletcher, 2006; Flory, Molina, Pelham, Gnagy, & Smith, 2006). Adults with ADHD are also more likely to engage in risky driving behaviours (Wymbs et al., 2013).

Adults with ADHD may search for stimulation in novel situations and they may go to extreme means to satisfy the need for stimulation (Garland, 1999). These individuals appear to be underaroused and they may seek out arousing experiences even to the point of engaging in risky behavior (White, 1999). Risk taking appears to be a core characteristic of individuals with ADHD that results in negative psychosocial and health-related outcomes (Matthies et al., 2012). There appears to be rewarding properties of risk taking to the individual with ADHD as a means to increase positive affect (Matthies et al., 2012). However, the associations between risk taking and emotional states in ADHD are poorly understood (Matthies et al., 2012).

1.7. Research Questions

The aim of this study was to explore the potential psychological benefits that risk-taking behaviours may provide to individuals with and without symptoms of ADHD. To explore this area, the study investigated the experience of risk taking amongst two groups of experienced skydivers. The first group of skydivers is composed of individuals who meet the diagnostic criteria for ADHD, as defined by the DSM-5 (APA, 2013). The

second group consists of skydivers who would not meet the diagnostic criteria for ADHD. The primary research question is:

- What psychological benefits does participating in skydiving offer the skydiver?

The secondary research question is:

- In what ways do the psychological benefits of skydiving differ between skydivers who meet the criteria for a diagnosis of ADHD and those who do not?

The overall purpose of these research questions is to gain a deep understanding of the experience of skydiving and what benefits this risk-taking behaviour may have on the psychological well-being of the individual skydiver. This study contributes to the existing literature by providing examples of the experience of risk-taking behaviour, specifically skydiving, and drawing a comparison of that experience between individuals with and without ADHD. It also provides insight into the role risk-taking behaviours have in the management of some adverse mental health symptoms or problematic behaviours that are inherent in ADHD.

Chapter 2.

The Sport of Skydiving

Historical events suggest that the act of skydiving, or parachuting, has been around for over 1,100 years (Canadian Sport Parachuting Association [CSPA], n.d.). In 852 AD, Armen Firman, a philosopher, poet, and inventor from Cordoba, Spain, constructed a wing-like cloak made of cloth and wood and he attempted to glide from a tower (Ali, 2013). While he did not successfully glide, his wing-like construction caught enough air, much like a modern-day parachute, to break his fall and Armen escaped with only minor injuries. In the 1300s, Chinese acrobats were known to attach parachutes to their bodies and jump off towers during their performances (Khuri, 2005). In the 1400s, Leonardo Da Vinci designed pyramid shaped parachutes that included features similar to those found in modern parachute designs (Leonardo Da Vinci inventions, 2008). In the 1600s, Galileo Galiliei and Isaac Newton discovered the principles of relative falling speeds and terminal velocity (CSPA, n.d.). During the 1700s, experiments using parachutes were conducted by a number of inventors. Louis Sebastien Lenormand experimented with parachutes as a means of escaping burning buildings and he was responsible for inventing the name “parachute” (CSPA, n.d.). Jean Pierre Blanchard experimented with parachutes, using animals in a basket to test weight limits (“Jean-Pierre-François Blanchard,” 2015). Jacque Garnerin completed the first recorded parachute descent from 2,000 feet in 1797 and, subsequently, his wife, Jeanne-Genevieve Garnerin, became the first woman to complete parachute descents, including leaping from heights of 8,000 feet (CSPA, n.d.).

The 1800s was a busy time of trial an error in the evolution of parachuting. A number of new parachute designs were introduced which improved stability of the parachute and removed the wooden structures making the parachutes collapsible (CSPA, n.d.; Thomas Scott Baldwin, n.d.; Works, 2015). Harnesses were developed that allowed the parachutist to strap the parachute on to his or her body (“Thomas Scott Baldwin,” n.d.). The 1800s also saw the first life saved as a result of a parachute (MacSweeny, 1844) and the first fatality as a result of parachuting (Dunlop, 2013). Parachute jumping was also becoming more publicly known as it drew audiences who

wanted to watch the risky, death defying acts by people such as Paul Letteman and Kaethe Paulus, German exhibition jumpers, and Leo Stevens, a Canadian dare devil who parachuted from Niagara Falls and the Notre Dame Cathedral (CSPA, n.d.).

Advancement of parachute equipment and the sport continued in the 1900s (Works, 2015). Leo Stevens developed a release system that permitted the jumper to deploy the parachute manually while falling (Works, 2015). The pilot chute, an auxiliary parachute used to deploy a main parachute more efficiently, was developed by Pinto, an Italian inventor (Works, 2015). The first parachute jump from a plane was made in 1912 by Captain Alberta Berry (Works, 2015). The first parachute jump from an airplane in Canada was also made that year by American, Charles Sanders (Works, 2015). In 1913 the first jump from an airplane by a woman was made by Georgia Broadwick (Works, 2015). Throughout the early- to mid-1900s parachute design and the sport advanced at an accelerated rate due to the advancements made in aeronautics (Works, 2015). In 1930, sport parachutists entered the scene in the Union of Soviet Socialist Republics (USSR) and by 1936 the USSR had over 650 parachute training sites (Works, 2015). By the early 1940s, most major military organizations of the world had various squads or platoons with specialized training as parachutists (e.g., paratroopers) (Works, 2015). In 1948 the St. Catharines Parachute Club, Canada's first and now oldest parachute club, was formed (CSPA, n.d.). By 1950, parachute designs had moved from uncontrolled circular parachutes to steerable circular parachutes (Works, 2015). In 1951 the First World Parachuting Championships were held in Yugoslavia and skydiving became an international sport (Works, 2015). In 1956, the Parachute Club of Canada (PCC) was formed to regulate sport parachuting (CSPA, n.d.). The PCC evolved into the Canadian Sport Parachuting Association (CSPA) in 1967 to better represent the size to which the sport had grown in Canada (CSPA, n.d.). The equipment advancements in the 1960s and 1970s led to safer, more steerable parachutes with longer float times (Works, 2015). In 1966, the rectangular parachute canopy was patented by Domina Jalbert (Works, 2015). The concept was based on the idea of developing an inflatable airplane wing (i.e., airfoil) out of fabric (Works, 2015). The 1970s saw a heightened interest in parachute skill competitions around the world and national and international competitions started to be held annually.

Throughout the late 1990s and early 2000s the sport made numerous advancement in the equipment, training approaches, and skill disciplines. The following sections provide a summary of the current state of these areas of the sport.

2.1. Skydiving Equipment

The basic skydiving equipment setup consists of three parts. A *main canopy* is the primary parachute. A *reserve canopy* is a secondary canopy deployed in situations in which the main canopy becomes unusable. The *container*, also known as the backpack or rig, stores the main and reserve canopies. The container includes arm, leg, and chest straps permitting the container to be secured to the skydiver like a backpack. Reserve canopies are stored on the back above the main canopy in the container.

Modern canopies are of a rectangular *ram-air* design. A ram-air canopy is a self-inflating airfoil (i.e., in the shape of a wing) that permits the skydiver to control the speed and direction of the canopy. Canopies are usually made of zero-porosity nylon fabric that lasts for thousands of deployments. Reserve canopies are typically larger and more docile than main canopies. Main canopies are mechanically released by the skydiver. When a skydiver wants to deploy the main canopy he or she pulls and throws a pilot chute which is located in a bottom of container (BOC) pouch. The pilot chute, approximately 18 inches in diameter, fills with air and pulls the main canopy from the container.

Canopies and their deployment are not fail-proof. Often *malfunctions* can occur as a result of improper packing, poor mechanical deployment, or error on the part of the skydiver. Reserve canopies are required as one safety measure for addressing malfunctions of the main canopy. In the case of a malfunction, the skydiver attends to two handles located on the front of the container. One handle is pulled to release the malfunctioning main canopy and the second handle is pulled subsequently to deploy the reserve canopy. Reserve canopies must be inspected every 180 days by a certified rigger who follows precise inspection and packing procedures.

Beyond the basic set up, there are numerous other pieces of equipment a skydiver may use in their jumps. There are two optional safety devices. The *automatic activation device* (*AAD*) is a small computer that is sensitive to altitude and free fall

speed. If a skydiver gets too close to the ground without deploying their canopy, the AAD will activate the reserve canopy at a predetermined height. The *skyhook* ensures that a reserve canopy is deployed in the case where a skydiver cuts away their main canopy but fails to manually deploy their reserve canopy. Personal equipment includes helmets, gloves, jumpsuits, shoes, and weights. Altimeters, mechanical or digital, are required to track altitude and can be mounted on the wrist for visual inspection or within the helmet to provide audio cues related to altitude. Many skydivers also use picture or video cameras and secure the camera to their wrist or helmet.

2.2. Skydiving Training

There are three primary approaches for training new skydivers: *Accelerated Freefall* (*AFF*), *Instructor-Assisted Deployment* (*IAD*) or *Static Line*, or *Tandem Freefall*. The AFF program is considered the quickest method to achieving independent skydiving skills. It involves several hours of ground school, classroom based teaching. The student's first jumps are at altitudes ranging between 4,000 and 10,000 feet, resulting in 30 seconds to 60 seconds of freefall time. During earlier jumps, the student is accompanied by one or two instructors who ensure the student is following safety procedures and completing specific skills. Throughout AFF training the student is always alone under canopy. During earlier jumps, a ground control instructor may provide radio instruction to the student when landing.

The IAD and Static Line approaches, sometimes referred to as Solo First Jump courses, both involve several hours of ground school. The student begins their jumping from lower altitudes (i.e., 3,000 feet to 4,000 feet) and he or she is required to be under a deployed canopy upon leaving the airplane. The canopy is deployed in one of two methods. In the IAD approach, an instructor accompanies the student in the plane to jump altitude. The instructor releases the student's pilot chute manually into the airstream to activate the deployment of the main canopy. In the Static Line approach, the student's pilot chute line is attached to the frame of the airplane. When the student jumps from the airplane, the static line pulls the main canopy out. As the Solo First Jump student progresses in their training, they are gradually taken to higher altitudes and subsequent jumps include increased free fall time. Inclusion of freefall time usually begins around the sixth jump after the student has mastered safely flying and landing his

or her canopy. Throughout IAD or Static Line training the student is alone under canopy with some basic radio assistance in earlier jumps.

The *Tandem Freefall* approach is regarded as one of the quickest ways to obtain the full experience of skydiving. Students typically participate in short, less than 30 minutes, ground school sessions. Students jump with one instructor with the instructor and student sharing the same parachute system. The jump is typically made from higher altitudes but within the range of 4,000 feet to 10,000 feet, providing for 30 seconds to 60 seconds of freefall. The student may be permitted to deploy the main canopy but the tandem instructor is ultimately responsible for ensuring the canopy is deployed. The instructor is also responsible for all canopy flight and landing.

Initial training in skydiving leads to the student developing and mastering basic knowledge in equipment and flight dynamics and basic skills in freefall and canopy flight. They are also trained in executing emergency procedures should problems arise during their jump. If the student continues with training, he or she will work towards demonstrating competency that leads to varying levels of licensing.

2.2.1. Skydiving Licensing

Licensing requirements are established by national regulatory bodies that govern the sport of skydiving. Skydiving is governed by the CSPA in Canada and in the United States skydiving is governed by the United States Parachuting Association (USPA). For the purposes of this study, discussions of licensing requirements will be limited to those set by CSPA.

The CSPA issues licenses, called Certificates of Proficiency (CoP), to skydivers at five different levels of skills mastery. The *solo certificate* is the first step to becoming a license skydiver and it permits the skydiver to jump by themselves without being directly supervised by an instructor. The solo certificate requires the student to demonstrate proficiency in basic freefall and canopy skills and to have technical knowledge relevant to freefall and canopy principles and emergency procedures. The student must have also completed 10 supervised jumps and accumulated a minimum of 3 minutes of freefall time.

The “A” CoP is the first level of licensing that is officially recognized internationally. The “A” CoP permits the skydiver to participate in 2-way skydives with higher level CoP holders and to participate in intentional night and water jumps. Freefall skills that must be mastered include freefall maneuvers and relative work skills. The skydiver must also demonstrate basic canopy maneuvering skills and landing accuracy. Technical knowledge that must be mastered includes main canopy packing skills and a review of emergency procedures. The skydiver must have accumulated a minimum of 25 jumps and 10 minutes of freefall time.

The “B” CoP permits the holder to engage in group formation skydiving activities as well as group night jumps. It is also a pre-requisite for licensing as a coach or rigger. Freefall skills that must be mastered are more advanced skills in relative work and freefall maneuvers. Canopy skills that must be mastered include increased accuracy landings. The skydiver must also demonstrate mastery of technology knowledge related to sport canopies and emergency procedures. The skydiver must have accumulated a minimum of 50 jumps and 30 minutes of freefall time.

The “C” CoP permits the holder to qualify as a drop-zone safety officer and to qualify for an Exhibition Jump Rating, for jumping into exhibition sites involving a close proximity audience. Freefall skills that must be demonstrated including 4-way relative work skills and advanced freefall maneuvers. The skydiver must demonstrate canopy proficiency by being judged on accuracy landings within 15 centimeters, canopy formation jumps, or restricted accuracy sport landings. The skydiver must also have advanced technical knowledge of canopies and emergency procedures. The skydiver must have accumulated a minimum of 200 jumps and 60 minutes of freefall time.

The “D” CoP permits the skydiver to optionally wear a helmet and to participate in course facilitator training. The skydiver must demonstrate more advanced, time-limited skills in formation skydiving or freefall maneuvers. The skydiver must also demonstrate canopy proficiency by being judged on accuracy landings within five centimeters, canopy formation jumps, or restricted accuracy sport landings. The skydiver must have accumulated a minimum of 500 jumps and 180 minutes of freefall time.

2.3. Skydiving Disciplines

Sport skydiving disciplines arose from skill competitions (Works, 2015). The first discipline was *Accuracy*. In Accuracy, the skydiver attempts to land in a specified location. Today, skydivers trained in accuracy have the ability to land by placing their heel on a spot the size of a quarter.

Freefall style was the next discipline to develop. In Freefall, skydivers performed sequences of maneuvers during freefall (i.e., falling without a canopy deployed). This style evolved to include multiple skydivers completing the maneuvers which were described as *relative work*. In 1991, the name of the discipline was changed to *Formation Skydiving* to better represent the nature of the skills involved. This discipline is also referred to as "belly-flying." Over the years, this discipline has also involved attempts to build the largest formations called *Big Ways*. The current world record for skydivers in a single formation involved 282 skydivers. The world record for skydivers completing multiple formations in a single jump, also known as sequential skydiving formations, involved 202 skydivers.

Canopy Formation, or *canopy relative work*, became popular starting in the mid-1980s. The canopy formation discipline initially involved four to eight skydivers performing relative work under canopy. Skydivers would immediately open their parachute after leaving the airplane and then fly their parachutes together to build formations. As with the Formation Skydiving discipline, there have been numerous attempts in Canopy Formation to construct the largest formation. The current world record involved 100 skydivers under canopy completing a diamond formation.

In the mid-1990s, two related disciplines were adopted by the sport. *Freestyle* skydiving is a form of mid-air gymnastics. The skydiver performs maneuvers in the sky that are reminiscent of gymnastics and figure skating maneuvers. *Skysurfing*, which involves the skydiving wearing a board similar to a surfboard on his or her feet, is similar to Freestyle in that it includes a routine composed of a set of maneuvers.

Freeflying, an offshoot of Freestyle that involves flying with the body in a variety of orientations to the ground (i.e., ranging between head-first to feet-first), was initially developed in the late 1980s but gained popularity in the late 1990s and early 2000s. The Freeflying discipline expanded the complexity of the Freestyle by adding the extra

dimension of space. *Vertical Formation Skydiving* is a branch of Freeflying that involves multiple Freeflying skydivers that build formations in a mix of upright and head down orientations. *Atmonauti Fly*, or “angle flying,” refers to a sub-discipline of Freeflying where the skydiver flies at a diagonal. The relationship of the angle and trajectory speed allows the skydiving to control their surrounding air stream to provide more control over lit and flight.

Canopy Piloting, or “swooping,” refers to the discipline in which skydivers fly high performance canopies that can generate high vertical and horizontal speeds. Speed induced maneuvers are performed with the canopy pilot flying inches above the ground.

The most recent skydiving discipline is *Wingsuit Flying*. A wingsuit is a specialized jumpsuit outfitted with arm and leg wings. The wings allow the skydiver to traverse larger horizontal distances across the sky while maintaining a low descent rate. A branch of Wingsuit Flying called *Flocking*, which involves a group of wingsuit flyers flying in close proximity, has also evolved.

Chapter 3.

Methods

3.1. Background and Perspective of the Researcher

I am a 44-year-old male who has been married for 13 years. I have a 22-year-old step-son. I was born in Saskatchewan and raised in Saskatchewan and Alberta. I have one brother, 5 years younger. My parents have been happily married for 45 years. I had a very fortunate upbringing. My parents instilled in me the values of education, independence, and hard work. They also supported me in any and all endeavors which I chose to purse. As a result, I am an achievement oriented person who is driven by the pursuit of knowledge and the experience of life. A second outcome of how I was raised is that I can often be unsettled in life and I am constantly searching for the next goal or the next experience.

My interests in life have always been diverse. I primarily enjoy individual activities that require a significant level of technical expertise and mental prowess. I am certified as a Master Scuba Diver Trainer and I have completed over 4,000 scuba dives. I hold a recreational pilots license with specialty ratings. I am a skydiver with approximately 800 jumps and I have held coaching ratings. I have travelled to over a dozen countries and I have had the opportunity to learn about many different cultures. I have completed six university degrees in diverse areas such as computing science, strategic management, and psychology. This study is part of the requirements for my seventh university degree. I have also been fortunate to have followed various career opportunities including being a software engineer, educator, researcher, educational administrator, and business owner.

I have often been described as a risk taker and sensation seeker within the context of my personal hobbies and interests. I experience a significant degree of boredom susceptibility leading to my need for constant change or variety. While I am able to commit for extended periods of time (e.g., years) to particular interests, I require a notable degree of thrill and adventure in my activities or an acquisition of unique

experiences. While I have experienced some episodes of social anxiety throughout my life, I have had no significant issues with mental illness. More specifically, in relation to the current study, I have never experienced notable ADHD symptoms and I have never been diagnosed with ADHD. I am confident that I do not have ADHD.

My motivation for conducting a study on risk taking and mental health stems from my fascination with the motivations of individuals to partake in risky or extreme sports and observations that engagement in these activities seems to calm the psychological presentation of some individuals. I have often been struck by the diametrically opposed views on extreme sports presented by participants and non-participants. Media has often presented extreme sports in a negative light, quick to highlight the injuries, deaths, or criminal violations of those involved in the sport. Extreme sport participants, on the other hand, express numerous benefits to their participation (e.g., personal, relational, psychological) but they often underplay the negative outcomes (e.g., injury, death) that sometimes occur as a result of participation. The dissonant relationship between the espoused benefits of participating in extreme sports and the hazardous, and sometimes final, consequences of participation suggests that there may be value in exploring the motivations behind participation.

3.2. Theoretical Orientation

As an aspiring clinical psychologist, I have varied interests in psychological theory, assessment, treatment, and research. My research and practice of clinical psychology is grounded in psychodynamic theory. I believe there is a constant interaction of drives and forces within an individual and that conscious and unconscious motives lead to behaviours. I believe that behaviours and emotions are intrinsically connected to unconscious motives and that all behaviours have a cause and a reason. Psychological defenses (i.e., unconscious mechanisms) arise to mitigate anxiety created by conflicts between the conscious and unconscious (Freud, 1915, 1923). Ego functions (e.g., impulse control, affect regulation) drive how an individual interacts with the world around them and how they respond to internal forces (e.g., anxiety, aggression; Blanck & Blanck, 1994). Individuals are shaped by their relation to significant others around them as they maintain relationships while attempting to differentiate them self from others (Fairbarin, 1952). Furthermore, the notion of self refers to the individual's

perception of their experience, including the role of self-esteem, the presence or absence of boundaries, and differentiation of self from others (Kohut, 1978/1991).

Paired with my grounding in psychodynamic theory, I strongly believe that an individual's experience in the world is unique. As a result, I take an idiographic approach in clinical psychology research and practice. To understand an individual's psychology, it is essential to consider the individual as a unique agent, with a unique history, and with characteristics that set the individual apart from others. Furthermore, to fully understand an individual's behaviors and emotions, the subjective meanings of an individual's experiences need to be explored.

This theoretical frame of reference, which is both psychodynamic and idiographic, fueled the selection of the IPA research design for the current study. IPA is founded on three core theoretical foundations. It is phenomenological, hermeneutic, and idiographic. The theoretical framework of IPA is described in Chapter 3, 3.3. Research Design.

3.3. Research Design

The study employed a multi-perspectival (two group), multi-case qualitative design to examine the experience of skydiving amongst skydivers with and without ADHD. A qualitative framework enhanced this study in that it offered the opportunity to understand the importance and meaning that individuals attribute to a specific experience (Creswell, 2009). The intent of a qualitative study is to generate a collection of data or narratives from each participant that are then inductively analyzed to construct a view of how participants understand their experience (Fraenkel, Wallen, & Hyun, 2012). Additionally, qualitative research permits a flow and evolution to the research process that allows questioning, analysis, and procedures to develop based on the information provided by participants (Creswell, 2009). While a qualitative study begins with an initial plan for the exploration of the participants' experience, the participants' responses may reveal additional areas worthy of exploration. This permits an emergent research design based upon findings, a feature not typically present in quantitative frameworks (Creswell, 2009).

As the purpose of this study was to seek an understanding of how skydivers perceive their risk-taking experience in the sport of skydiving, IPA was employed (Smith et al., 2009). The goal of IPA is to explore how individuals construe a particular experience (Smith et al., 2009). There are three primary theoretical underpinnings of IPA. First, IPA is considered *phenomenological* in that it takes a philosophical approach to understanding experience (Giorgi, 1997; Lindseth & Norberg, 2004; Smith et al., 2009). IPA emphasizes the importance of focusing on an individual's perception of an experience (Husserl, 1929/1971; Smith et al., 2009) and conceives individuals as being immersed in a world of objects, relationships, semantics, and culture (Heidegger, 1962; Merleau-Ponty, 1962; Sartre, 1956; Smith et al., 2009). This embedding and interaction in the world makes an individual's experience in the lived world personal. Understanding the experience involves interpreting the individual's perspectives and meanings that are unique to their relationship to the world, their activities, and the things that happen to them (Smith et al., 2009).

The second theoretical underpinning of IPA is that it is based on *hermeneutics*, which is a theory of interpretation (Gadamer, 1989; Heidegger, 1962; Schleiermacher, 1838/1998). IPA is concerned with identifying meanings within the data collected but those meanings are temporal in nature (Smith et al., 2009). Inherent in the IPA process is a double hermeneutic perspective where the researcher attempts to make meaning of a participant's experience while the participant attempts to make meaning of their experience (Smith et al., 2009). In the IPA process, data is analyzed using a recursive approach between the data corpus and the individual lines of data and by applying different perspectives (Smith et al., 2009). Additionally, IPA assumes the researcher cannot avoid examining new data in light of their own prior experiences, assumptions, and preconceptions (Connelly, 2010; Smith et al., 2009). IPA places an onus on the researcher to remain acutely aware of these pre-suppositions in the context of the analysis and how they might affect the study (Connelly, 2010; Flood, 2010). The researcher must acknowledge pre-existing values, assumptions, and beliefs that may affect the interpretation of data, and attempt to *bracket* these to ensure he or she takes an objective approach to trying to understand the meaning of the participants' narratives (Elliott, Fischer, & Rennie, 1999; Stiles, 1993; Yardley, 2000).

The third feature of IPA is that it is *ideographic* rather than nomothetic. An ideographic approach refers to an in-depth study of the individual whereas a nomothetic

approach is concerned with claims at the group or population level. IPA is committed to a high degree of detail and therefore employs a depth analysis (Smith et al., 2009). IPA is also focused on understanding how a particular experience has been understood from the perspective of particular people, in a specific context (Smith et al., 2009). The ideographic feature of IPA offers the researcher a process by which to move from the details of single cases to more general claims (Harré, 1979; Smith et al., 2009).

To collect the rich narrative accounts of participants' experiences that are required by the IPA approach, a semi-structured interview protocol was utilized. Interviews permit the participant to recount the details of their experiences while generating sufficient amounts of data (Rubin, 2012). The recursive data analytic approach of IPA makes it possible to identify meanings of those experiences as perceived by the participant (Penner & McClement, 2008).

3.4. Participants and Eligibility Criteria

Based on Smith et al.'s (2009) recommended samples sizes, the study was initially designed to include a total of eight participants. The *ADHD* group consists of four participants that had received a formal diagnosis of ADHD. The *non-ADHD* group consists of four participants who have never received a formal diagnosis of ADHD and do not meet criteria for a diagnosis of ADHD at the time of participating in the study. This sample size is considered sufficient to develop meaningful data that can be used to compare and contrast the participants (Smith et al., 2009). To be eligible to participate in the study, individuals had to be: (a) male; (b) within the age range of 19-30, inclusive; and (c) have completed a minimum of 200 skydives. Additionally, to be included in the ADHD group, individuals must (d) have previously received a formal diagnosis for ADHD or currently met the criteria for a formal diagnosis for ADHD.

Purposeful sampling, a method that permits the selection of the sample population based on prior information (Fraenkel et al., 2012), ensures that a representative group of participants is selected (Smith et al., 2009). The use of prior knowledge to select participants ensures the individuals under study share traits that purposefully inform the central research theme (Creswell, 2007; Fraenkel et al., 2012; Maxwell, 2005). Better representativeness in the study sample increases the confidence

in the conclusions made for typical members of the representative group (Maxwell, 2005). Gender and age restrictions were imposed in this study as there is some evidence that there is a higher prevalence rate of ADHD in adult males in the ages of 19 to 30 than in adult females (2.15:1 male:female ratio; Faraone, Biederman, Spencer et al., 2000; Kessler et al., 2006; Ramtekkar, Reiersen, Todorov, & Todd, 2010; Resnick, 2005). A skydiving experience restriction was imposed in this study to capture individuals who had included skydiving as regular part of their recreational activities, as opposed to individuals who attempted skydiving once or twice because it was on their "bucket list."

During the course of recruitment, there was significant interest from a few female skydivers who wanted to participate in the study. They expressed an interest to share a female-perspective of participating in the sport. As women represent approximately 25% of the skydiver population (Poynter & Turoff, 2007), the study was modified to allow female participants provided they still met the age and skydiving experience criteria. Participant recruitment continued until the originally planned minimum number of completed male participants for each group (i.e., four in the ADHD group, four in the non-ADHD group) was met. Data from completed female participants was then included for additional analysis. The final participant pool included six participants in the ADHD group, four male and four female, and five participants in the non-ADHD group, four male, one female. The results did not vary as a result of including the female participants.

3.5. Recruitment

Participants were recruited by placing posters advertising the study at skydive facilities in Alberta and British Columbia and by posting electronic versions of the study advertisement to social media websites that catered to the skydiving population in these geographical regions. In addition, targeted recruitment of individuals identified as meeting the diagnostic criteria of ADHD, who are also active skydivers, was employed by posting the study advertisement to ADHD support group websites. The advertisements specified that individuals interested in participating in the study were to send a statement of interest to an email address designated for the purposes of this

study. Participants were entered into a draw at the end of the study with a chance to win a $500 credit at a skydiving facility of their choice.

When an email expression of interest was received, the individual was screened to ensure he or she met the eligibility criteria of the study. If the individual was eligible, a copy of the Informed Consent was forwarded to the individual. The potential participants were encouraged to discuss their participation and raise any questions that they had. If the participant consented to participate, an interview time was scheduled. Participants were informed that if at any point during the study they wished to withdraw from the study, the request would be honored and all data collected from the individual would be destroyed.

Seventeen participants, 13 male and 4 female, began the study. Five male participants and one female participant withdrew from the study prior to the interviews being completed after reporting an inability to commit to the time demands of the interviews. The initial data collected from these participants who withdrew was destroyed and not included in the study. Of the 11 participants who completed the study, eight were male and three were female. Four of the eight male participants and two of the three female participants had received a formal diagnosis of ADHD. The remainder of the participants had never received a formal diagnosis of ADHD and had not reported difficulties with ADHD symptoms.

3.6. Interview Procedure

Face-to-face semi-structured interviews based on Seidman's (2006) 3-interview series model were used to collect data. This interview model explores the participant's engagement in the behaviour under study in the context of the participant's life. This permits a more "meaningful and understandable" interpretation of the participant's experience (Seidman, 2006, p. 16). The first interview explored the context of the participant's experience in skydiving. Participants were asked to describe their personal history leading up to their involvement in the sport of skydiving. This interview explored the participant's earlier experiences in their families, school, work, social networks, communities, and recreational activities. The intent of this first interview was to put the participant's involvement in skydiving in the context of their life story (e.g., how did the

participant come to be a skydiver). The second interview asked the participant to reconstruct the details of their experience in skydiving within the context of their life. The participants were asked to concentrate on the details of their present lived experience in skydiving. The intent of this interview was to have the participant reconstruct the myriad details of their skydiving experience and to place that experience into context amongst their other life activities and relationships (e.g., what is the participant's sense of their skydiving experience). The third interview encouraged the participant to reflect on the meaning their skydiving experience holds for them. The participant was asked to consider the intellectual and emotional connections they experience between their involvement in skydiving and their life as a whole (e.g., what is the participant's understanding of their skydiving experience). Each interview lasted approximately 90 minutes in length. This process of putting experience into language is considered a meaning making process (Vygotsky, 1934/1986).

Seidman's (2006) 3-interview series model was modified in the study so that all three interviews for a single participant were held over the course of 1 day. This modification was necessary to accommodate for time and travel restrictions. Variations of the model with all three interviews held on the same day have been conducted with "reasonable results" (Seidman, 2006, p. 22).

Each interview followed a semi-structured protocol designed around a set of predetermined open-ended questions. A copy of these questions is contained in the interview guide in Appendix A. The interview guide consists of six parts. Parts 1 (ADHD screening), 2 (demographics), and 3 (life experiences prior to skydiving) make up the first interview. Parts 4 (activity within the skydiving community) and 5 (experience of skydiving) make up the second interview. Part 6 (relevance of skydiving activities) makes up the third interview. This protocol permits new questions to emerge based on responses from the participant while ensuring the thematic topics are consistently covered across participants (DiCicco-Bloom & Crabtree, 2006; Turner, 2010).

Interviews were held in private rooms at or near each participant's local skydive facility. At the start of each session, verbal and written consent to participate was obtained. Participants were then asked to complete the Adult ADHD Self-Report Scale (ASRS) to screen for symptoms consistent with ADHD (see Appendix A, Part 1). The ASRS-v1.1 was developed by the World Health Organization and has been shown to

have a 94.3% predictive value and is useful in identifying adults at risk for ADHD (Adler, 2004b; Kessler et al., 2005). Demographic information was then collected (Appendix A, Part 2). Scoring of the ASRS-v1.1 results in a single score on the range of 0 (low presentation of ADHD symptoms) to 6 (high presentation of ADHD symptoms), with scores of 4 or higher indicating a presentation of symptoms that are highly consistent with ADHD in adults.

Participants also completed the Sensation Seeking Scale Form V (SSS-V; Zuckerman, Eysenck, & Eysenck, 1978). The SSS-V is a multi-dimensional measure of sensation-seeking traits, consisting of four interrelated subscales. The subscales, each consisting of 10 forced-choice items, include Boredom Susceptibility (aversion to repetitive or boring tasks or people), Disinhibition (seeking disinhibited social behaviours via alcohol, partying, sex), Experience Seeking (seeking an unconventional lifestyle via unplanned activities or hallucinatory drugs), and Thrill and Adventure Seeking (seeking unusual sensations via exciting and risky sporting activities). Scoring of the SSS-V results in a single total score on the range of 0 (low sensation-seeking traits) to 40 (high sensation-seeking traits) and subscales scores on the range of 0 (low sensation-seeking traits) to 10 (high sensation-seeking traits). The SSS-V has continued to be the most frequently used measure of the construct of sensation seeking despite the over 3-decade long debate regarding its factorial structure and psychometric properties (Ball, Farnill, & Wangeman, 1983; Birenbaum & Montag, 1987; Manna, Faraci, & Como, 2013; Ridgeway & Russell, 1980; Roberti, Storch, & Bravata, 2003; Rowland & Franken, 1986; Salvadoir, Lazzeroni, & Primi, 2007; Zuckerman, 1994).

The use of the SSS-V was intended to be complementary to the hermeneutic phenomenological approach of the current study as it provides insight into a construct, sensation seeking, that is often associated with risk-taking behaviours (Breivik et al., 1998; Zuckerman, 2007). The SSS-V is a quantitative measure which does not assimilate easily with the qualitative nature of the current study. Rather than relying on the quantitative aspects of the SSS-V, the current study used the SSS-V results as a source of qualitative information about the participant. The intent of translating the SSS-V in this fashion was to explore how participants expressed sensation seeking within the context of Zuckerman's (2007) four sensation-seeking traits. For the purpose of this study, SSS-V total and subscale scores were converted to a qualitative descriptor. No standard conversion of numeric score to qualitative descriptor has been developed for

the SSS-V. For this study, SSS-V total scores were described as low (0-10), moderate (11-30), and high (31-40). SSS-V subscale scores will be described as low (0-3), moderate (4-7), and high (8-10). An additional concern regarding the use of the SSS-V, even as a qualitative descriptor, is that it directs attention to the prescribed thematic subscales of the SSS-V. This approach is antithetical to the phenomenological approach since in the pure phenomenological form these presuppositions should be bracketed. Despite this apparent inconsistency, phenomenology does permit the method of investigation to be adapted and modified (Wertz, 2015). In the current study, the modification will permit some reflection on how the findings relate to existing popular literature.

Two digital recorders were used to capture the interview proceedings. Written notes were taken during and after the interview processes. The notes included observations, personal reflections, and additional questions raised as a result of the participant's discourse (Creswell, 2009). Audio recordings of each interview were transcribed verbatim in preparation for analysis.

3.7. Confidentiality and Security of Research Data

The data of this study will maintain confidentiality of participants' names and the contributions they have made to the extent allowed by the law. All information participants provide will be strictly confidential. Information will only be accessible by the principal investigator, supervisor, research assistants, fellows, and volunteers working on this study. There are three conditions under which the release of information about participants to someone else would be ethically and legally required: (a) evidence of harm or likelihood of harm of a child, (b) evidence that a participant is at imminent risk of causing serious bodily harm or death of themselves or another person, or (c) a court orders disclosure of information about participants. In any of these cases, only the minimal amount of information required to protect the safety of participants or others, or as required by law, would be released. Given the nature of the information collected for this study, it is very unlikely that information received from participants would fall within these categories.

Digital recordings and electronic data will be stored in secure databases kept within password-protected file servers, backed up onto hard storage (DVD or external hard drives), and kept in locked filing cabinets. The servers, hard storage, and filing cabinets will all be located in a secure facility on the Simon Fraser University Burnaby campus. Databases will be retained for 20 years. Participants have the right to refuse the storage or to request the deletion of their data. Access to these databases will be strictly limited to people working on this research. Data will be coded with an anonymous subject identification number. Only anonymous research data will be published. Data are presented without any information that would identify an individual participant.

3.8. Data Reduction and Analysis

The analysis of the participants' discourse in IPA is an iterative and inductive cycle that aims to draw out each participant's personal meaning-making in a particular context (Reid, Flowers, & Larkin, 2005; Smith, 2007; Smith et al., 2009). This process involves a series of six steps to organize and interpret the data. The first step involves reading and re-reading the transcriptions, in addition to a review of audio recordings, of a single participant to ensure the participant becomes the focus of analysis (Maxwell, 2005; Smith et al., 2009). Repeated review of the interview allows for the identification of structures and patterns in the participant's discourse (Smith et al., 2009). During this step, the researcher recorded his recollections and observations of the interview to separate his perspectives from those of the participant. See Appendix B for a selected sample of the researcher's analysis of an interview session.

In the second step an examination of the semantic content and language within individual participant data (i.e., across the three interview sessions) was conducted (Saldana, 2009; Smith et al., 2009). The researcher conducted a free textual analysis with no rules or requirements on what was captured. The researcher made descriptive, linguistic, and conceptual comments on the narratives with the intent of describing principal objects within the participant's experience, including relationships, processes, values, and events (Smith et al., 2009).

The third step of analysis involved the development of emergent themes within the data set derived in step two. The researcher attempted to reduce the volume of detail from the original transcriptions and the initial notes. At the same time, a mapping was made of the interrelationships, connections, and patterns of the initial notes. The extrapolation of emergent themes was intended to capture the understanding and interpretation of the participant's original expression of their experience (Smith et al., 2009).

Inclusive mapping and clustering of emergent themes was conducted in the fourth step. The researcher considered how the emergent themes identified in step three were related to and interacted with each other (Smith et al., 2009). The goal of this step was to bring together the emergent themes into a structure that highlights interesting and important aspects of the participant's account of their experience as it relates to the research questions (Smith et al., 2009).

In the fifth step, the researcher repeated steps one through four on the next and subsequent cases. The researcher made special effort to set aside the themes emerging from the previous case analyses to ensure the next case was considered "on its own terms" (Smith et al., 2009, p. 100).

In the sixth step, patterns across cases were considered. By examining data of individual participants in the context of the total sample of participants, a structure of how subordinate themes interconnect and operate within superordinate themes was developed (Smith et al., 2009).

As the proposed study was designed using a multi-perspectival approach, an additional step was required to compare themes between the comparative groups. The exploration of one phenomenon (e.g., risk taking) from multiple perspectives (e.g., individuals with and without ADHD) provided a more detailed and multifaceted account of the phenomenon. In this final step, commonalities and differences in themes between the two groups of participants were identified.

3.9. Validity and Reliability

There is a growing concern amongst qualitative researchers that the "quality" of qualitative research is often measured with the criteria for validity and reliability which

are applied to quantitative research (Onwuegbuzie & Leech, 2007; Strauss & Corbin, 1990). As with any research study, validity, reliability, limitations, and generalizability are relevant factors that must be considered. In IPA, however, validity cannot be represented by the accuracy of correspondence between interpretations as all phenomenological interpretations are subjective. Instead, validity in IPA is more concerned with whether the interpretation is a "coherent" representation of the participants' sense of the experience under study and whether the interpretations in a study have a "plausible and insightful" structure (Todres & Galvin, 2006, p. 52).

Various guidelines, models, and approaches have been proposed for assessing quality or validity in qualitative research (e.g., Elliott et al., 1999; Lincoln & Guba, 1986; Onwuegbuzie & Leech, 2007; Yardley, 2000, 2008). For this study, the guidelines proposed by Yardley (2000, 2008) will be adopted. These guidelines were selected due to the criteria being broad ranging and offering a variety of ways of establishing quality, and because the criteria can be applied irrespective of theoretical orientation (Smith et al., 2009).

Yardley (2000) identified four broad principles for assessing the quality of qualitative research: *sensitivity to context*, *commitment and rigour*, *transparency and coherence*, and *impact and importance*. Sensitivity to context requires the researcher to be informed and aware of relevant theory, existing literature, sociocultural setting, participants' perspectives, and ethical issues. Commitment and rigour involves an in-depth engagement with the study topic, methodological competence and skill, thorough data collection, and depth and breadth of analysis. Transparency and coherence requires the researcher to provide clarity and power in descriptions and arguments, provide transparency in methods and data presentation, and find an appropriate fit between theory and method. Impact and importance refers to building a theoretically rich understanding from the study that has meaning and practicality to the population, which the study sample is intended to represent. The IPA approach is consistent with Yardley's (2000, 2008) principles, but IPA is a creative process that requires the researcher to actively monitor his or her adherence to the quality principles throughout the study (Smith et al., 2009).

3.10. Verification of the Data

A member checking procedure was followed as a quality control process to improve the accuracy, credibility, and validity of the data collected from each participant (Barbour, 2001; Byrne, 2001; Coffey & Atkinson, 1996; Doyle, 2007; Lincoln & Guba, 1985). The member checking process included three phases of activities. During the interviews, participants' comments were restated or summarized and the participants were questioned to determine the level of accuracy of the data. After the interviews were completed, transcripts of the interviews were forwarded to the respective participant for their review. The participants were asked to correct and comment on any discrepancies they noted. Finally, after the initial data analysis of each participant case, a 60- to 90-minute follow up meeting was held with each participant to review the identified themes. The participant was asked to verify or correct the identified themes and to clarify the meaning of statements that were found to be unclear or ambiguous during analysis. Themes were refined based on the member check feedback.

While member checks are not without fault, they are intended to decrease the likelihood of capturing or interpreting the data incorrectly. Member checks allow for the verification of the accuracy and completeness of the findings and they aim to improve the validity of the study (Cohen & Crabtree, 2006). In IPA, validity is determined by the reader's ability to understand how the researcher arrived at his or her interpretations and to find personal meaning in the description of the phenomenon of interest (Todres & Galvin, 2006). Member checks support the overall goal of IPA which is to derive authentic interpretations (Creswell, 2007; Moustakas, 1994).

3.11. Data Dissemination within the Community

Disseminating the findings of this study to the stakeholders of this research is an important step. Results of this study will be published as a formal thesis and possibly as a peer-reviewed manuscript. Additionally, in collaboration with the study participants, the researcher intends to present a summary of the research results to stakeholder communities. A formal presentation will be offered to skydiving facilities in Alberta and British Columbia. Additionally, a written summary of the study findings will be circulated

to members of the skydiving facilities. All potential identifying information will be modified or omitted to protect the privacy and confidentiality of all participants.

Chapter 4.

Findings of the Study

4.1. Brief Individual Participant Profiles

In this study, the goal is to understand what importance and meaning participating in skydiving may have for each of the participants. To truly and deeply understand how a particular activity serves a purpose to an individual, we must understand how that activity is rooted within the individual's life. To begin this exploration, the following brief participant profiles provide a personal backdrop to the worldviews, beliefs, and past experiences that contribute to the value these participants assign to skydiving. It is these beginnings that will anchor the comparison of commonalities and differences in the study's themes represented across the participants. The data collected during this study maintains the privacy and confidentiality of the participants. Some information was withheld or described vaguely. This restricted presentation of the information has not altered the findings of this study. Pseudonyms to identify all participants were randomly generated by the researcher using an online random name generator (http://www.behindthename.com/random/). The demographic characteristics of the participants are depicted in Table 4.1 for the ADHD group participants, and Table 4.2 for the non-ADHD group participants.

Table 4.1. Demographic Characteristics of the ADHD Group Participants

Demographic	Rusty	Peyton	Jack	Damion	Noelia	Sherry
Age	26	25	27	28	30	26
Gender	Male	Male	Male	Male	Female	Female
Residence	BC	AB	BC	AB	BC	SK
Marital Status	Single	Dating	Single	Dating	Married	Single
Education	Trade	Grade 11	Bachelor	Bachelor	Diploma	Bachelor
Employment	Fulltime	Fulltime	Fulltime	Fulltime	Fulltime	Part-time
Annual Income	$100,000	$70,000	$100,000	$120,000	$100,000	<$20,000
ASRS-V1 Score	4	5	5	5	4	4
SSS-V Total	35	22	24	29	33	33
Boredom	6	5	4	4	4	7
Disinhibition	9	5	4	8	9	9
Experience	10	6	8	7	10	9
Thrill/Adventure	10	6	10	10	10	8
Total Skydives	408	2800	1500	560	1348	284
Skydive License	B	C	C	C	D	B
Skydive Ratings	Coach	Instructor Coach Rigger	N/A	N/A	Instructor Coach	N/A

Table 4.2. Demographic Characteristics of the Non-ADHD Group Participants

Demographic	Jason	Oliver	Kodey	Brice	Kenzie
Age	22	29	29	30	28
Gender	Male	Male	Male	Male	Female
Residence	BC	AB	BC	BC	BC
Marital Status	Single	Engaged	Married	Dating	Single
Education	Bachelor	Diploma	Certificate	Bachelor	Grade 10
Employment	Student	Fulltime	Fulltime	Fulltime	Fulltime
Annual Income	<$20,000	$98,000	$60,000	$91,000	$50,000
ASRS-V1 Score	2	3	3	1	3
SSS-V Total	21	20	30	30	33
Boredom	4	2	4	4	5
Disinhibition	3	5	8	8	8
Experience	4	3	8	8	9
Thrill/Adventure	10	10	10	10	10
Total Skydives	508	250	1040	230	1450
Skydive License	B	B	C	B	C
Skydive Ratings	N/A	Coach	Rigger	N/A	Coach Instructor

4.1.1. ADHD Group Participant Summaries

Rusty

Background. Rusty is a 26-year-old male born and raised in Ontario. He and his sister, who is 3 years older, lived with their parents until Rusty was 25 years old, at which time Rusty relocated to British Columbia for work. Rusty described his family as "particularly close," often engaging in various family activities on weekends and during holidays and always supporting and comforting each other. Rusty's father is a construction tradesman and his mother is a financial analyst. Rusty described his sister as a "hippie" and a "wild child" who worked as an outdoor guide. Rusty and his sister are both big fans of extreme sports and they both regularly participated in sky diving, scuba diving, kayaking, white water rafting, and travelling.

As a child, Rusty was "always in trouble." His mother told him his first word was "no" and he never stopped using it. Rusty had difficulties listening to his parents. He

was always running around doing things, “running around town, being a little jerk.” He recalled much difficulty being able to calm down if he became upset. Despite these challenges, Rusty held fond memories of his childhood. He often reminisces about camping trips and events that he participated in with his family. He always felt that his parents were proud of him and he considered his sister to be his best friend.

Rusty had always really enjoyed sports. He excelled in martial arts and he was actively involved in multiple sport teams, especially football and soccer. He enjoyed active things “that keep you moving, keep you outside.” As an adult, his interest in sports continued. He also developed a preference for highly social activities, particularly if they included alcohol. Rusty felt that he could “really enjoy anything if friends and alcohol are involved.”

Rusty had many difficulties in school. While he enjoyed mathematics and physical education, he had great difficulties in literature and socials. He often had difficulties calming down or keeping focused in class. He regularly handed in assignments late or incomplete and he had difficulties focusing when taking exams. He was often in trouble for not paying attention. He also had some peer relational issues, noting that he was often bullied. Rusty failed some classes and was held back 1 year due to not having completed enough credits. He had been suspended multiple times for skipping classes and once for smoking marijuana in school. He was expelled once for fighting. Despite these challenges, Rusty successfully completed Grade 12. He then continued his education by completing an apprenticeship as a millwright.

As a teenager, Rusty held a number of retail and general labour jobs. He was fired from one job after having an altercation with a customer and he quit a number of jobs because they were “boring.” After completing his apprenticeship, Rusty obtain full-time employment and he had been in his employment for the previous 2 years. He really enjoys his work as a millwright because he likes working with his hands and he enjoys that “every job is different.”

During his childhood, Rusty had difficulty initiating and maintaining friendships. He did keep a couple close friends through his school years. He had always had difficulty maintaining long-term romantic relationships, which he attributed to the busy schedule of his education, employment, and skydiving. He was having difficulties finding

“the right woman” because he preferred a partner “who enjoys skydiving or appreciates his involvement in the sport.”

Rusty’s goal in life is to enjoy himself and “not get stuck in ruts by following society’s expectations.” He claims his life is guided by three primary values: family is a priority because you “always stick up for your family and yourself,” treat others as you want to be treated, and enjoy life because there is “no sense being here if you’re not having fun.”

Psychological Functioning. Rusty was formally diagnosed with ADHD at the age of 6. He also experienced periods of intense anxiety and depression through his grade-school years. Rusty was prescribed a trial of ADHD medication for approximately 1 year starting at the age of 7. These medications were discontinued because Rusty felt they turned him into a “robot.” Rusty had received no other formal diagnoses and he could not recall any other significant symptoms of mental illness. Rusty describes himself as a regular drinking and marijuana user. He also admits to experimenting with other substances. He typically consumes one to two alcoholic beverages daily throughout the week and 5 to 10 alcoholic beverages daily on the weekend. He uses marijuana approximately three times a day on average. He denies any adverse impacts as a result of his alcohol and marijuana usage. Rusty notes that his father also had a history of ADHD but he was not aware of any other mental health issues being present in his family. He is also unaware of any family members experiencing difficulties with alcohol or substance use.

Rusty completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 4 indicating that his report of ADHD symptoms was highly consistent with ADHD in adults. He reports very often experiencing difficulties with fidgeting or squirming when he tries to sit still. He often has difficulties wrapping up details of projects once the challenging parts have been completed and feeling overly active or compelled to do things. He also sometimes has difficulties keeping himself and his environment organized.

Rusty also completed the SSS-V and received a SSS-V total score of 35, indicating a high overall expression of sensation-seeking traits. His subscale scores suggested a moderate expression of Boredom Susceptibility (score = 6), high expression of Disinhibition (score = 9), high expression of Experience Seeking (score = 10) and high

expression of Thrill and Adventure Seeking (score = 10). This SSS-V profile suggests that Rusty expresses a strong desire for social or sexual disinhibition, experiences through the mind and senses including travel or a nonconforming lifestyle, and engagement in sports or other activities involving risk or danger. He may also express an aversion to repetitive, routine, or dull activities or people.

History in the Sport of Skydiving. As a teenager, Rusty was always looking for a good time and getting into trouble. He always wanted to be in "party mode" and he often abused alcohol and marijuana. During one party, when he was approximately 19 years of age, the police were involved in shutting down the festivities. Rusty recalled that "escaping" from the police that night triggered an "adrenaline rush that was better than any drug" he had used before. As a result of that experience, he began searching for activities that would give him the "natural high" like he experienced that night. He always considered himself a "daredevil, adrenaline junkie type of person" and skydiving seemed like a "logical" choice.

Rusty's first skydive was a Tandem Jump. He received approximately 1 hour of training with two of his friends which provided a basic introduction to the jump and the procedures for communicating with the tandem instructor. The jump elevation was 12,500 feet. The tandem master was responsible for controlling the entire jump. Rusty described his first jump as so amazing that he knew right away that skydiving was something he was "going to do for a long time." He also realized in that moment that "you don't have to be messed up to have fun."

A week after Rusty's first jump, he broke his arm in a work-related accident. After 7 months of recovery he returned to the drop-zone and he continued skydiving training. He made approximately 50 jumps per year and he had accumulated a total of 408 jumps. Rusty made all of his jumps at a local drop-zone in British Columbia where he mixed "jumping with socializing." His primary interest in the sport was Freefly but he was continuing to develop his skills so that he could become an instructor.

Peyton

Background. Peyton is a 25-year-old male. He was born and raised in Alberta, residing in many small towns and cities. He and his brother, 5 years older, were raised by both of their parents. Peyton's mother is a teacher and his father is a construction manager. Peyton has a particularly close relationship with his mother while his

relationship with his father is strained. He described his mother as a “kind and caring soul” who supports him unconditionally. He described his father as an “angry man” who was physically abusive at times. Peyton also feels “detached” from his brother which he believes is a result of their age difference.

As a child, Peyton was considered “hard working and industrious” but his parents believed his industriousness often got him into trouble. Peyton would become bored easily and would “resort to making life more interesting.” He was often in trouble for petty stealing and eventually was arrested and charged for theft in his early teenage years. Peyton also had difficulties staying focused and listening to his parents. He was easily distracted unless he was working on something that he found “stimulating.”

Peyton always “needed” to have hobbies and interests that were “exciting and stimulating.” He “hated being a spectator.” He preferred creative activities over physical, team-oriented activities and he preferred activities that involved other people. He enjoyed many different arts and crafts. His favorite activity as a child was to mountain bike on mountain trails with his friends. He also liked learning to do tricks on a skateboard with his friends. As he got older, he became more interested in “risky” sports like body surfing, mountain snowmobiling, and heli-skiing.

Peyton considers school one of his “worst memories.” He had great difficulties conforming to all of the rules at school such as “having to sit still, pay attention, and listen.” He had difficulties keeping focused on school work and he rarely finished his homework on time. He was expelled from one school for his chronic tardiness with handing in homework. He would be punished often for acting out in class which resulted from him becoming bored. He often skipped school. Peyton dropped out of school after completing Grade 11.

Peyton had worked “too many jobs to count.” He worked primarily in retail jobs but he changed jobs often as a result of being fired or quitting. He was fired from some jobs for committing acts of theft and from many other jobs for not meeting performance requirements. He quit many jobs because he became “bored.” Peyton had trouble staying focused on tasks in his employment because he could “always find something more interesting” to do. In the previous 5 years, Peyton was developing a career in skydiving as a coach, instructor, and videographer. He had also started a venomous snake breeding company.

Throughout his childhood and teenage years, Peyton was “socially awkward.” He had difficulties initiating and maintaining friendships. Despite these challenges, he always maintained one or two close friendships. He considered himself a friend that could be “counted on” but he noted that he would become “vengeful and vindictive” to any friend that wronged him. He dated casually in high school and entered the first of two serious romantic relationships when he was 19 years of age. This first relationship lasted 2 years but fell apart due to substance abuse issues experienced by Peyton’s partner. Peyton’s second serious romantic relationship is ongoing and has lasted 2.5 years. Peyton describes his current partner as “engaging and tolerant.”

Peyton’s goals in life are to lead an “adventurous, exciting, and happy life,” start a family and travel the world. He hopes to inspire people to be themselves and to live an “engaged” life. His motto is to “not get worked up about the small stuff in life.”

Psychological Functioning. Peyton was diagnosed with social anxiety and ADHD at the age of 10 although he believes they were undiagnosed for “many years.” He was prescribed various medications over a 5-year period but he discontinued using medications because they made him feel ill and he did not think they had any effect. Peyton went through a depressive period between the ages of 12 and 17. During this time, he struggled with his sexual identity. He consumed alcohol “heavily” and he often experienced significant suicidal ideation. At the age of 18, Peyton came out as gay. While this disclosure created many relational issues it appeared to have lifted his depression. Peyton was unaware of any mental health or substance use issues experienced by his family members.

Peyton completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 5 indicating that his report of ADHD symptoms was highly consistent with ADHD in adults. He reports very often having difficulties wrapping up details of projects once the challenging parts are complete, fidgeting or squirming when he tries to sit still, and feeling overly active and compelled to do things. He often avoids or delays getting started any tasks that require a lot of thought. He also sometimes has difficulties keeping himself and his environment organized.

Peyton also completed the SSS-V and received a SSS-V total score of 22, indicating a moderate overall expression of sensation-seeking traits. His subscale scores suggested a moderate expression of Boredom Susceptibility (score = 5),

Disinhibition (score = 5), Experience Seeking (score = 6) and Thrill and Adventure Seeking (score = 6). This SSS-V profile suggests that Peyton expresses some aversion to repetitive, routine, or dull activities or people. He also expresses some desire for social or sexual disinhibition, experiences though the mind and senses including travel or a nonconforming lifestyle, and engagement in sports or other activities involving risk or danger.

History in the Sport of Skydiving. Peyton learned about skydiving on television when he was a child. He recalled always wanting to try skydiving. For his sixteenth and seventeenth birthday parties, he attempted to organize skydiving trips but his friends "bailed out" on him on both occasions. At the age of 20, Peyton and a friend decided to complete a Solo First Jump course. The course involved 5 hours of instruction and a single jump. Peyton felt he had "no words to describe" the experience of his first jump but he "fell in love" with skydiving that day.

Peyton had completed 500 jumps per year on average and had accumulated a total of 2,800 jumps. Peyton did not feel he had a specific skydiving discipline of interest. Instead he liked every jump as long as it was with friends he enjoyed being with. Peyton had also completed many jumps as a coach, instructor, and videographer. He enjoyed the challenge of "focusing on a job while experiencing the rush of the jump." Peyton also certified as a rigger to help improve his employment opportunities.

Jack

Background. Jack is a 27-year-old, single male. He was born in Nova Scotia but he lived in many places across Canada as a child. His family eventually settled in the Greater Vancouver Regional District. Jack's father is a priest and his mother stays at home. He has one brother, 3 years younger. Jack describes having a very close relationship with his parents and brother. He describes them as his "primary supports" and even as an adult he spends a lot of his free time with his family.

As a child, Jack was "somewhat introverted and somewhat extraverted." He described himself as being "private and guarded but sociable and open" depending on the circumstances and people involved. Jack considers his childhood to be "privileged," feeling that he never went without anything. He was adventurous and liked to explore new places and learn new things. He was supported fully by his family in all of his

endeavors. He was very conscientious and he rarely got into trouble unless he was accidentally hurtful towards others.

Jack really enjoyed team sports as a child, especially hockey. As a teenager he continued to be involved in team sports as a player, referee, and coach. Jack also enjoyed travelling with his family. They made numerous trips both within Canada and internationally. As an adult, Jack began taking more interest in activities that were "intellectual." He loves golf, skydiving, skiing, hockey, yoga, reading, and writing. He notes that as an adult he tends to prefer individual activities over team activities.

As a result of his father's work in the ministry, Jack changed grade schools often. He appreciated these constant changes in school as the changes forced him to develop good people skills in being able to meet new people and establish friendships. Academically, Jack struggled with being able to stay focused and not becoming bored. He could focus well on some school projects if he was motivated to understand how something worked. He often got into trouble for being distracted, distracting others, and not completing his school work. He was never expelled from school but he received a suspension in high school once for alcohol use. Jack repeated a few classes but managed to complete Grade 12, "with great effort." Jack continued his education by completing an undergraduate degree in science. He found it easier to complete university studies because he was able to "control how and when" he completed his work.

As a teenager and young adult, Jack held numerous part-time jobs. He found it difficult to maintain employment because he either became bored or he was too easily distracted which impacted his performance. Jack was fired from a few positions for not completing his responsibilities to the level expected. He also quit many jobs because of boredom. After completing university, Jack found a job as a manager of a retail chain store. He struggles with the boredom of the job but he is "motivated to pay his bills." He also continues to have distractibility problems but his coworkers and supervisor tolerate him because he is the "team comic."

Jack describes having "hit and miss friendships" both as a child and as an adult. He maintained one or two close friendships and many "volatile" friendships. He found that many of his peers could not tolerate his "always on the go personality." Jack also had difficulties maintaining romantic relationships. He had many short-term romantic

relationships but they usually ended because his partners would tire of his “high energy.” He did have one relationship that lasted a bit longer than a year. Jack felt that relationship lasted longer because they had shared interests in skydiving.

Jack’s goal in life is to follow a “path that is true” to himself. He also hopes to make a difference in other peoples’ lives. He values truth, honesty, and “being real and authentic.” He believes that people should take responsibility for their actions and he feels that people should learn to relax about most issues.

Psychological Functioning. Jack was diagnosed with ADHD and anxiety around the age of 9. Between the ages of 9 and 18, Jack followed a course of ADHD and anxiety medications which he claimed had little positive effect in managing his symptoms. He discontinued his medications at the age of 18 because he wanted to determine if there would be a worsening of his symptoms. He continued without medications but noticed no significant change in his symptoms. He continues to experience difficulties with concentrating, keeping organized, and completing projects. Jack denies having any other mental health or substance use issues. He is unaware of anyone in his family having issues with mental health or substances but he describes a paternal uncle as having some ADHD-like symptoms. Jack consumes alcohol occasionally but never in excess. He experimented with marijuana as a teenager but he discontinued because he felt it was “uncool.”

Jack completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 5 indicating that his report of ADHD symptoms was highly consistent with ADHD in adults. He reports often having difficulties wrapping up details of projects once the challenging parts are complete, avoiding or delaying getting started tasks that require a lot of thought, fidgeting or squirming when he tries to sit still, and feeling overly active and compelled to do things. He sometimes has difficulties keeping himself and his environment organized.

Jack also completed the SSS-V and received a SSS-V total score of 24, indicating a moderate overall expression of sensation-seeking traits. His subscale scores suggested a moderate expression of Boredom Susceptibility (score = 4), moderate expression of Disinhibition (score = 4), high expression of Experience Seeking (score = 8), and high expression of Thrill and Adventure Seeking (score = 10). This profile suggests that Jack expresses a strong desire for experiences through the mind

and senses including travel or a nonconforming lifestyle and to engage in sports or other activities involving risk or danger. He may also express an aversion to repetitive, routine, or dull activities or people and he may desire social or sexual disinhibition.

History in the Sport of Skydiving. Skydiving had always intrigued Jack but he can not recall when he first became aware of the sport. At the age of 19, "it seemed like the thing to do" and he signed up for a Solo First Jump course. After 4 hours of instruction he completed a single jump. He "absolutely loved" the experience of leaving the plane and flying under canopy. He was even more intrigued by the sport because 10 people signed up to complete the course with him but the other 9 participants discontinued their training and never made their first jump.

Jack completed approximately 175 jumps per year on average. He has accumulated a total of approximately 1,500 jumps. He is interested in all disciplines in the sport and he can not identify a specific discipline of preference. He has many jumps in Formation Skydiving, Freefly, Big Ways, and Canopy Piloting. He believes that there is "too much to learn" in the sport to focus only one discipline.

Damion

Background. Damion is a 28-year-old, single male. He was born and raised in a large city in Alberta, where he has lived all his life. He is an only child. His parents are both engineers in the oil and gas industry. Damion describes his parents as being highly supportive of him. They would "encourage" him to pursue his goals but they would never "force" him to do anything he dislikes. He feels very close to his parents and considered them to be his primary emotional support in life.

As a child, Damion was "outgoing and witty." He was generally well-liked by everyone that knew him but he was also known as the "hyperactive kid" who often got into trouble. He was considered to be a "highly distracted" child who was always having difficulties completing projects. Many of his teachers and friends thought he was bit immature as a child because he would often "goof off."

Damion enjoyed a range of activities as a child. He played badminton, soccer, and running. He often enjoyed things that were considered "more exciting or unusual" that what the "common spectator" would consider participating in. As he got older, he became very interested in activities that involved "risk" or put him "on edge." He enjoys

racing cars and motorcycles, scuba diving, and skydiving. He is also very passionate about cooking. He prefers activities that are intellectual involving “mind games” or “strategy.” He also prefers to be more “active” or “engaged” rather than “sitting around.”

Damion was a poor student. He did not enjoy school as it was “very concrete” with no “flexibility.” He would have preferred learning environments that were less structured and that would have allowed him to pursue what he was interested in learning. He graduated high school but he considered it a “struggle.” He was often in trouble at school, usually for not completing his work or for “goofing off” in class. He repeated a few courses and one grade. After Grade 12, Damion took a year off to travel and then returned to university to complete a Bachelor of Information Technology degree. He found university much easier than high school because of the “constant flurry of activities” on campus.

As a teenager, Damion’s first jobs were often working in restaurants. He started as a dishwasher but rapidly took on other responsibilities as a food preparer and eventually a front line chef. During this time, Damion resigned from many of his jobs because he would become “bored” or the “next opportunity” would come along. After completing university, Damion started his own information technology consulting company which he had operated for the previous 4 years. He enjoys the technology field because of the “constantly changing” work environments and projects. He prefers working on large projects with a team that he cam “trust” and that includes “smart enough” individuals.

Damion always had a large group of friends. He believes that his outgoing personality is what drew people to him and he always felt energized around his friends. He admits that he is very “picky” about who his friends are and he is quick to discontinue a friendship if a friend demonstrates “poor values.” In high school, Damion dated casually. He had three serious romantic relationships during his adult years, one in which he was currently. He describes his previous two relationships as being very positive but they ended because his partners struggled with his need to be “constantly busy.” His current relationship has been ongoing for 1 year. He describes his current partner as “ideal” because she leads a healthy life style, is willing to “take risks in life just for the experience,” and she can “sit back and enjoy life.”

Overall, Damion feels he holds a very positive view on life. He believes it is important to be the type of person who is "supportive, helpful, and kind." He also believes that it is important to "commit fully" to anything one choses to do in life. He has hope that people in society will learn to see beyond the day-to-day grind of life. He hopes they will learn to "engage more fully with life and experience the world around them."

Psychological Functioning. Damion was diagnosed with ADHD at the age of 7. He was prescribed ADHD medications between the ages of 9 and 11. His medications were discontinued as his parents were uncomfortable with him taking medications. Damion denies any other history of mental health or substance use issues with himself or his family. He consumes alcohol occasionally in social situations but the amount he consumes is limited because he does not enjoy the taste of alcohol. He has experimented with marijuana when he was younger but he has not used marijuana for the past 10 years.

Damion completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 5 indicating that his report of ADHD symptoms was highly consistent with ADHD in adults. He reports very often having difficulties remembering appointments and obligations, fidgeting or squirming when he tries to sit still, and feeling overly active and compelled to do things. He often avoids or delays getting started any task that requires a lot of thought. He sometimes has difficulties keeping himself and his environment organized.

Damion also completed the SSS-V and received a SSS-V total score of 29, indicating a moderate overall expression of sensation-seeking traits. His subscale scores suggested a moderate expression of Boredom Susceptibility (score = 4), high expression of Disinhibition (score = 8), moderate expression of Experience Seeking (score = 7), and high expression of Thrill and Adventure Seeking (score = 10). This profile suggests that Damion expresses a strong desire to engage in sports or other activities involving risk or danger and social or sexual disinhibition. He may also express a desire for experiences through the mind and senses including travel or a nonconforming lifestyle.

History in the Sport of Skydiving. Damion was first introduced to skydiving at the age of 19 when he attended a friend's birthday party. During the party, a few of the

party goers decided to go to a drop-zone to participate in a Tandem course. Damion went to the drop-zone but did not participate in the jump. He was fascinated by watching the activities at the drop-zone and he started to develop an interest. The following Summer, he planned a skydiving party for his twentieth birthday.

Damion completed a Tandem course with three of his friends. They were provided with 1 hour of training and then completed their tandem jump. Damion enjoyed the jump but he was more enthusiastic that he was participating in an activity that "many people get queasy about." Damion and one of his friends returned to the drop-zone the following weekend and completed the Solo First Jump course. After 4 hours of training, Damion completed his first solo jump. It was at this point that Damion realized just how "thrilling" the sport was. He enjoyed the freedom of jumping on his own and of being "in control" of his jump. Since completing his solo jump, Damion has spent "every possible weekend" at his local drop-zone jumping. Damion has also participated in eight skydive camps in the United States.

Damion completes approximately 70 jumps per year, half completed at a local drop-zone and half completed during skydiving camps. He has accumulated a total of 560 jumps. His primary interests are Formation Skydiving and Big Ways but he has occasionally participated in Freefly jumps so that he can jump with his friends.

Noelia

Background. Noelia is a 30-year-old, married female, with an 8-year-old son. She was born in a small Northern town in British Columbia but spent much of her childhood and adult life in the Greater Vancouver Regional District. Noelia's father is a manager in the lumber industry and her mother is an accountant for a hotel chain. Noelia has one brother who is 2 years younger.

Noelia describes a difficult childhood. Her mother was an "overbearing and controlling" woman and her father was often absent from the home. As a child, Noelia always felt that she could "never do anything right" in her mother's eyes and she believed that her mother "hated" her. Her mother often punished her by hitting her with objects that would leave "deep, dark bruises." Her father rarely came home as he was often travelling for work. When he did come home, he would treat Noelia kindly but this treatment would result in her mother becoming even more abusive towards her.

Noelia can not recall many interests from her childhood years. She expresses a lot of anger towards her mother for not allowing her to do many of the things she wanted. She often wanted to be outside or socializing with school friends but her mother did not permit her to do so. Noelia physically developed early which allowed her to gain access to local drinking establishments while underage with some ease. She started drinking alcohol at the age of 13. During her teenage years, she would often sneak into bars to hang out with older friends. As she got older, she became very interested in outdoors activities like camping, hiking, snowmobiling, and motocross. She never enjoyed activities that required her to sit around or concentrate for long periods of time.

Attending school was somewhat challenging for Noelia. She disliked school work, "especially if it involved lengthy periods of intense concentration" (e.g., reading, exams). She did not focus on grades but she found that she could pass her courses relatively easily. If she became determined to excel at something in school, she could "force" herself to focus and she usually did well in these situations. She was motivated to attend school but primarily for the social aspects. Noelia completed Grade 12 and then continued into university because she was "expected" to go to university. She completed 1 year of a general arts program at university before dropping out. She was "just not interested." She eventually returned to school a few years later and completed her apprenticeship as an automotive mechanic. She returned to school again 1 year later and completed a diploma in digital marketing.

Noelia held many short-term serving jobs during her teenage years. She would often work a job "for a few days or a week" and then quit to start a job elsewhere. During her automotive mechanic training she was able to hold her apprenticeship jobs and she became employed as a mechanic for 1 year following her completion of the training. She got bored with being a mechanic and switched careers to be a digital marketer. While she has switched employers a few times, she has continued to be employed in the digital marketing field for the previous 5 years. She enjoys the marketing work because of the "constant change of people and project, and the creative aspect to it."

Noelia had difficulties maintaining friendships as a child but she blames this on her mother's "strict rules." In her teenage years, she often developed "short" and "difficult" relationships with peers who were "party types." Also during her teenage

years, she had numerous short-term romantic relationships. She found it difficult to find someone “who got her.” At the age of 21, she married her husband and they had a son together 1 year later. Noelia describes a difficult relationship with her husband who she claimed was an “alcoholic.” She reports having a “fantastic” relationship with her son.

Noelia is driven in life to continue to have a good relationship with her son, to develop more independence, to travel, and to have more close relationships with friends. She is guided by the value that “all people must evolve to be kind and caring individuals, rather than being lazy, vampires.”

Psychological Functioning. Noelia was diagnosed with ADHD at the age of 12. She always seemed to have problems with activities that were “boring, repetitive, or required extensive concentration.” She was prescribed a trial of Ritalin which she continued for approximately 5 years. She discontinued her medication because she “never wanted to be dependent on drugs.” She was never diagnosed or treated for any other mental health issues but she wondered if some of her aggressiveness as a teenager and adult was a way of “dealing with difficult emotions.” She was unaware of any mental health issues in her family but she believed her mother had “issues” as she was “always either very depressed or very angry.” Noelia had struggled personally with her own alcohol and marijuana use in her young adult years but she never felt it impacted her functioning in life. She is unaware of any alcohol or substance issues in her family but she feels that mother consumes too much alcohol.

Noelia’s score on the ASRS-v1.1 was 4 indicating that her report of ADHD symptoms was highly consistent with ADHD in adults. She reports very often having difficulties keeping herself and her environment organized, remembering appointments or obligations, avoiding and delaying getting started any task that requires a lot of thought, and fidgeting or squirming when she tries to sit still.

Noelia also completed the SSS-V and received a SSS-V total score of 33, indicating a high overall expression of sensation-seeking traits. Her subscale scores suggested a moderate expression of Boredom Susceptibility (score = 4), high expression of Disinhibition (score = 9), high expression of Experience Seeking (score = 10), and high expression of Thrill and Adventure Seeking (score = 10). This profile suggests that Noelia expresses a strong desire for social or sexual disinhibition, experiences though the mind and senses including travel or a nonconforming lifestyle, and engagement in

sports or other activities involving risk or danger. She may also express an aversion to repetitive, routine, or dull activities or people.

History in the Sport of Skydiving. At the age of 22, Noelia joined a group of students from her automotive mechanic training class who had decided to take a Solo First Jump course at a local drop-zone. She attended a 6-hour training program with her group and then completed her jump. She described her first jump as "ungraceful" but "exhilarating." Although she thought this was a "do it once kind of thing," she ended up making friends with some of the skydiving instructors during the First Jump course and they encouraged her to return the following weekend. Noelia became "addicted" to the sport because she "loved the people" and she enjoyed the "intensity" of the jumps.

Noelia has continued to skydive regularly for the last 8 years. She jumps most weekends, weather permitting, at her local drop-zone and she has travelled to numerous drop-zones around the world. She makes approximately 175 jumps per year and she has accumulated a total of 1,348 jumps. She has participated in various levels of competitive skydiving including 4-way, 8-way and Big Way teams. She is certified as a coach and instructor and she really enjoys introducing new people to the sport.

Sherry

Background. Sherry is a 26-year-old, single female. She was born and raised in a small town in Saskatchewan. She has one step-sister, 5 years younger, and one adopted sister, 3 years younger. Sherry and her sisters were raised by Sherry's mother. Sherry describes her mother as "absent" because she was always catering to a stream of men that "came and went." Sherry's father was an abusive man who left the family when Sherry was a child. At the age of 14, Sherry was removed from her home by child protective services and she spent most of her teenage years in foster and group homes.

As a child, Sherry often stood out because she had "trouble with mainstream society" and because she did not "understand a lot of the rules." She was often in trouble with her mother or care providers. She hung out with older youth and was involved in alcohol and drugs in her early teenage years. Sherry was arrested on multiple occasions in her teenage and young adulthood years for alcohol related problems and "other issues."

Sherry grew up enjoying outdoor, physical activities. She often participated on soccer teams and she spent years practicing martial arts. Her teenage years were mostly preoccupied with social activities and heavy alcohol use. She developed a love for riding motorcycles. She loved the "freedom" and the "speed." Once she began skydiving, the sport "took over" her life. Sherry was not interested in "boring" or "safe" activities such as curling or golf. She disliked things that did not "mentally and physically stimulate" her.

In school, Sherry was disciplined a lot. She was suspended from school on multiple occasions and expelled from one school in Grade 9. She often got into trouble for fighting, drinking, and having conflicts with teachers. As a result of suspensions and expulsion, she was held back a total of 1.5 years. She received her Grade 12 diploma at the age of 19 when she completed the General Education Development test. After a few years out of high school, Sherry began a post-secondary degree program in fine arts. She had one more semester left to complete her degree.

Sherry has had a sporadic history of employment. She held "too many to count" casual, short-term jobs. In her late teenage years and early adult years, she engaged in some illegal activities to support herself financially. She was not currently employed and she considered herself a "low income individual" who worked casual jobs. She is attempting to secure more permanent employment at the drop-zone. She hopes that one day she can obtain a job that would offer "variety and freedom."

Sherry has always had a lot of friends. She describes her friendships as "difficult" at first as she is an "acquired taste" but once she becomes close to someone they remain good friends "forever." When Sherry started dating, she often had relationships with men that were 5 or more years older than she was. She dated many different men when she was younger and, at the time, she preferred open-relationships. Sherry has experienced a couple of longer-term relationships. One ended because she and her partner were "headed in different directions in life," where her partner wanted to settle down and get married and she wanted to "live free." Her second long-term relationship was "intense" with constant arguments, eventually leading to the end of the relationship. Sherry's last relationship was a "friends with benefits" relationship that became "intense" and resulted in an assault charge against Sherry. Sherry has been

single for the prior 3 years and she notes that she prefers “lots of short-term relationships that offer lots of novelty and fun.”

Sherry’s goals in life are to obtain an education, promote artistic advancement, and “avoid submitting to the conformity of society.” She believes that it is important to question authority and to “live life to the fullest.” She also believes that everyone in society should promote the care and well-being of all animals.

Psychological Functioning. Sherry had been diagnosed with ADHD at the age of 7. She was never placed on ADHD medications but she attended a psychologist and psychiatrist as a child to help her with attention and behavioural problems. She denies any other mental health issues until more recently. Sherry was in an accident 3 years prior that left her with a serious injury to her leg and ongoing chronic pain issues. Sherry describes the chronic pain as causing her to “lose her way in life.” She has experienced significant bouts of depression and she has chronic suicidal ideation. Sherry had a notable history of alcohol and substance abuse but she reports having overcome that period of her life. She considers herself to be a “casual user” of alcohol and marijuana. Sherry is unaware of any potential mental health or substance issues her family members experienced with the exception of her mother. She knows that her mother had been diagnosed with borderline personality disorder.

Sherry’s score on the ASRS-v1.1 was 4 indicating that her report of ADHD symptoms was highly consistent with ADHD in adults. Sherry reports very often having difficulties wrapping up details of projects once the challenging parts have been completed and fidgeting or squirming when she tries to sit still. She also often has difficulties remembering appointments or obligations and feeling overly active and compelled to do things.

Sherry also completed the SSS-V and received a SSS-V total score of 33, indicating a high overall expression of sensation-seeking traits. Her subscale scores suggested a moderate expression of Boredom Susceptibility (score = 7), high expression of Disinhibition (score = 9), high expression of Experience Seeking (score = 9), and high expression of Thrill and Adventure Seeking (score = 8). This profile suggests that Sherry expresses a strong desire for social or sexual disinhibition, experiences though the mind and senses including travel or a nonconforming lifestyle, and engagement in

sports or other activities involving risk or danger. She may also express an aversion to repetitive, routine, or dull activities or people.

History in the Sport of Skydiving. Sherry had always wanted to try skydiving for as long as she could remember. At the age of 23, Sherry signed up for a Solo First Jump course. This decision was triggered by the death of friend, which motivated Sherry to complete things on her "bucket list." After a 4-hour training course, Sherry completed her first jump which she described as "the most soothing experience ever." Immediately following her first jump, she signed up to further training and jumping for the following weekend.

Sherry has continued to skydive regularly at a local drop-zone, only limited by her financial means. She has also attended two out-of-country skydiving camps. She has completed approximately 75 jumps per year on average and has acquired a total of 284 jumps. One hundred twenty-five (125) of those jumps were completed at the skydiving camps. She has been working on developing her Freefly and Artistic skills. Sherry describes her skydiving as being "therapeutic." Skydiving allows her to ignore the chronic pain because "it is hard to feel the pain when you're falling out of the sky at 120+ mph." She believes that she would have "offed" herself if not for skydiving. She also notes that skydiving is "more addictive than cocaine and more expensive."

4.1.2. Non-ADHD Group Participant Summaries

Jason

Background. Jason is a 22-year-old male. He was born an only child in Germany but he and his family relocated to Canada when he was 3 years old. Jason's parents struggled financially when they first moved to Canada. They were initially unemployed and lacked post-secondary education. Jason describes his parents as "growing up in life" as he grew up. His parents worked hard, completing university degrees while supporting their family "in any way they needed to." Jason's father excelled in business and became an upper level executive manager in a technology company. His mother trained as a doctor and practices full-time in her own clinic.

As a child, Jason felt he was often treated "more like an employee than a son." He was required to maintain and follow a budget from the age of 8 onwards. He had responsibility for daily and weekly chores. He was required to work for things he wanted

by saving his own money, learning from others who had expertise, and demonstrating that he could commit to something new before his parents would support him. Jason was also required to regularly "contribute" to his family and his community. Jason feels that because of this lifestyle, he had to "grow up" and "become an adult" earlier than his peers. He also believes this lifestyle taught him that "rules existed but could be bent until you get whatever you want, if it is needed and you deserve it." He believes that the rigidity of the rules forced him to be creative in finding ways to achieve his goals.

Jason had a number of interests as a child. He played a lot of individual and team sports. He really enjoyed technical and physical activities such as rock climbing. He also enjoyed doing "new things" and "things that not everybody else could do." Jason was also fascinated by languages and, at the time of this study, he was fluent in five languages. He describes his hobbies as activities that were "visual and spectacular" and requiring "expertise knowledge," citing his interests in windsurfing and building and flying airplanes.

In school, Jason enjoyed physics, mathematics, computer sciences, literature, and languages. He maintained average grades in his early school years but then began to excel academically when he reached high school. He recalls often getting into to trouble for his behaviours (e.g., fighting with peers) but these difficulties subsided after Grade 6. After graduating from high school, Jason continued his education at university. At the time of this study, Jason had recently completed his third year of an engineering degree. Jason had also completed two internship positions as part of his degree program. Beyond the internships, Jason has only ever held one part-time employment position as a restaurant server.

Jason maintained a few close friendships throughout life but he preferred to "stay in a comfort zone for social things." He had only one serious romantic relationship. This relationship was with an older woman and it lasted approximately 4 years. Jason described the relationship as being very positive. The couple travelled together frequently and they shared a passion for food. Jason described her as more "random" than himself and he "needed that little extra bit of randomness in life." This relationship ended when Jason and his partner took different paths for continuing their post-secondary education.

Jason's goals in life are to establish financial stability and grow a family. He claims to live his life by two main life philosophies. First, he strives to understand issues, events, and people thoroughly before making decisions or judgments. Second, he believes it is important to be cautious in life because "if somebody can get away with something, they will."

Psychological Functioning. Jason has never been diagnosed with any mental health disorders and he has never experienced any significant symptoms of mental illness. He describes experiencing occasional periods of sadness that were appropriate to difficult situations or events that he faced. Jason considers himself a social drinker of alcohol but he dislikes the loss of control that comes with intoxication. He denies any regular use of substances but admits to experimenting with marijuana occasionally in social situations. He is not aware of any family members suffering from mental illness or difficulties associated with alcohol or substance use.

Jason completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 2. While he reports often having difficulties with fidgeting or squirming when he tries to sit still and feeling overly active and compelled to do things, his score was not highly consistent with ADHD in adults.

Jason also completed the SSS-V. He received a SSS-V total score of 21, suggesting a moderate overall expression of sensation-seeking traits. His subscale scores suggested a moderate expression of Boredom Susceptibility (score = 4), low expression of Disinhibition (score = 3), moderate expression of Experience Seeking (score = 4) and high expression of Thrill and Adventure Seeking (score = 10). This SSS-V profile suggests that Jason is likely to express a strong desire to engage in sports or activities that involve some level of risk (e.g., speed, danger). Occasionally, he may struggle with restlessness or aversion to boring tasks or situations. He may also have some desires to seek experiences of the mind or senses through travel or a nonconforming life-style.

History in the Sport of Skydiving. Jason was first introduced to the sport of skydiving by his father. Jason's father had trained to be a pilot in his younger years and during that training he learned about skydiving. Jason's father went on to engage in recreational skydiving for a number of years before discontinuing in the sport. When Jason was 16 years old, on a bet with friends to do something daring, Jason, his father,

and a couple of Jason's friends completed a Solo First Jump course. Jason describes his first jump training as "unnerving" as the instructor repeatedly told the group everything that could go wrong on the jump and that they could not address those issues because they were not trained to deal with them. Jason's Solo First Jump course included 3 hours of ground training during which the group was introduced to the process and procedures of the skydive, the equipment, and safety procedures. The jump took place from an elevation of 4,000 feet. The jump master was responsible for deploying Jason's pilot chute when he exited the plane. Jason's first jump was uneventful but "exhilarating" because of the "adrenaline rush." After the group completed the jump, Jason's father encouraged him to continue his skydive training by signing up for an Accelerated Free Fall course.

Jason continued skydiving on a regular basis since his initial training. At the time of this study, he had been in the sport for approximately 5 years. Jason has completed approximately 100 jumps per year on average and he has accumulated a total of 508 jumps. He prefers to concentrate his jump activities to skydiving holidays during which he travels to larger drop-zones in the United States and jumps multiple times per day. His primary interest in the sport is Big Way jumps.

Oliver

Background. Oliver is a 29-year-old male who has recently become engaged to marry his girlfriend of 2 years. He was born and raised in Northern Alberta with his brother, 2 years older, and sister, 3 years younger. Oliver's father is an engineer and his mother is a nurse. Oliver describes his family as "very close" and his childhood as "healthy." He recalls his parents always "being in love with one another and loving their family." He is very close with his parents and his maternal and paternal grandparents. He always feels supported by his family. He rarely got into trouble at home and he "never felt the desire to push boundaries or cause problems."

Oliver was considered an "intellectual thinker" as a child. He always enjoyed activities that combined technical and creative components. He was particularly fond of airplanes. He built and flew numerous model airplanes. He also enjoyed learning anything about mechanical systems such as engines and building structures. Oliver also enjoyed spending time with close friends and spending time outdoors. He often participated in camping and skiing with his friends.

School was quite enjoyable for Oliver. He performed well in most classes but he excelled in classes where he felt he was learning something useful" such as mathematics and science. He got along very well with his peers and teachers and he was voted "best personality" and received various awards for being a "good student." Oliver could not recall ever getting into trouble at school. He was never suspended or expelled and he never repeated any courses or grades. He successfully completed Grade 12 and then went on to pursue a post-secondary education. Oliver completed two technology diplomas, one in civil engineering and the other in construction engineering.

As a young teenager, Oliver often worked in the summers on a farm performing general labour work. In his last two summers before graduating from high school and in the summers while he was attending college, he worked in the oil and gas industry, which he really enjoyed. After completing his technology diplomas, he became employed full-time as an engineering project manager. He has been working for the same employer for 7 years. Oliver enjoys his work and his colleagues as he finds the environment full of "educated, ambitious, and professional" people.

Oliver has always valued a "small group of close friends, over a large group of acquaintances." Many of his adult friends are close friends from childhood. Oliver casually dated in his late teenage years but he experienced his first serious romantic relationship when he was 21 years old. He describes this relationship as "very positive" but it ended because they were "headed in different directions in life." Oliver met his finance when he was 27 years old. He describes his relationship with his fiancé as "amazing," as she is a "kind and dependable person."

Oliver has many goals in life. He wants to have a happy and healthy family. He wants to develop "strong independence." He hopes for financial stability. He also wants to work hard and lead an honest life. Oliver is concerned with "societal decline," noting that too many people seem to want to be "less accountable for their actions." He believes that people should "contribute to society," "do nice things for others," and "generally be a good person."

Psychological Functioning. Oliver denies any mental health issues or concerns. He rarely consumes alcohol and only in social circumstances. He has never

experimented with substances. He is not aware of any family members suffering from mental illness or alcohol or substance use issues.

Oliver completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 3. While he reports sometimes experiencing trouble wrapping up details of projects once challenging aspects were completed, keeping himself and his environment organized, and remembering appointments and obligations, his score was not highly consistent with ADHD in adults.

Oliver also completed the SSS-V and received a SSS-V total score of 20, indicating a moderate overall expression of sensation-seeking traits. His subscale scores suggested a low expression of Boredom Susceptibility (score = 2), moderate expression of Disinhibition (score = 5), low expression of Experience Seeking (score = 3), and high expression of Thrill and Adventure Seeking (score = 10). This profile suggests that Oliver expresses a strong desire to engage in sports or other activities involving risk or danger. He may also express some desire for social or sexual disinhibition.

History in the Sport of Skydiving. Oliver's grandfather is a pilot and aircraft mechanic and his father is also a pilot. Oliver's interest in skydiving originated from the stories his father and grandfather told of their piloting experiences. In high school, Oliver decided he wanted to try skydiving. He liked the idea that skydiving was "mentally challenging and intimidating." At the age of 18 he completed a Tandem Jump. He received 1 hour of training and then completed a very "exhilarating" jump.

Three years after his tandem jump, Oliver returned to complete a Solo First Jump course. He completed a 5-hour training course and then made two solo jumps that day. He had returned to skydiving with the "specific intent of training on a regular basis." He enjoyed the "technical aspects" of body flight and participating in skydiving "appeased his ego." Due to financial and time constraints, Oliver has only completed approximately 30 jumps per year on average. He has accumulated a total of 250 jumps. He does not have a specific area of skydiving he is focused on but he enjoys Freeflying, Formation Skydiving, and Big Ways. He is also developing some skills as a coach. Oliver acknowledges that he jumps a lot less than most "regular" skydivers but he is "content" with jumping when he can.

Kodey

Background. Kodey is a 29-year-old, married male with a 10-year-old daughter and 8-year-old son. Kodey was born in the Yukon but raised primarily in the Greater Vancouver Regional District. His parents are still married. His father is a commercial airline pilot and his mother is a college instructor. Kodey has one sister, 2 years older, who he describes as being "mature beyond her years."

Life as a child was "uneventful" for Kodey. He recalls a "simple, yet calm" home life. He rarely got into trouble as a child and, if he did, it was usually for not completing his school work. He recalls often travelling with his family. He considers his parents "boring" but "supportive."

Kodey was considered a "quiet intellectual." As a child, he always had a strong thirst for knowledge and would he would often try to "explore reality and find limits." He was fascinated by how things worked and just how far things could be "pushed." He enjoyed a variety of interests as a child. He liked participating in crafts like sewing and art with his mother. He enjoyed a number of team sports including softball and rugby. He also enjoyed more "individual" activities such as gymnastics and skateboarding. For Kodey, the most important aspect of any interest or hobby is that it included a specific goal. As an adult, Kodey enjoyed spending time with his family. He also enjoyed any activities that were exciting. He refused to participate in boring activities such as golf, running, or swimming.

Kodey was an average student in school. He recalled having a lot of difficulties completing his school assignments. He always felt that he "could do the work if he wanted to" but he disliked being evaluated by others. Kodey was suspended once for fighting in school but he was never expelled. He never had to repeat a course or grade. Kodey successfully completed Grade 12. He then went on to complete a number of post-secondary certificates in diverse areas such as business analysis, flight school, electrical, and communications. He studied these different areas because he was "unsure what he wanted to do." Eventually, Kodey became interested in technology and he taught himself software development skills.

Kodey held a number of jobs as a teenager and young adult. He always enjoyed positions were he was "constantly learning." He would often change jobs because he would become bored. He held many jobs as in the restaurant and hotel service

industries. After completing his school, Kodey went on to become a self-employed software developer. He enjoyed his work because there was a “constant learning curve” and the work “always changed.”

Kodey describes his social circle in childhood as being “small and ever changing.” He had little tolerance for immaturity or ignorance amongst his peers. He would find it difficult to keep friends because they would “often disappoint” him. He generally kept one or two close friends but whom he considered a close friend would change often. Kodey was never overly interested in maintaining a long-term romantic relationship when he was a teenager. He had one serious romantic relationship in high school that lasted 1 year. They split up because there were in different circles of friends that did not get along. He met his wife shortly after highschool. They dated for a short period and then got married and started a family.

Kodey’s main goals in life are to become successful in his career and to develop a strong, close family. His decisions in life are anchored by religion and spirituality, and guided by three values: respect others, provide guidance to others, and being a unique individual in the world.

Psychological Functioning. Kodey has no history of mental health or substance use issues. He is also unaware of any of his family members experiencing mental health or substance related issues. Kodey rarely consumes alcohol and he has never experimented with drugs.

Kodey completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 3. While he reports very often experiencing difficulties wrapping up details of projects once the challenging parts are complete, often having problems remembering appointments and obligations, and sometimes having difficulties keeping himself and his environment organized, his score was not highly consistent with ADHD in adults.

Kodey also completed the SSS-V and received a SSS-V total score of 30, indicating a moderate overall expression of sensation-seeking traits. His subscale scores suggested a moderate expression of Boredom Susceptibility (score = 4), high expression of Disinhibition (score = 8), high expression of Experience Seeking (score = 8), and high expression of Thrill and Adventure Seeking (score = 10). This profile suggests that Kodey expresses a strong desire to engage in sports or other activities involving risk or danger. He also expresses a strong desire for experiences through the

mind and senses including travel or a nonconforming lifestyle and for social or sexual disinhibition. He may also express an aversion to repetitive, routine, or dull activities or people.

History in the Sport of Skydiving. Kodey was exposed to the sport of skydiving because a drop zone was located minutes from his childhood home. He always expected that he would get into the sport. At the age of 19, he met a friend who had already completed a couple of jumps. His friend encouraged him to attend a course and to give the sport a try. The following weekend, Kodey attended a Solo First Jump course. After completing 6 hours of training, he completed two jumps.

Kodey became enthralled by the amount of information there was to learn about the sport, equipment, canopy flight, and drop-zone operations. He also likes that the sport is still in development and always improving. He is particularly interested in the technical skills and acquiring knowledge about the equipment, and the limits of the equipment. While most of his jumps are "just for fun" and include a variety of skills, he developed an expertise as a Rigger. Kodey has completed approximately 100 jumps per year on average with all of his jumps completed at a local drop-zone. He has accumulated a total of 1,040 jumps.

Brice

Background. Brice is a 30-year-old male in a committed relationship. He was born and raised in Ontario. His parents are both university educated and he considered them "role models." His father is a grain farmer and his mother is a psychologist. Brice learned to "appreciate people" from his mother and to "work hard" from his father. Brice has one sister, 3 years younger. He describes his relationship with his sister as "stereotypical." They are close but they have "silly arguments over trivial matters."

As a child, Brice's family considered him to be highly confident and intelligent. He enjoyed learning about new things and he was always fascinated by how things worked. He had supportive parents who tried to ensure that he had lots of opportunities in his life. These opportunities included hobbies, interests, travel, and learning. As a child, Brice was rarely in trouble and only if he had disrespected his parents. As a teenager he got into trouble more often because he began "experimenting heavily with drugs and alcohol."

Brice always enjoyed analytical activities. He liked learning about a variety of things and learning those things in depth. His hobbies and interests always had to include “excitement and adventurousness.” Although he was not overly athletic, he enjoyed skiing, skydiving, rock climbing, and mountain biking. For Brice, it was important that his activities were “exhilarating” and required him to be “extremely present in the moment.” The difference between a “good” activity and an “awesome” activity for Brice was that awesome activities included some “risk of life.”

Brice excelled in school. He was designated as gifted when he was in early grade school. He was placed in advanced classes and he often permitted to take on extra credit activities. Despite these advanced placements, he never felt challenged but he often felt bored. In high school, when he started to heavily-use substances, Brice ran into difficulties at school. He started having attendance problems and his grades started to slip. He barely passed high school and graduated with a general diploma. Brice entered post-secondary school right after high school. He began at a college to bring his grades up and then transferred to a university. He found post-secondary education to be “easy” but he attributed this to having overcome his issues with substances. Brice completed an undergraduate degree in engineering.

Brice engaged in a lot of jobs throughout his teenage and young adult years. Many of these jobs were general labour positions or seasonal work. He never had difficulties in his employment. He was never fired and he usually only quit his jobs if he was returning to school or a better opportunity arose. After his post-secondary education, he became employed full-time as an engineer.

Socially, Brice considers himself introverted. He keeps very few friends but his friendships are “deep.” He describes needing to know people quite well before being really comfortable with them. He had been in two serious romantic relationships. The first lasted 2 years but ended due to a difference in commitment levels. He desired more commitment than his partner. His second relationship, which is currently in, has lasted 4 years and he and his partner have plans for marriage and children.

Brice’s goals in life include developing a strong career, building a close family, and seeking more exhilaration and adventure. He is guided by many values. He feels it is important to respect the rights of others, work hard, be curious, be independent, personally grow, avoid ignorance, and seize any opportunity in life.

Psychological Functioning. Brice has no history of mental health issues. Other than the period of time during high school, Brice denies ever having any other substance use issues. He is also unaware of any of his family members experiencing mental health or substance related issues. Brice continues to consume alcohol "regularly but in control" on the weekends and at social gatherings.

Brice completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 1. While he reports often experiencing difficulties with fidgeting and squirming when he tried to sit still, his score was not highly consistent with ADHD in adults.

Brice also completed the SSS-V and received a SSS-V total score of 30, indicating a moderate overall expression of sensation-seeking traits. His subscale scores suggested a moderate expression of Boredom Susceptibility (score = 4), high expression of Disinhibition (score = 8), high expression of Experience Seeking (score = 8), and high expression of Thrill and Adventure Seeking (score = 10). This profile suggests that Brice expresses a strong desire to engage in sports or other activities involving risk or danger. He also expresses a strong desire for experiences through the mind and senses including travel or a nonconforming lifestyle and for social or sexual disinhibition. He may also express an aversion to repetitive, routine, or dull activities or people.

History in the Sport of Skydiving. Brice knew at the age of 16 that he wanted to try skydiving. He also knew that he would prefer the Solo First Jump course over the Tandem course because he wanted the freedom of the solo jumps. At the age of 21, Brice started the Accelerated Free Fall program. This training included an alternating mixture of short ground training sessions followed by jumps. After completing the training program, Brice took a few years off due to limits in his finances. He returned to skydiving at the age of 27.

Brice completed all of his jumps at a local drop-zone. He made approximately 75 jumps per year on average and he has accumulated a total of 230 jumps. He does not have a preferred discipline. Instead, he considers all of his jumps "fun jumps," where all he tries to do is have a good time with the people he is with.

Kenzie

Background. Kenzie is a 28-year-old, single female. She was born in Ontario but raised "across Canada, literally." She is an only child raised by her father, who is in the armed forces, and her mother, who works various odd jobs. Kenzie's father's work required the family to relocate across Canada frequently.

Kenzie describes herself as a child as being "independent, stubborn, and strong." She had a very positive relationship with her parents as child, until she reached adolescence. As a younger child, her parents taught her good morals and values including treating all people equally, eating healthy, and respecting yourself. As a teenager, she began to challenge her parents, their way of life, and their decision. At this point their relationship deteriorated and became "mentally and physically abusive." Kenzie ran away from home at the age of 15 and was placed in foster care. After 1 year with a foster family, Kenzie moved out on her own.

As a child, Kenzie often participated in "traditional" team sports but she never enjoyed or excelled in the sports. She more interested in sports and activities that should excel in individually. She was fond of track and field, particularly running. She enjoyed physical activities such as exercising in the gym, swimming, hiking, and climbing. She was also enthusiastic about creative activities such as arts and crafts, reading and writing, and photography.

Kenzie was home schooled for Grades 1 to 3 and then placed in the public school system to help develop her social skills. She was an honour roll student in school until problems unfolded at home. At this point, she "chose to be a bad student" so that she could be liked by "cool" kids. She also started using a lot of alcohol and drugs. Kenzie was suspended twice due to difficulties with peers. She was never required to repeat courses or grades. She completed Grade 10 and then dropped out of school as she needed work more regularly to support herself financially. Kenzie did complete a number of individual college and university courses related to her employment interests.

As a result of needing to support herself, Kenzie began working fulltime after she left school. She was often employed fulltime, or in multiple part-time positions, as a service staff in bars or restaurants. She eventually entered retail sales and enjoyed the work. Kenzie then decided to start her own clothing retail business and has been self-employed for 2 years.

Kenzie has always preferred relationships with “educated and engaged” individuals. She considers herself difficult to get to know at first but deeply connected with friends over time. She describes herself as “fiercely protective” of friends. Kenzie claims to be “bad” at romantic relationships due to having commitment issues. She had many causal relationships over the years and only one long-term relationship. Her long-term relationship lasted 3 years but ended because of differences in values and directions in life.

Kenzie’s primary goal in life is to live her life with “good morals and ethics and not harm others.” She believes in living life with an open mind but she does not tolerate “ignorant or stupid people.” She values friendships and independence. She believes the world is “over populated, uneducated, and closed minded.” She hopes that society will reach a turning point but she does not see how this will be possible.

Psychological Functioning. Kenzie denies any history of mental health issues. She admits that she likely needed help with alcohol and drugs as a teenager but she felt she grew out of the lifestyle. She considers herself a social drinker and no longer consumes substances. Kenzie is unsure about her family members experiencing any mental health or substance related issues.

Kenzie completed the ASRS-v1.1 to screen for ADHD symptoms and received a score of 3. While she reports often experiencing difficulties wrapping up details of projects once challenging aspects are completed, fidgeting or squirming when trying to sit still, and feeling overly active and compelled to do things, her score was not highly consistent with ADHD in adults.

Kenzie also completed the SSS-V and received a SSS-V total score of 33, indicating a high overall expression of sensation-seeking traits. Her subscale scores suggested a moderate expression of Boredom Susceptibility (score = 5), high expression of Disinhibition (score = 8), high expression of Experience Seeking (score = 9), and high expression of Thrill and Adventure Seeking (score = 10). This profile suggests that Kenzie expresses a strong desire to engage in sports or other activities involving risk or danger, experiences through the mind and senses including travel or a nonconforming lifestyle, and social or sexual disinhibition. She may also express an aversion to repetitive, routine, or dull activities or people.

History in the Sport of Skydiving. Kenzie has always liked trying different things in life, particularly things that are "scary, taking her out of her comfort zone." One day, she met some skydivers at a restaurant she was working in and they convinced her to sign up for a course. She completed a Solo First Jump course at the age of 21. After completing a 5-hour training course with a group of five other students, she made her first jump. Kenzie could not find the right words to describe the experience but she enjoyed it so much she became "addicted."

Kenzie made approximately 200 jumps per year, 100 of which were at a local drop-zone and 100 were at skydiving camps in the United States. She has accumulated a total of 1,450 jumps. Her primary interests are in Formation Skydiving, coaching, and instructing. She also participates in many Freefly and Big Way jumps. She considers herself quite "versatile" in the sport but with "much left to learn."

4.2. Introduction to Themes across Participants

Prior to exploring the themes endorsed by participants in the current study, it is important to place participants' conceptualizations of risk into the context (i.e., risk orientation, risk motivation, and risk theory) of existing literature (see Table 4.3 and Table 4.4, for ADHD group participants and for non-ADHD group participants, respectively). Descriptions of these conceptualizations in existing literature were provided in Chapter 1, 1.2. Theories of Risk Taking. Understanding of participants' conceptualizations was based on the participants' endorsement of risk and how each participant described operationalizing risk in their skydiving activities during interviews and member checks.

Table 4.3. Summary of Risk Orientation, Risk Motivation and Risk Theory Endorsed by ADHD Group Participants

Category Dimensions	Rusty	Peyton	Jack	Damion	Noelia	Sherry
Risk Orientation						
Risk Taking	X	X	X	X	X	X
Risk Management	P	P	P	P	P	
Risk Motivation						
Individual						
Impulsivity						
Self-Control	X	X	P	P	X	
Sensation Seeking	X	P	P	X	X	P
Relationships						
Status Seeking		X	X	X		
Social Recognition	P	X	P	P	X	P
Society						
Peer Expectations						
Societal Expectations					X	X
Risk Theory						
Sociological						
Opportunity	P	X	P	P	X	X
Differential Association	X	X	X	X	X	X
Lifestyle or Exposure	X			X	X	X
Anomie					X	X
Symbolic Interactionism	X	X	P	X	X	X
Psychological						
Reversal	X	P	P	X	P	X
Addiction						
Pathology-based						
Economic						
Consequential	P	P	P	P	P	P
Non-Consequential	P				X	X

Note. X indicates high endorsement and P indicates partial endorsement.

Table 4.4. Summary of Risk Orientation, Risk Motivation and Risk Theory Endorsed by Non-ADHD Group Participants

Category Dimensions	Jason	Oliver	Kodey	Brice	Kenzie
Risk Orientation					
Risk Taking	P	P	P		
Risk Management	X	P	X	X	X
Risk Motivation					
Individual					
Impulsivity					
Self-Control	X	P	X	X	P
Sensation Seeking	X	X	X	X	X
Relationships					
Status Seeking	P	P	X	X	
Social Recognition			P	P	P
Society					
Peer Expectations					
Societal Expectations					
Risk Theory					
Sociological					
Opportunity	P				
Differential Association	X	X	X	X	X
Lifestyle or Exposure	X				
Anomie					
Symbolic Interactionism				P	
Psychological					
Reversal	P	P	X	P	P
Addiction					
Pathology-based					
Economic					
Consequential	X	P	P	X	p
Non-Consequential					

Note. X indicates high endorsement and P indicates partial endorsement.

The rankings of endorsement, either "highly endorsed" (X) and "partially endorsed" (P), were identified by the frequency of statements that aligned with risk conceptualizations, the content similarity of those statements, the salience of those statements, and the comparison of conceptualizations between participants. All

participants in the ADHD group endorsed both a risk-taking orientation and a risk management orientation as components of their skydiving experience but the ADHD group more strongly endorsed the risk-taking component. In contrast, the non-ADHD group provided a stronger endorsement of a risk management orientation.

With respect to individual risk motivations, self-control and sensation seeking were the most notable amongst participants in both the ADHD and non-ADHD groups, with both groups endorsing these factors to a similar degree. Impulsivity was not endorsed by either group. For relationship based motivations, non-ADHD participants endorsed status seeking more than social recognition, while ADHD participants endorsed social recognition more than status seeking. The society based motivations of peer expectations and societal expectations were not endorsed by most participants in both groups. Noelia and Sherry of the ADHD group were the only exceptions and endorsed societal expectations. They both described a motivation of non-compliance with societal norms.

There was some variance in the risk theories that would best describe the groups. From the category of sociological risk theories, differential association was fully endorsed by all participants in both groups. The ADHD group further endorsed symbolic interactionism, opportunity, and lifestyle or exposure. Noelia and Sherry from the ADHD group also endorsed anomie with both making reference to loss of controllability in other aspects of their lives. Beyond differential association, the non-ADHD group demonstrated very little endorsement for other sociological risk theories. Jason fully endorsed lifestyle or exposure and partially endorsed opportunity. Brice partially endorsed symbolic interactionism. From the psychological risk theories, both groups endorsed reversal. Addiction and pathology were not endorsed by either group to any notable degree. Both groups demonstrated some endorsement of consequential economic theory with the non-ADHD group providing a heavier endorsement than the ADHD group. The ADHD group also offered some endorsement of the non-consequential risk theory whereas no participants in the non-ADHD group endorsed this theory.

Table 4.5 and Table 4.6 summarize the endorsements of superordinate themes and subthemes by participants in the current study for the ADHD and non-ADHD groups, respectively. Superordinate themes and subthemes, and subsequent rankings of

relative endorsement, “highly endorsed” (X) and “partially endorsed” (P), were identified by the frequency of thematic statements made by participants throughout the interviews, the salience of thematic statements, the novelty of themes, the comparison of themes between participants, the use of metaphors and analogies, and the provision of examples used by participants to describe their experiences. Themes are not ranked quantitatively.

Table 4.5. Summary of Themes Endorsed by ADHD Group Participants

Superordinate Theme Subtheme	Rusty	Peyton	Jack	Damion	Noelia	Sherry
Intrinsic Motivation						
Identity	X	X	X	X	X	X
Achievement	X	X	X	X	X	X
Self-Esteem	X	X	X	X	X	X
Extrinsic Motivation						
Social Context	X	X	X	X	X	X
Status		X	X	X		
Risk Experience						
Risk Taking	X	X	X	X	X	X
Risk Management	P	P	P	P	P	
Control	P		P	X		
Sensation Seeking						
Boredom Susceptibility	X		P	X		X
Disinhibition	P			X	X	X
Experience Seeking	X	X	X	X	X	
Thrill and Adventure Seeking	X	X	P	X	X	X
Psychological Experience						
Sense of Well Being	X	X	P	X	P	X
Experience and Management of Stress	X	X		X	X	X
Psychological Dialectic	X		X		P	P

Note. X indicates high endorsement and P indicates partial endorsement.

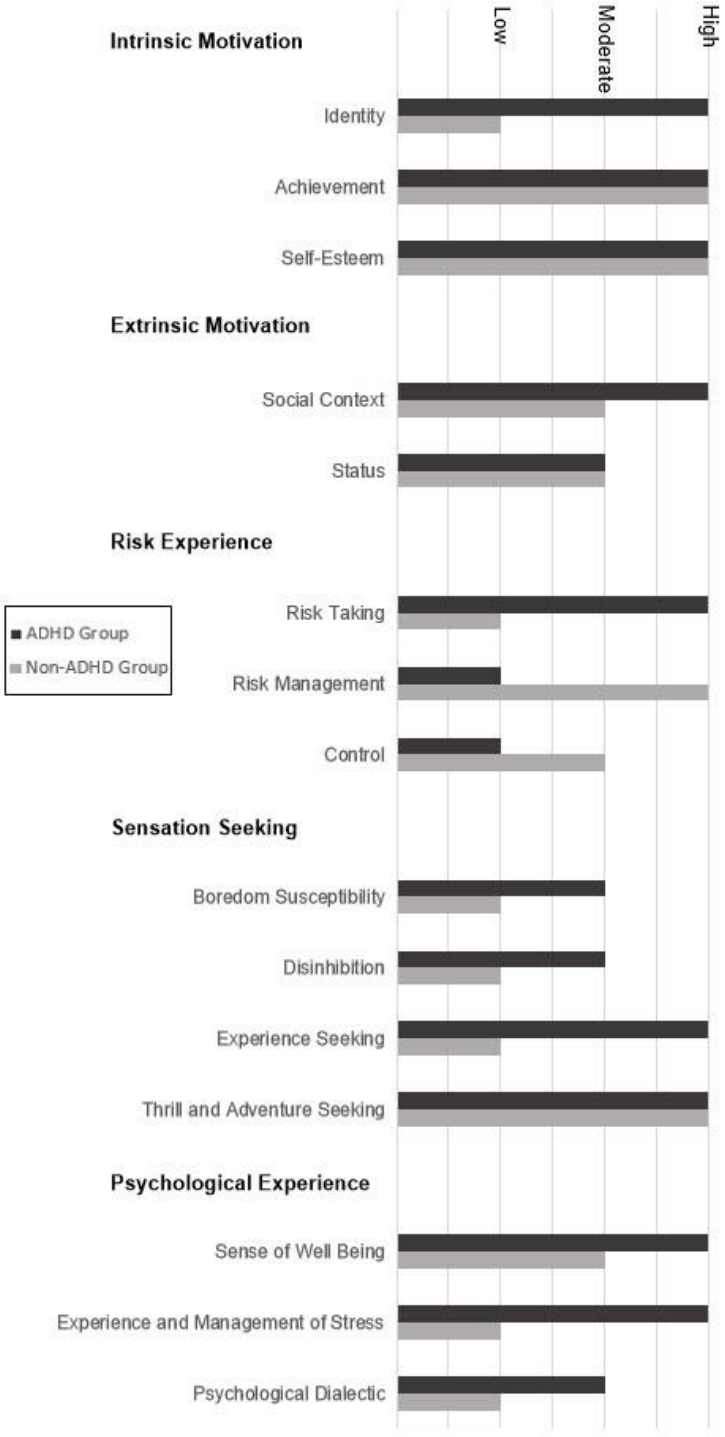
Table 4.6. Summary of Themes Endorsed by Non-ADHD Group Participants

Superordinate Theme Subtheme	Jason	Oliver	Kodey	Brice	Kenzie
Intrinsic Motivation					
Identity				P	
Achievement	X	X	X	X	X
Self-Esteem	X	X	P	X	X
Extrinsic Motivation					
Social Context	P	P	X	P	X
Status	P	P	X	X	
Risk Experience					
Risk Taking	P	P	P		
Risk Management	X	P	X	X	X
Control	X		P	X	P
Sensation Seeking					
Boredom Susceptibility					
Disinhibition					
Experience Seeking					
Thrill and Adventure Seeking	X	X	X	X	X
Psychological Experience					
Sense of Well Being	P	P	P	X	P
Experience and Management of Stress					P
Psychological Dialectic	P			P	

Note. X indicates high endorsement and P indicates partial endorsement.

Figure 4.1 provides a comparison of the level of endorsement of each of the groups, ADHD and non-ADHD, on the various superordinate themes and subthemes. The rankings of group level endorsements, “low,” “moderate,” and “high,” were identified by the volume of participants from each group and the salience and emphasis of each theme or subtheme endorsement by each group as a whole. For the purposes of Figure 4.1, subthemes with no endorsement by a participant group (e.g., Boredom Susceptibility, Disinhibition, and Experience Seeking) were grouped within the “low” category.

Figure 4.1. Comparison of Themes Endorsed by ADHD and Non-ADHD Groups



Note. Rankings of group level endorsements, “low,” “moderate,” and “high,” were identified by the volume of participants from each group and the salience and emphasis of each theme or subtheme endorsement by each group as a whole.

4.2.1. Superordinate Theme 1: Intrinsic Motivations

All participants in the study described intrinsic motivations for engaging in skydiving. The Intrinsic Motivations theme represents factors internal to the individual that motivate them to participate in the sport. These factors are personally rewarding for the participant and motivate the participant to engage in skydiving for its own sake rather than to achieve some external motivation. Three distinct subthemes of Intrinsic Motivations surfaced in the study: Identity, Achievement, and Self-Esteem.

Identity

Identity refers to the conceptualization and expression of one's being or existence. Factors that contribute to one's identity define the individual's sense of self and the nature of their existence in the world. How one perceives himself or herself in the world informs their actions, thoughts, and interactions with others. Individuals experience identity factors as core, essential features that combine to create a unique individuality and that must be replaced if taken away. These factors place the individual within a cultural frame, create motivation and passion, and construct a structure for learning about one's self. With respect to the Identity subtheme, ADHD group participants provided a high endorsement while non-ADHD group participants provided a low endorsement.

ADHD Group. Identity was a subtheme heavily endorsed by all participants of the ADHD group. Rusty described skydiving as playing a significant role in his life, highlighting that he expected to continue with skydiving throughout his life, and finding it unimaginable to not be engaged with the sport:

> Skydiving is a part of who I am. I know it's going to be a part of my life, for the rest of my life. I just couldn't even imagine a life without it.

Rusty further emphasized how participating in the sport was core to who he was when responding to a scenario in which he may be injured or in some way unable to continue in the sport:

> I don't know who I would be. I am not even sure how to answer that. It's like, it's like having someone erase everything that you are and then asking who are you now?

Peyton described his participation in the sport as an aspect of himself that is restricted in his other day-to-day activities. He described his engagement in non-skydiving activities as a "façade" that he was required to maintain. He emphasized that engagement with the skydiving community and activities allowed him to be more authentic to his identity:

> I get to let out a part of myself that feels so confined in the rest of my life. Letting it out feels normal, natural. I feel more like myself when skydiving. Actually, anytime I am away from skydiving it feels really weird. I feel like I'm missing a part of myself.

Peyton also expressed some concern for who he would become if he were not engaged in skydiving:

> One time I got injured, broke my leg pretty bad. Thinking I would never skydive again was the most terrifying experience of my life and I hope to never have to relive that. I don't think I would like who I would have become if it weren't for skydiving.

Jack, Damion, Noelia, and Sherry also described skydiving as being a key component of their sense of self and being in the world. Jack saw his participation in the sport as a way to ground his existence in the world:

> Skydiving feels like part of my path in life. It helps me understand how I fit into the society I exist in. I left the sport for a while because of finances but during that time I never felt like myself. When I returned, it was like I became whole again. …If I were to write a profile statement of myself, I would definitely put skydiving in the first two sentences.

Damion expressed skydiving as essential to life:

> Skydiving is like breathing. It's necessary and without it you feel like you are dying. … My life would be different if I was no longer a skydiver. I would not be me. I would be missing something significant about myself."

Noelia experienced skydiving as a key component of her identity stating that she would not know who she would be if she were not a skydiver. She also saw skydiving as a way to connect on different levels with her existence in the world:

> I have experienced personal development, spiritual and intellectual, which I'm not sure would have occurred if I did not skydive. If for

> some reason I stopped jumping, I would need to find a replacement that stimulated me intellectually, emotionally, and psychologically.

Sherry also described skydiving as an essential aspect of her existence:

> Skydiving is a natural thing for me to do. It is my life and no jumping at all would be death.

Non-ADHD Group. In contrast with the ADHD group, Identity was not endorsed by the non-ADHD group, with the exception of Brice who provided a limited endorsement. He stated that if he was not participating in skydiving he would feel as if he were "missing something" in his life but that he could "find something else to replace it." The other non-ADHD participants made more explicit comments to describe skydiving more as an interest, hobby, or activity rather than a core element of their identity. Jason described skydiving as a lower priority activity in his life:

> I would not let this sport or this hobby overtake and take away from other aspects of my life. Being able to do the sport while still maintaining life balance is important for me but, if I could not find the balance, then it would be time to give up skydiving.

Oliver described skydiving as one of many activities that he engaged in and he did not see it as having a higher priority over any other activities in his life:

> Skydiving is something I do when I have time. It doesn't define me.

Additionally, Oliver reinforced that the sport was one of many activities he could choose from when reflecting on what impact there would be if he were no longer able to skydive:

> I don't feel it would affect me much as I have a lot of other things that I find fulfilling, challenging, and enjoyable.

Similarly, Kodey expressed that other aspects of his life were core to his identity and he described skydiving as less essential:

> My family and my work define me. Skydiving is just something I do for now…. Because I know that if I'm going to keep my family happy, and keep myself happy, there's things other than skydiving I need to take care of before skydiving.
>
> Sometimes skydiving acts as an anchor but I do not think it is the skydiving itself. It is having something engaging to do. If I didn't

> have skydiving, I would pick something else up. It may or may not involve risk.

Kenzie also refuted the idea that skydiving was part of her identity. She suggested that skydiving was more of an activity that she was currently interested in but could be replaced by a new interest:

> My skydiving life is separate from the rest of my life. It does not define me in the ways the other aspects of my life do. If I didn't skydive, I would have more time to do the other things I would like to do in life.

Summary. The difference of perspectives on skydiving as a part of identity between the ADHD and non-ADHD groups is quite notable. The ADHD group appears to have internalized the experience of skydiving as an essential core element of their identities. Without skydiving these individuals would experience an injury to or loss of their identities. They would need to find a way to replace that component of their sense of being. Upon reflection about the possibility of no longer being engaged in skydiving, the ADHD participants all expressed some anxiety regarding the difficulty of having to find a replacement. The non-ADHD group described skydiving more as a function in their life. Skydiving satisfied an interest or was considered engaging but it was considered as a replaceable activity with no impact on identity.

Achievement

The Achievement subtheme refers to one's ability to successfully complete something one strives to attain. It can involve an acquisition of specialized knowledge or a mastery of skills. It can require the individual to push his or her limits and test one's abilities. There is often a learning process that leads to continual improvement of skills and the challenge of striving for the end goal is often a learning process in itself. With respect to the Achievement subtheme, both the ADHD group participants and the non-ADHD group participants provided a high endorsement.

ADHD Group. Achievement was a subtheme heavily endorsed by all participants of the ADHD group. Rusty expressed a lot of enjoyment in describing the mental and physical challenges of skydiving and the acquisition of elite skills:

> I'm always pushing limits on every jump. As you learn to be more competent, you take on more demanding skills. I spend hours and hours reviewing footage [video] to improve my skills. … I gravitate to

> jumps that have both a cognitive and physical challenge. … It's about enjoying jumps where you achieve that goal that you've been trying. Those are the best jumps because you see the progression and you watch yourself get better.

Peyton and Jack considered the learning process as a significant factor for keeping their interest in the sport. Peyton enjoyed the ongoing learning but he also noted the achievement of expertise:

> I enjoy constantly learning new things. … It is gratifying to think back from where I started, a newbie that really knew nothing, and to see my transformation to where I would consider myself an expert in some areas of the sport.

Jack emphasized the process of being engaged in learning and he described feeling accomplished when he mastered the learning:

> The most interesting activities are those that have a learning curve and are not mindless. It is the feeling of having learned a lot about something challenging.

Damion described the experience of learning in skydiving as an engagement with strategic thinking and noted that the sport offers continual learning opportunities:

> I enjoy things that feel like mind games or have a high level of strategy and learning involved. It is also that the more you are in the sport, the more you know how much you don't know about the sport.

In addition to cognitive achievements, Damion described the physical achievements and their interplay with the cognitive elements:

> When jumping I like to challenge myself and I shoot for success. I enjoy jumps where there are a specific set of moves, in a certain order and are quite complex. Not only are there physical demands but there are significant mental demands. … When I get it, it's a feeling of success that I don't have to brag about.

Noelia also talked about achievement that was related to high levels of knowledge and skill. She descried her enjoyment of "challenging, complex, high-level, elite jumps." She also highlighted the importance of "badges of success" to acknowledge her accomplishments:

> There are various licenses and awards that you are able to achieve and it makes you feel good to get these done. I have my licenses and ratings but I have also achieved some world records.

For Sherry, achievements in skydiving promoted her sense of competence and she expressed a lot of pride in her competence:

> It showed me I could develop a level of competence. I know a lot and I know how to do a lot, well certainly not everything, but a lot.

Non-ADHD Group. Achievement was a subtheme heavily endorsed by all participants of the non-ADHD group. Jason described his enjoyment of developing skills and having successful accomplishments. He also recognized these accomplishments as a "trophy:"

> Skydiving is like a collection of technical skills. I enjoy achieving those skills and building upon them. I see this as a challenge and I see it as an achievement. … If I had never learned to skydive, this would be one very big trophy taken from the room, and I would feel less accomplished.

Oliver described how he had been motivated to enter the sport of skydiving because of the learning opportunity and he noted that it was something he could achieve independently of others:

> I wanted to get into the sport and learn about skydiving and knowing I was doing this on my own was rewarding to me. … Other memorable jumps are when I felt I had achieved a new level of competence. They gave me a sense of accomplishment.

Kodey was also motivated to enter the sport because of the learning opportunities and for the potential accomplishments that could be made. In fact, the sense of accomplishment is a topic he spoke often about during interviews:

> It satisfies my thirst for knowledge. … It is about progress and development. … I was a novice and I had this new learning curve to get into that was very exciting. … There's this kind of exploring reality and trying to find limits. … I like the challenge and succeeding. … I have developed a great deal of knowledge in skydiving. … It has allowed me to be a teacher. I have a new sense of purpose in passing on and educating people that are coming in after me.

Brice enjoyed the continuous learning process and he emphasized the degree and depth of knowledge that had to be mastered. He also described the sense of accomplishment:

> I enjoy the sport because of the high level of learning and depth of knowledge, the large element of accomplishment. It is a sport of

> many beginnings. You are always new to one discipline or another. … The more experienced I become in general, the more confident I am in tackling new areas of the sport. … Every jump is a learning experience and you take as much as you can away from it in order to get to the next level.

While Kenzie was not as emphatic about the learning process, she emphasized a goal-oriented approach to her skydiving experience, emphasizing the pride she took in achieving those goals:

> I enjoy setting up a plan and achieving it. It is more about the skill that I am doing or working on and whether I can find a specific approach to master it. … The coaching ratings I've earned. I'm very proud of those accomplishments, and while the general world may not have a clue what they are or how hard they were to achieve they make me proud of myself for doing them.

Summary. There were no notable differences between the ADHD and non-ADHD groups with respect to the subtheme of Achievement. All participants described a strong sense of accomplishment, emphasizing both the mental and physical challenge and the learning process. They all expressed great pride when providing their responses and describing their accomplishments during interview.

Self-Esteem

The Self-Esteem subtheme refers to one's feelings of worth, respect, or positive impression of oneself. While self-esteem is closely linked to achievement, self-esteem and achievement do differ. Achievement can be seen as a mechanism that contributes to self-esteem whereas self-esteem pertains to self-valuation usually expressed as a factor of what one has achieved. Self-esteem is derived from a greater sense of self-sufficiency, independence, and autonomy. Self-esteem can also increase through an intrinsic sense of accomplishment as one takes pride in those accomplishments. With respect to the Self-Esteem subtheme, both the ADHD group participants and the non-ADHD group participants provided a high endorsement.

ADHD Group. Self-Esteem was a subtheme heavily endorsed by all participants of the ADHD group. Rusty explained how his confidence in skydiving promoted a general sense of confidence in life:

> I don't want to sound pompous or whatever but it's a sense of confidence you get like if I could tackle skydiving and do that, I can do

> anything. I know I bring my confidence from skydiving into other aspects. I enjoy seeing that I can challenge myself, push myself to do something I've never done before, and succeed.

Peyton talked about an improved sense of confidence both within the sport of skydiving and outside of the sport:

> It is a great feeling to know that I have developed many strengths in skydiving and that I am now in a position to help others learn about the sport. … I have become a more confident and proud person overall as a result.

Jack described an increased awareness of his potential and provided an example of how crisis situations in skydiving have made him more confident:

> It has opened my awareness of my potential greatly not only in skydiving but in life in general. Being a skydiver has enabled me to look at almost any situation and know that I can do it, get through it. Like, experiencing stressful moments such as equipment malfunctions and dealing with it results in a person having more confidence.

Damion described how his sense of self-reflection had developed through his skydiving experiences and how this translated into a greater confidence within and outside the sport:

> I have learned a lot about myself by being in the sport. I learned that the personal limits that I felt I had could be changed, that I could overcome significant challenges, that I could be comfortable with people. … If I come across less exciting sports for me, which might be very exciting for more people, then I'm definitely able to try them, do them and excel in them because the fear, wondering have gone as a result of my skydiving experience. … What I have learned and experienced in skydiving allows me to take problems in other areas of my life that used to be very big and could consume me, and turn them into speedbumps that I will take my time, and fix. It's amazing just how much competence you build. You learn a lot and you learn to apply a lot.

Noelia reported an increased confidence but she also highlighted that the memories of her skydiving experiences acted as confidence boosters:

> Skydiving has given me way more confidence. It makes me an independent, confident, leader. At times I remind myself that if I can jump out of a plane, I can do anything.

Sherry spoke of how skydiving assisted her in redefining herself and helped her to foster a greater sense of self-esteem:

> Skydiving makes me feel absolutely amazing, like I can conquer anything. I have relearned how to see myself as a productive person, not just as a society misfit. I have learned that I am a capable person.

Non-ADHD Group. Participants in the non-ADHD group expressed similar reflections to the participants in the ADHD group regarding Self-Esteem. Jason described experiencing a confidence boost from skydiving. He specifically spoke of how skydiving helped him to feel better about himself and how the sport gave him confidence when interacting with other people:

> Being a member of the skydiving community makes me feel better about myself. I get a confidence boost from doing it. … It's just allowed me to communicate more effectively with other people.

Oliver also described being more comfortable in social settings as a result of his skydiving experience:

> Being a skydiver has given me more confidence. It's helped me stay more comfortable around meeting and talking to new people.

Kodey only slightly endorsed self-esteem. Kodey's only statement related to self-esteem was that it made him "a better family man." Most of the participants reported that they had greater confidence in various domains of their lives as a result of their skydiving experiences, but Kodey's reflection was limited to the value he associated with family.

Brice reported higher levels of confidence and personal growth, especially in areas of his life where he previously experienced difficulties with emotionality:

> It has given me a rather high level of confidence. It's been essential for me to reach the highest levels of personal growth in many areas of my life. … It has built confidence in my ability to react and control my emotions and responses to high stress/risk situations.

Similar to other participants, Kenzie reported an increased confidence in the sport and she provided an example that her experiences in skydiving had improved her confidence in public speaking:

> Skydiving has given me more confidence. … It has made me more confident in public speaking.

Summary. There were no notable differences between the ADHD and non-ADHD groups with respect to the subtheme of Self-Esteem. All participants described an increased sense of self-value, not only within the sport of skydiving but also in other areas of life. They had internalized their sense of accomplishment within in the sport that had given them more confidence in areas such as goal achievement, communication, and crisis management.

4.2.2. Superordinate Theme 2: Extrinsic Motivations

Extrinsic Motivation refers to an individual's motivation to engage in an activity in order to earn an external reward or to avoid punishment. External rewards are not driven from within the individual but, instead, are granted or denied by other individuals or systems. All participants in the current study reported some degree of extrinsic motivations with some variation between the ADHD and non-ADHD groups. Two subthemes of Extrinsic Motivations were identified: Social Context and Status.

Social Context

Social Context as an extrinsic motivator refers to the degree of acceptance and integration an individual has within a community. When accepted into a community, the individual feels included and experiences a sense of belonging. Integration within the community offers the individual an opportunity to share similar desires, interests, and activities with others and to share experiences. The individual engages in social interactions with other members of the community, develops meaningful interpersonal relationships, acquires a degree of dependence on others, and enjoys a sense of camaraderie. With respect to the Social Context subtheme, ADHD group participants provided a high endorsement while non-ADHD group participants provided a moderate endorsement.

ADHD Group. Social Context was heavily endorsed by all participants in the ADHD group. Rusty described the skydiving community as being a highly cohesive "family." He described feeling integrated with the skydiving community, sharing

experiences with other skydivers, and being able to turn to the skydiving community in times of emotional need:

> The skydiving community has a very tight circle, very tight community of friends. We're very supportive and social with everyone in the community…I call it my second family. It's a family. It's a giant family! … Outside of work, they're the only friends I have and we hang out all the time, even during the off season. … Being able to share these experiences with friends, come of your closest friends are up there with you. It's awesome! Everybody who was on the jump gets together and watches the footage, congratulating everyone on a great jump. … The community is very supportive. If I needed to talk to somebody, I could call any one of them and they would talk to me about anything and there's always a lot of respect given to everybody. … I turn to the community when things are not going well in my life. They can always make me feel supported.

Peyton described the feeling of acceptance within the skydiving community. He contrasted his experiences within the skydiving community to his experiences outside of the community, highlighting that the skydiving community seemed to have less prejudices or criticisms:

> There is a general feeling of acceptance in the skydiving community. No one cares who you are, what you do, where you have been, or what you do behind closed doors. … While I have a few non-skydiving friends, I consider my skydiving friends as my best friends.

Jack spoke of the share experiences and deep bond amongst a community of diverse individuals:

> There is a lot of diversity in the community. I love that everyone comes from different backgrounds but yet we share the same experience. … YouTube may have brought skydiving to the public's eye, but they [the public] will never get a glimpse of how supportive the community is. … For a group of type A personalities, there is an amazing compassion for fellow skydivers. The bond that has formed allows us to have a deeper friendship.

Damion highlighted the positive aspects of being part of a community of diverse individual much like Jack. He also emphasized the link between the "intensity" of the sport with the depth of the relationships:

> The people are unique, which is what makes drop-zones so interesting. They are fun, outgoing people that I enjoy seeing every time. You can be yourself and people like you for who you really are. … I think the intensity of our relationships are greater because of the nature of the

> risk, injury, and death in our sport. We share the passion and are connected in some way. For example, losing a skydiving friend feels like losing a brother.

Noelia spoke at length about the skydiving community. She took great pride in discussing the nature of diverse relationships she had formed and how her approach to relationships had changed in a positive way as a result of her engagement with the skydiving community. She highlighted many pro-social characteristics of the community and the benefits of feeling accepted:

> Because of the international nature of the sport, you get to experience different cultures. The relationships I have built around the world as a result of being part of the community are irreplaceable. I would never have had such interesting, enjoyable friendships if it weren't for skydiving.
>
> The sport has changed how I view people and how I interact with others. There are so many skydivers who I admire, who inspire me, and who I wish to emulate, not only in skydiving but in all areas of my life. The skydiving community seems to have a greater number of people who are giving, forgiving, autonomous, dependable, caring, empathic, and open minded. People are self-actualized, have a personality, are well travelled, are interesting and enrich the world around them. There is a sense of community and family, altruism, positivity. There is no class system, jumpers are jumpers, surgeons would hang out with people who pumped gas for a living, everyone is equal. … I really feel loved when I show up to an event. I know they would be there for me, and I would be there for them.

Sherry also talked about the diversity of people who become skydivers and the feeling of acceptance within the community:

> I have met people from all walks of life, from doctors to drop-out snowboarders. I have met spectacular people. Skydiving has given me a crowd of other oddballs to hang out with. … There are more open minds at a drop-zone, less judgment, just a better, happy vibe.

Non-ADHD Group. The non-ADHD group also endorsed Social Context as an extrinsic motivation but, in contrast with the ADHD group, participants in the non-ADHD group endorsed this factor to a lesser degree and some participants emphasized a functional benefit of relationships. Jason described his relationships with skydivers as having a functional purpose:

> I like associating with others in the community because most are business owners or entrepreneurs. The general case is they are well above a certain level of income, I'd say. I have been able to make a

> lot of connections with just different businesses, and sometimes connections when you're skydiving together turn into bigger ideas.

Oliver expressed some difficulty in fitting in with the skydiving community as a whole but he reported some beneficial relationships with a subset of the community:

> I'm an outsider in the skydiving community in the sense but I have met some great people in the sport that have taught me a lot about it. … I get along well with the jumpers that are more serious or professional about the sport, as I respect them and tend to try to associate with them.

Kodey's experience with the skydiving community emphasized diversity and acceptance:

> I love the diversity of the family of skydivers. I love that you can walk onto a drop-zone anywhere in the world and feel like you're at home. Camaraderie and acceptance, soft of the unconditional love you get there. … People in general in skydiving are very encouraging and I know I can turn to the community in times of emotional distress.

Brice also described the skydiving community as accepting but he noted similar difficulties with inclusion and acceptance as did Oliver:

> It is like a large family. All skydivers are generally open and accepting of newcomers. … Many skydivers are also notoriously highly outgoing and social people. This can be a difficult community for those not as socially inclined, as I described myself. But, while it can be tough to break into the experience-based cliquey groups if you want to skydive with more experienced people, once you spend enough time at a drop-zone and are able to establish yourself as a regular and some-what experienced jumper, skydiving with others can form extremely strong bonds and friendships, and can be a source of a great companionship.

Kenzie reported a positive experience of integrating into the skydiving community, being accepted, and feeling a sense of unconditional support:

> I love the sense of community, how we are vastly different. With the exception of a few people, everyone in my social life I met through skydiving in some way. … I do love how we all drop our silly fights and come together and support one another. Even people who are not close will reach out to others that are hurting.

Summary. While participants of both the ADHD and non-ADHD groups emphasized Social Context as an extrinsic motivator, there were differences in the presentation and language used to describe this factor between the groups. ADHD

group participants emphasized more the diversity of skydivers and the degree of acceptance and support offered by the community as a whole. Some participants in the non-ADHD group described acceptance and support while others described some difficulty finding that acceptance. Additionally, a couple of the participants in the non-ADHD group (i.e., Jason and Oliver) emphasized functional benefits of the association with other skydivers such as allowing them to access experienced skydivers to help improve skydiving skills or connecting to the business world with the potential for business opportunities.

Status

Status refers to the relative social standing of someone compared to others. Status is acquired by an individual on the basis of merit and it often reflects personal skills or abilities. Status can be derived from an individual achieving experiences that are beyond the normal experiences of most other people. It can also reflect an individual engaging in activities that are too challenging for most people to attempt. Status arises for an individual when others take notice of the individual's accomplishment, acknowledge the individual's skill, and are impressed by the individual's abilities. With respect to the Status subtheme, both the ADHD group participants and the non-ADHD group participants provided a moderate endorsement.

ADHD Group. Peyton, Jack, and Damion of the ADHD group heavily endorsed the Status subtheme but Rusty, Noelia, and Sherry did not. Peyton expressed pride when describing how non-skydivers learned that he was a skydiver:

> It always serves as a great conversation starter! … I do like when non-skydivers are shocked to learn I am a skydiver. It is like they are amazed I am able to do something they cannot comprehend…jumping out of an airplane!

Jack's description related to status emphasized the uniqueness of being able to engage in a sport that others would not consider partaking in or express some fear of:

> Ten of us were to go [to skydiving training], but nine backed out at the last minute. I went on my own and became the only skydiver. … There are people who feel I am crazy for taking up such a risky activity and that is good! It is challenging and exciting to be able to do something that is unknown to most of the world. It is something I do that they [non-skydivers] do not. … Having experienced something that most people feel is out of touch with their abilities is thrilling. The

> ego definitely becomes inflated! I make sure everyone around me is aware that I am a skydiver. I am like an ambassador for the sport.

Damion also expressed pride in accomplishing something that most people would not consider:

> People think skydiving is so remote and weird. … Fifteen of my friends signed up for our first jump, only four of us actually completed the course, and then only one friend and I continued in the sport. I guess it is too much for most people. … If people are asking questions about my skydiving, I love to answer them, and they become more interested in me.

Non-ADHD Group. Kodey and Brice heavily endorsed the Status subtheme and Jason and Oliver offered some limited endorsement, but Kenzie did not endorse the Status subtheme. Jason appreciated that he was able to do something that was enjoyable but that not everyone else could do:

> Doing things that not everybody else can do is fantastic! … I have been able to do some cool things. I jump out of airplanes.

Oliver was intrigued by doing something that impressed others:

> I do something that others find interesting and sometimes impressive.

Kodey emphasized the uniqueness of obtaining skydiving skills and abilities and that non-skydivers are impressed by his accomplishment:

> There's some people that are impressed by it, that think it's extreme and not everybody does it. That's probably one of the things that I like about skydiving is that people do recognize that it is unique.

Brice also described the uniqueness of having skills and abilities in the sport of skydiving and that non-skydivers take note of his participation:

> It is sometimes viewed by others as crazy. … I feel like I am participating in something that almost transcends human experience. I feel excited that I am able to participate in something that is on the fringe of human capabilities.

Summary. While participants in both the ADHD and non-ADHD groups that endorsed Status described the uniqueness of their skills and abilities and the acknowledgement of this uniqueness by non-skydivers, there was some variation in the

way responses were presented during interview by participants of each group. The ADHD group participants tended to exude more pride regarding having impressed non-skydivers compared to non-ADHD group participants. The lack of endorsement of Status by some participants (i.e., Rusty, Noelia, Sherry, and Kenzie) is notable. When probed about this potential factor, these four participants expressed that they had not considered it.

4.2.3. Superordinate Theme 3: Risk Experience

Risk Experience refers to the engagement in activities that expose the individual to the potential of losing something of value (e.g., risk of injury or death in skydiving) and the management of those experiences (e.g., avoidance of risk, control of risk parameters). In the current study, all participants acknowledged that participation in skydiving involved some degree of risk but there was variation between the ADHD group and the non-ADHD group with respect to which aspects of the risk experience motivated their participation. Three subthemes of Risk Experience were identified: Risk Taking, Risk Management, and Control.

Risk Taking

Risk taking refers to participation in an activity that involves the potential for an undesirable consequence in order to achieve a specific goal. Risk taking often involves encountering the unknown, breaking away from comfort, and having the expectation of success while there is uncertainty with respect to the outcome. Risk taking occurs in situations where the individual cannot control all of the factors that might contribute to or inhibit the goal. Risk takers often describe the experience of risk taking as being "on the edge." With respect to the Risk Taking subtheme, ADHD group participants provided a high endorsement while non-ADHD group participants provided a low endorsement.

ADHD Group. Risk Taking was a subtheme heavily endorsed by all participants of the ADHD group. Rusty described risk taking as an inherent part of the sport of skydiving suggesting that skydivers put themselves in situations that involve uncontrollable factors (e.g., other skydivers) and pushing limits:

> It is a risky sport. It's kind of like being a daredevil. … Risk is part of jumping with new people and when you're trying to progress in the sport, you have to push yourself a little bit, do things that are "Okay,

> I've never tried this before but I'm going to try on this jump with this person." There is risk there because you're doing things that you're not used to and when they're in that situation but being scared is part of the sport. You are doing that you're uncertain about because you push the limit. … you can't control everything. Not everyone pays attention. Gear wears out. The weather is unpredictable.

Rusty also expressed that death is one of the potential consequences of participating in skydiving. He emphasized that skydivers are aware of the risk of death and that the risk becomes more salient when a death in the sport does occur. Despite this awareness, skydivers continue to participate in the sport:

> It does happen to us where people die. We all know that sometimes there's usually a chain of events that goes wrong. You live knowing your best friend can die soon. It's like the guy I did my 100th jump with. He passed away 2 months ago. I had just jumped with him and then the next day he died and you're like, "holy shit!" Death is a real eye-opener to what we do.

Rusty also expressed that the risk of death entices his appreciation of the sport and life:

> Maybe I wouldn't appreciate life as much if I didn't realize how quick you can be gone and how amazing it [skydiving] is. You can't go through life staying away from things because they make you uncomfortable.

Peyton acknowledged the potential risk of death in skydiving and he described it as an realistic and somewhat anticipated outcome of participation in the sport:

> Yeah, it is risky….people die! It isn't a walk in the park and it's not driving a car on the interstate. … I have lost a lot of friends to this sport and I have seen many others injured, sometimes very seriously. I know my time will come but I understand that is part of what it takes to be part of this sport.

Peyton also included serious injury as a possible consequence for participating in the sport. For Peyton, the risk of serious injury was so adverse that he increased his risk for death in hopes to avoid serious injury:

> My biggest fear is being stuck in a bed or wheelchair for the rest of my life. While I have all the safety equipment like a reserve and AAD [automatic activation device], I don't use much of the safety equipment. I know it might mean that an accident will result in my death rather than just an injury but I would rather end it than suffer. I would rather burn in and not be in any misery. … If for whatever

> reason I'm unable to do what my training tells me I need to do it's likely my time to go anyways.

Jack described skydiving as a risk-taking activity and he emphasized that, despite the best efforts to control risk factors, the potential for injury or death could not be eliminated completed:

> Of course it is risky! Risk to me is the likelihood that a set of circumstances will produce some harm that matters over some timeframe. Risk is taken to hopefully achieve some benefit. That is skydiving. … A skydiver leaves the confines of the earth to willfully be subjected to Newtonian Laws, with some gear that if used correctly may, and I emphasize may, prevent injury or death. That is pretty risky.

Jack also indicated that he accepted the risk of death in order to continue participating in the sport:

> I have had many friends die in this sport and it has crushed me and, yes, I could injure myself or die doing it, but I accept that risk.

Damion noted that serious consequences were an inherent part of skydiving and that the risk for injury and death stemmed from uncontrollable factors such as weather and the constant pushing of limits by the skydiver:

> When every person on earth makes the decision to jump out of a plane, if they like it or not, they weigh the possible consequences of that being the last jump, and breath that they take. … Some may argue that we can be safe but the reality is that all it takes is one little wind gust or the blink of an eye. … People [skydivers] make decisions based on their experience in the sport by thinking that they will be okay to push it a little more, and just keep on going, risking the ultimate disaster.

Damion also emphasized the discomfort that occurs as the awareness of risk becomes more salient but he noted that the risk was considered acceptable compared to the alternative of not participating in the sport at all:

> It often feels like things are about to be chaotic and your job is to try and hold things together but what makes me uncomfortable on a jump is the thought that something may happen but that you do not know what that thing is or when it may happen. … I would rather take the risk than always wonder whether I should I have.

Noelia described skydiving as having inherent risks of injury and death numerous times throughout the interviews. She also emphasized that the sense of safety that some skydivers had was an illusion because the risk was always present:

> People are getting hurt and hurting other people. People are dying. So, yeah it is risky. … We can do everything possible to be safe but in the end, we cannot control it all and death is a real possibility. … Diving can be safe but at the same time it is dangerous when things go wrong. … You can have all the skill in the world but it cannot prepare you for everything that can happen on a dive. … The thrill comes from the unexpected, which of course could be good or bad and when it is bad, we can get hurt.

Sherry also emphasized the risk-taking aspect of skydiving, highlighting the limited training in skills and use of equipment. She also indicated that it was an acceptable risk:

> Duh! You would have to be pretty stupid to think we are not taking risks when we jump out of a plane, using 15 minutes of training we received from a half-baked coach, and attempting to use highly technical equipment that we don't understand and that we have only been told to punch right, punch left. Shit can happen to anyone, including me. This sport has very real consequences. … I would rather die knowing I lived life, rather than just existed. I want to truly live.

Non-ADHD Group. In contrast with the ADHD group, Risk Taking was only minimally endorsed by the non-ADHD group. The non-ADHD group participants tended to downplay the risk or highlight the controllability of risk. Jason initially denied there being any risks in participating in skydiving but later acknowledged that there existed calculated and random risks that skydivers attempt to minimize:

> There's a component of calculated risk and a component of random risk. You just minimize the calculated and random risks to be safe.

Oliver also broke down risks into two categories, controllable and uncontrollable, and he justified safety in the sport by referencing descriptive statistics:

> I acknowledge that there are risks. The controllable risks do not worry me. The uncontrollable risks I try to minimize. … I tell myself if thousands of people can jump thousands of times without incident that I should be able to as well.

Kodey acknowledged the existence or risk but he suggested that awareness and response to risk would result in safety:

> What separates skydiving from a lot of other things that people do in their daily lives is that the risk is so apparent. You can't deny it but if you acknowledge it and manage it, you can be safe.

While Jason, Oliver, and Kodey acknowledged some degree of manageable risk, Brice and Kenzie denied risk in the sport. Brice stated that skydiving was not a "high-risk" activity and when questioned if there was any risk in the sport he responded, "Not really. If you are smart about it, not at all." Kenzie blamed injuries and death on mistakes that skydivers make stating, "People die or get seriously injured but it is because of stupidity not because of risk in the sport."

Summary. There is a notable difference between the perspectives of risk taking held by participants in the ADHD group versus the non-ADHD group. The ADHD group participants more readily acknowledged risk as an inherent characteristic of the sport. The ADHD group participants described the risk for serious injury and death as resulting from uncontrollable factors (e.g., other skydivers, weather) and a tendency to push the limits of skill and ability. The ADHD group participants appeared to accept these significant risks and they integrated the risk as part of the experience of being a skydiver. Additionally, the ADHD group participants emphasized that taking the risks associated with skydiving were better than the alternative of not participating in the sport. The non-ADHD group participants appeared to devalue the extent of risk in the sport. Instead, the non-ADHD group participants emphasized the controllability or manageability of factors that might contribute to risk. The non-ADHD group participants tended to redirect their responses to questions about risk to describe how safe the activities could be or emphasizing the injury and death of skydivers was a result of incompetence on the part of the skydiver. Despite their assertions of how risks can be controlled, the non-ADHD group participants still described the sport has having the potential for serious consequences.

Risk Management

Risk Management refers to the forecasting and evaluation of risks combined with the identification of procedures to avoid or minimize the potential consequences of those risks. Risk management involves understanding costs, assessing alternatives, and making informed and educated decisions about risks. Risk management is not about disregarding risk. Instead, risk management is about determining the level of risk to be

taken. For the current study, risk management was differentiated from the control of risks with risk management referring to the processes involved in the decision to participate in a skydiving activity and control referring to the response taking when a risk was imminent. The subtheme of control will be described in the following section. With respect to the Risk Management subtheme, ADHD group participants provided a low endorsement while non-ADHD group participants provided a high endorsement.

ADHD Group. Risk Management was minimally endorsed by participants in the ADHD group. Rusty explained that he would choose not to engage in some skydiving activities if he perceived the risk caused by other skydivers to be too great:

> You have to take some safety precautions. I need to know everyone that I will be in the plane and air with. If I don't feel safe to jump with them, I won't jump with them.

Although Peyton made conscious decisions to avoid using much of his safety equipment, he acknowledged that use of equipment could reduce some risks:

> There are ways to limit risk. We have AAD's [automatic activation devices] and reserve canopies that help reduce the risk if you use them.

Jack described risk management as a way to reduce some calculable risks:

> We all understand the risks of this sport. We try to make the best decisions to be able to enjoy the experience in a relatively safe way. Some calculated risks can be reduced ahead of time by making good choices about who you jump with and what you do on a jump but the only way to reduce the risk to zero is to not participate.

Damion provided a description suggesting that wise decisions had to be made before engaging in some skydiving activities:

> It would be crazy to ignore the risks. If you did then you would be a BASE jumper! You have to assess all aspects of a potential jump, weigh out the risks with the benefits, and make a good choice. You cannot completely remove risk this sport.

Noelia also referred to making appropriate decisions about whether or not to engage in some activities:

> No one is forcing me to jump. I make informed decisions whether to expose myself to that risk or not.

Sherry did not refer to risk management. When questioned about risk management she responded that it was the "variance in risk" that made the sport "exciting."

Non-ADHD Group. In contrast with the ADHD group, Risk Management was heavily endorsed by the non-ADHD group. The non-ADHD group participants emphasized being responsible for their safety and attending to proper risk assessment before engaging in activities. Jason explained that to engage in a potentially risky activity he must acknowledge the risk and the possible consequences and be accountable to himself:

> Anything that involves risk requires an acknowledgement that this risk exists. It is about being accountable. Yeah, expecting it and preparing for it, more importantly. … There's all these things around me that I have, family, friends, material, non-material, that I cannot lose, and I don't want to lose.

Jason also emphasized that risk management is an intentional planning activity that take place before engaging in the potentially risky activity:

> It involves preparation for this risk. I assume that everything that can go wrong will go wrong but I try to stay within the vicinity of my comfort zone and rarely push myself outside of it. If you are willingly taking a weighted risk, it's a sign that you have everything figured out, you have a plan, and everything is okay in your head.

Oliver did not speak as much about the risk management process but he highlighted the need for awareness of risk and purposeful prioritization of things in his life:

> I question if something similar [death or injury] could happen to me, and question the risks involved. You need to be aware of potential risks in order to avoid them. … I know I won't be skydiving by the time I have children, as I don't feel the risk is worth it.

Kodey described risk management as a process involving awareness, acknowledgement, and response to potential risks:

> You have to pay attention to the risks, attend to them, and adjust accordingly which can result in not doing the activity or removing the risk. … It's about choosing the risk you know you can eliminate or avoid. You're choosing to step up to the edge, and look over into the abyss, and get as close as you can without falling in but you can do that safely by anchoring yourself.

Brice also highlighted the need to be aware of risks and to respond to them appropriately:

> It [death of a skydiver] makes think in depth about the nature of the accident, what happened, how and why it happened, and what the rest of us can learn from the situation in order to possibly prevent something similar form happening to us. … It is like dialing in the right amount of risk that can be managed and controlled.

Kenzie emphasized that injury and death in the sport occurs as a result of a skydiver not engaging in risk management or not making appropriate decisions during the risk management process:

> It [injury or death] is likely because they did something stupid and Darwin's theory is at work again. I truly believe if we respect the sport, respect our gear, and don't try to ride the edge it is a safe sport. Almost everyone I know who has died or been seriously injured was their own fault. My number one beef in this sport is people who say it can't happen to me and they blatantly choose not to assess and manage risks.

Summary. The different emphasis on risk management between the ADHD and non-ADHD group aligns with the opposing perspectives the groups hold on risk taking. The ADHD group integrates risk taking as an essential component of the skydiving experience and tends to minimize attention to risk management. The non-ADHD group appears to integrate risk management as the essential component of the skydiving experience with the intent to eliminate the risk-taking element.

Control

Control refers to the ability to influence or direct a course of events. It involves the application of rational and contextually-based decisions. Control is the careful and deliberate direction of an experience with the goal of achieving a specific outcome. For the purposes of this study, control differs from risk management in that risk management refers to the decisions to participate or not in an activity whereas control refers to the decisions made while participating in the activity. Control in skydiving includes the need to overcome fear in order to control the risk one has chosen to take. With respect to the Control subtheme, the ADHD group participants provided a low endorsement and the non-ADHD group participants showed a moderate endorsement.

ADHD Group. Control was a subtheme moderately endorsed by a subset of participants in the ADHD group. Rusty described having a set of procedures that were followed along each step of the skydive and emphasized the need to not become overwhelmed by the emotional aspect:

> I start with knowing who is coming with me, what their skill levels are at. You then make a plan for what you are going to do and get agreement with the other jumpers regarding the plan, including order, altitude, landing patterns. I always do gear check. It is important to take into account that every jump is different. There's always different things going on. … You have to keep the excitement at bay. You have to stay in control and keep your focus on details of the jump, with a heavy focus on equipment and planning.

Jack described various factors that support his ability to control stressful situations during a jump and the need to manage emotions:

> You have to rely on proper training, proper gear, including maintenance, proper conditions, to manage difficult situations. … Being able to work through the fear of being in such a risky environment, trusting yourself and your gear, fellow jumpers is an amazing feeling.

Damion also emphasized the need for rational, step-wise decisions to control difficulty situations while skydiving:

> If you think and act rationally, you can control the stress and reduce the risk in that moment. Every step of a skydive involves a decision point, you consider all the variables in that moment, make a decision, and follow through on your plan.

Peyton, Noelia, and Sherry did not place much emphasis on control. Peyton explained that in crisis situations he attempts to "trust" his training but he did not elaborate on the details of how that training helps control the situation. Noelia explained "we try to control what we can to make the overall risk tolerable" but she denied control as a primary focus of her skydiving experiencing. Sherry responded to questions regarding control with "we try to be safe."

Non-ADHD Group. Participants from the non-ADHD group provided responses related to Control that were similar to those received from participants in the ADHD group but the non-ADHD group participants tended to provide more detail when describing their control related actions. Jason emphasized the need to understand as much of the technical aspects of the sport as possible in order to control the experience:

> I became very aware of what's behind my back, down to exact technical specification of every piece of gear. … I had people teach me various techniques, various ways of doing everything, packing, opening, body position. … I have essentially perfected everything that I can do to make my skydive safer. … I take a technical approach. I like to quantify things. I follow a strict procedure for everything I do, which eliminates the unexpected things in general. I always make to-do lists. I always make plans. I am always going through a virtual list of checkpoints, making sure everything I could do, I did. The natural response to protecting myself or minimizing those risks was to take control of those factors. This naturally led me to ensure that as many factors as possible that I can possibly control, I do control it and I do have full control of. It's about being more technical and taking steps to control as much of the process as you can.

Jason also highlighted that a primary focus for him in skydiving is the process of doing something that he had prepared for extensively:

> It is not excitement that drives me. It's the feeling that you've been preparing for something and now it is time to do it.

Kodey spoke of integrating knowledge of the sport, skills, and plans to ensure the most control:

> If you have the knowledge, you can control most of the elements that increase risks. We have good, safe equipment if it is used appropriately. The training can protect us if we keep our skills current. However, resolving critical situations occurs if you had prepared a checklist. If you follow the checklist, you will have no problems.

Brice elaborated the need for rational decision making that leveraged technical knowledge and skills:

> You can reduce risk by being more analytical, rational, and systematic about most situations. You gain an ability to overcome fear by learning and progressing carefully. … We are safety oriented and have highly technical gear that is designed to keep you safe when used properly. By learning about and using gear in a systematic and detail oriented way, a high level of trust can be gained in its ability to save lives and is what allows one to mitigate the fears and risks at hand. … It is a safety oriented sport and has many safeguards, both in terms of technical gear and knowledge. … Almost all risks are controllable if you assess risk situations analytically.

Kenzie described the sport as being safe if you follow your training and stay aware of what is going on around you. Kenzie also highlighted need to following plans:

> This is safe sport if you follow the rules and your training, you stay attentive to your gear, your actions, and the people around you, and if you are methodical and planned in your dives.

Oliver did not allude to a sense of control when responding to interview questions. When questioned about crisis situations during a skydive, he retorted that those situations happen only because skydivers make the "wrong decision" about making the jump in the first place.

Summary. While a subset of participants in each of the ADHD and non-ADHD groups moderately endorsed Control, the participants in the non-ADHD group tended to offer a more detailed set of responses on this subtheme. ADHD group participants placed some emphasis on having a plan to deal with difficult situations while skydiving and following through with that plan. Non-ADHD group participants also emphasized the need for having and following a plan but they also emphasized the need for a high level of technical knowledge and training. Both groups referred to a need to control emotional responses to ensure a more rational approach to decision making.

4.2.4. Superordinate Theme 4: Sensation Seeking

Sensation Seeking, as described in Chapter 1 (Section 1.2. Theories of Risk Taking), refers to the "seeking of varied, novel, complex, and intense sensations and experiences and the willingness to take physical, social, legal, and financial risks for the sake of such experiences" (Zuckerman, 1994, p. 27). All participants in the study reported characteristics of sensation seeking when they completed the SSS-V (see Table 4.1 and Table 4.2). As noted previously, the use of the SSS-V in a phenomenologically based study is antithetical. The reader is cautioned that these themes are prescribed and not organically evolved from the participant's accounts. Participants' interview responses suggested some differences between the ADHD and non-ADHD groups in regards to how sensation seeking was perceived as a motivator for participation in the sport. Additionally, there was some variance between participants' responses on the SSS-V, which speaks to general sensation-seeking characteristics, and their reported perceptions of sensation seeking as a motivator within the sport of skydiving. Zuckerman's (1976, 2007) model of sensation seeking was used to

categorize four subthemes of Sensation Seeking: Boredom Susceptibility, Disinhibition, Experience Seeking, and Thrill and Adventure Seeking.

Boredom Susceptibility

Boredom Susceptibility refers to the "aversion to any kind of monotonous conditions and restlessness when confined to such conditions" (Zuckerman, 2007, p. 13). Individuals with high boredom susceptibility dislike repetition, routine, and people or situations that are not stimulating. These individuals prefer to break from familiar routines. With respect to the Boredom Susceptibility subtheme, ADHD group participants provided a moderate endorsement while non-ADHD group participants did not endorse the subtheme.

ADHD Group. Boredom Susceptibility was a subtheme moderately endorsed by a subset of participants in the ADHD group. Rusty described and provided examples of his aversion of boring and repetitive activities, and highlighted how skydiving allowed him to get the stimulation he required:

> I like variety, stimulation. People just get stuck in this loop in society and they become so confined. If you're bored with your everyday routine, day-to-day stuff, just go for one jump. … I don't want to sit in a cubicle all day and go home and watch TV and repeat the same thing days on, on and on, and on and on. I like to do things that ignite my senses. Skydiving gives me the rush I need. … I'd rather be broke and live at the drop-zone and do one or two jumps a week than to spend 3 weeks out of the month up there looking at blue skies working in some place that makes tinfoil.

Jack reported becoming easily bored with most activities in his life and that skydiving was the one exception:

> I have a tendency to become bored easily in almost everything in life. Skydiving is the one exception.

Damion described having difficulties with experiences of boredom in his employment and hobbies but noted that skydiving had never become repetitive:

> I've quit most of my jobs and interests because something new and more exciting comes along. Nothing is worse than doing the same thing over and over again. …I would definitely be bored and "Whah Whah!" if I wasn't able to skydive anymore. Every jump is different so there's nothing repetitive about it that would make me not want to jump again.

Sherry offered a comparison of skydiving with other sports she considered boring:

> I avoid things like curling and golf, which are as boring as fuck, safe, and mind-numbingly boring. Skydiving is like lighting your hair on fire and running through a gas plant.

Peyton and Noelia did not describe an aversion to boring or repetitive activities. They also did not offer a description of skydiving as a break from monotony.

Non-ADHD Group. None of the non-ADHD group participants endorsed the Boredom Susceptibility subtheme.

Summary. The difference of perspectives on Boredom Susceptibility as a motivator for skydiving between the ADHD and non-ADHD groups is quite notable. A subset of the participants in the ADHD group report some comfort in skydiving providing a non-repetitive, non-monotonous experience. Participants in the non-ADHD group do not appear to be motivated to participate in skydiving to avoid boredom.

Disinhibition

Disinhibition to "seeking sensation through other people, a hedonistic lifestyle, 'wild' parties, sexual variety, and drinking to disinhibit" (Zuckerman, 2007, p. 13). Individuals high in disinhibition desire to be sexually and socially uninhibited. These individuals will tend to resist societal and cultural norms and will attempt to break from the expectations of normal day-to-day existence. With respect to the Disinhibition subtheme, ADHD group participants provided a moderate endorsement while non-ADHD group participants did not endorse the subtheme.

ADHD Group. Disinhibition was a subtheme moderately endorsed by a subset of participants in the ADHD group. Rusty reported a history of engaging in disinhibited activities prior to being actively engaged in skydiving and he described enjoying the party life associated with the skydiving community:

> I was doing some things that I shouldn't be doing [prior to being a skydiver]. I was into drugs like mushrooms and smoking weed and partying with my friends and there was a few run-ins I had with the police. When I got into skydiving all those problems stopped. … I really enjoy that you can party all night after a day of jumping. When I come to the drop-zone, after the jumps, I can really let loose, drinking, smoking, and having some wild times, but it is safe and you trust the people around you to keep you out of trouble.

Noelia and Sherry emphasized that skydiving permitted them a safe, accepting environment to be unique individuals who do not fit with the expectations of mainstream society. Noelia described how the stress of conforming in society was lifted when she was engaged in the skydiving community:

> Skydivers do not conform to normal society. I do not conform to normal society! We can be who we want to be and we can be different than what the rest of society expects us to be. It's peaceful to have a place where the restrictions of life are lifted.

Sherry described her difficulties with conforming to mainstream society and how she was able to find like-minded individuals in the skydiving community.

> I have trouble with mainstream society because I don't understand a lot of the rules, and even when I do, I think the rules are stupid, so I don't necessarily follow them. That is why I love the skydiving community. There are more of me around in the skydiving community. … I don't ever want to be a sheeple [living a boring repetitive life], which is why I spend so much time at the drop-zone. I don't believe in adhering to social norms just because they exist. I believe in questioning authority, being responsible for your own behaviour, and being given second chances. Most North Americans are sheeple, willing to blindly believe the shit they are spoon-fed without questioning it. In the skydiving community, there are more people like me who don't put up with that shit.

Peyton and Jack did not describe a desire for a disinhibited lifestyle nor did they describe the skydiving community as a way to be more disinhibited.

Non-ADHD Group. None of the non-ADHD group participants endorsed the Disinhibition subtheme.

Summary. The difference of perspectives on disinhibition as a motivator for skydiving between the ADHD and non-ADHD groups is quite notable. A subset of the participants in the ADHD group describe how the skydiving community creates a safe and supported environment for engaging in a non-conforming lifestyle. Participants in the non-ADHD group do not appear to be motivated to participate in skydiving to be uninhibited.

Experience Seeking

Experience Seeking refers to "seeking sensations and new experiences through the mind and the senses (music, art, travel) and through a non-conforming general

lifestyle with like-minded friends" (Zuckerman, 2007, p. 13). Experience seeking often involves a desire for stimulating experiences through conversation, study, or travel. Individuals high on experience seeking will desire new and unusual experiences and they will enjoy the discovery of such experiences. With respect to the Experience Seeking subtheme, ADHD group participants provided a high endorsement while non-ADHD group participants did not endorse the subtheme.

ADHD Group. Experience Seeking was a subtheme heavily endorsed by all participants of the ADHD group, with the exception of Sherry who did not endorse the Experience Seeking subtheme. Rusty took pride in having experienced skydiving which he described as a unique, intense, and nearly unexplainable experience:

> It's like saying you worked at a nuclear power plant. How many people can say that I had to put a full suit on, like Homer Simpson. That is what skydiving is like. … People say what does it feel like and I'm like honestly, it's like trying to explain sex to a virgin. I can tell you how great it is and everything about it, you're not going to know until you do it.

Peyton described skydiving as one of many "crazy" experiences he had but noted that it was the most significant experiences:

> I want to have as many crazy experiences as I can get but I have to admit that I am not sure any other experiences will top skydiving. I think that is why I keep coming back.

Jack described how participating created vicarious experience seeking opportunities for him through travel:

> I enjoy the travelling opportunities that come with the sport. I've been able to travel to many places around the world. For me, it was travel to more exotic places that was the opportunity. I have jumped onto a beach, an island in the middle of nowhere, and desert.

Damion reported how the experience of skydiving created unique bodily sensations and he noted that the experience of these sensations were limited to those who participated in the sport:

> On every jump I notice a new sensation or feeling. It made me giddy thinking about it. And, not everyone gets to have these experiences. I like that.

Much like Jack, Noelia appreciated the travel opportunities that arose as part of her involvement with skydiving:

> The sport has allowed me more opportunities to travel and see different cultures. I like to do go and see something I have never seen before.

Non-ADHD Group. None of the non-ADHD group participants endorsed the Experience Seeking subtheme.

Summary. The difference of perspectives on Experience Seeking as a motivator for skydiving between the ADHD and non-ADHD groups is quite notable. Most of the participants ADHD group describe how the skydiving and the associated community offers unique or unusual experiences. Some of these experiences are directly as a result of completing skydives while some of the experiences are a result of associated activities (e.g., parties) or indirect opportunities (e.g., travel). Participants in the non-ADHD group do not appear to be motivated to participate in skydiving to be uninhibited.

Thrill and Adventure Seeking

Thrill and Adventure Seeking refers to a "desire to engage in physical activated that provide unusual sensations and experiences, such as mountain climbing, skydiving, or scuba diving" (Zuckerman, 2007, p. 13). Individuals high in thrill and adventure seeking will describe the hedonistic (thrill) aspects of their activities. They experience intense joy and pleasure and often feel alive or energized. They will often describe experiencing an "adrenaline rush." With respect to the Thrill and Adventure Seeking subtheme, both the ADHD group participants and the non-ADHD group participants provided a high endorsement.

ADHD Group. Thrill and Adventure Seeking was a subtheme heavily endorsed by all participants of the ADHD group, with the exception of Jack who provided a moderate endorsement. Rusty talked about the adrenaline rush being as potent as a drug:

> The adrenaline from that [skydiving] was better than any drug I'd ever done before, just the adrenaline overpowered everything else. I have always been a daredevil adrenaline junkie-type person.

Peyton offered a description comparing the adrenaline rush of skydiving to an experience of "ecstasy:"

> I like to push a why not motto rather than why, it comes back to wanting to live an exciting life and skydiving does that for me. My adrenaline starts pumping, my heart is racing, I can't wipe the grin off of my face. In my experience, if this isn't ecstasy it's as close as I've come so far.

Damion described a need for exciting experiences and reported that the adrenaline experience of skydiving was indescribable:

> I find that every experience that I'm exposed to, I need, like it to be more exciting than it usually is for the common spectator. The adrenaline kicks in, your mind shuts down, and you just react to the moment. It is a feeling I just can't describe. You have to do it to understand it.

Noelia described the rush she experienced in her skydives and indicated that because of her skill and experience she was able to adjust the experience to fit her needs at the time:

> It is a feeling of being alive in the moment. There is a rush and when you have enough skill you can dial up or dial down that rush so that you get the most enjoyment out of it.

Sherry reported that she enjoys the stimulation offered by skydiving and compared it to using cocaine:

> I dislike things that don't mentally and physically stimulate me. I enjoy slightly scaring the shit out of myself. … Skydiving is more exciting than cocaine.

Jack denied any experience of thrill and adventure but he justified his response as a result of how many jumps he had completed. He reported that he enjoyed skydiving but he did not feel as if he experienced a "rush" like he did when he first started skydiving.

Non-ADHD Group. Thrill and Adventure Seeking was a subtheme heavily endorsed by all participants of the non-ADHD group. Jason described the experience of an adrenaline rush and the idea of overcoming a perceived risk:

> Skydiving is thrilling because of the adrenaline rush. It was doing something great, risking everything, and the, yeah, successfully landing I think is the good part.

Oliver described an irreplaceable experience of excitement:

> There is a sense of adrenaline or excitement. It is something unique to skydiving and I have tried a lot of things in my life. This experience is not something you can find elsewhere.

Kodey provided a dramatic example to describe the thrilling experience of skydiving:

> It's kind of like having a Navy SEAL hold a gun to your head, and you know you're only going to die if he pulls the trigger. He's not going to accidentally shoot you. With skydiving, you're probably going to be okay. The gun might misfire, but that's sort of where the thrill comes from, that's where you create this intense situation. You get a good rush out of it.

Brice and Kenzie offered similar descriptions of the adventurousness and thrill of participating in skydiving. Brice described the reasons why he liked the sport and how it met his needs:

> I like the exciting and adventurous opportunities. It meets the needs of things I enjoy most: exhilaration, adventurousness, living completely in the moment.

Kenzie described how skydiving matched characteristics she sees in herself:

> Skydiving matches my personality. I am adventurous and people see me as a thrill seeker.

Summary. There were no notable differences between the ADHD and non-ADHD groups with respect to the subtheme of Thrill and Adventure Seeking. Thrill and adventure seeking appears to be a prominent sensation-seeking motivation for the participants in both groups.

4.2.5. Superordinate Theme 5: Psychological Experience

Psychological Experience refers to changes in an individual's mental and emotional state as a result of the individual's interactions and involvement in the world around them. Individuals' experiences can foster increased awareness and changes in feelings and motivation. These experiences change the way an individual perceives him- or her-self, others, and the environment in which they function. These experiences can also satisfy psychological needs, adjust personal capacities and resources, and influence an individual's patterns of thinking and behaving. Three subthemes of

Psychological Experience were identified: *Sense of Well-Being*, *Experience and Management of Stress*, and *Psychological Dialectic*.

Sense of Well-Being

Sense of well-being refers to how individuals evaluate their lives with respect to the state of being comfortable, healthy, or happy. It refers to the internal experiences of the individual and how the individual perceives his or her life. The sense of well-being an individual experiences is constructed via thoughts and feelings about one's self. Thoughts related to a sense of well-being are generally conscious, evaluative judgements about the individual's satisfaction with life. Feelings related to a sense of well-being refer to a hedonic evaluation guided by experienced emotions. A positive sense of well-being can arise from an emotional experience or change in emotional state, a sense of loss of control or vulnerability that is regained, a dissipation of fear, or overcoming psychological barriers or distress. A positive sense of well-being can also result from mindful experiences where the individual becomes absorbed in the experience, feels present in the moment and transcendent of time, and is able to focus on the immediate demands of the experience with no mental space for anything else. Often a positive sense of well-being is experienced as a calm, relaxed, or meditative state that generates positive energy and motivation. With respect to the Sense of Well-Being subtheme, ADHD group participants provided a high endorsement while non-ADHD group participants provided a moderate endorsement.

ADHD Group. Sense of well-being was a subtheme heavily endorsed by all participants of the ADHD group. Rusty described his skydiving experience as creating a positive sense of well-being for a number of reasons. Rusty described a mindful experience with a distinct sense of belonging that allowed him to release his mind from other concerns in life:

> You feel in your place. You feel a sense of belonging, I guess. Like you know that's where you're supposed to be at that moment in time. You could have a mortgage, you could have two kids, one of them sick at home, your wife is cheating on you or you just got laid off, anything, or even anything that's really good in your life like oh, you have a marriage coming up or this or that, or you just had a newborn. None of that is in your head when you are skydiving. I'm just back where I belong is how I feel. … There is more to life than money and materialistic objects.

Rusty explained notable changes in emotional state that included an increase to energy and a reduction to anxiety and stress:

> I find jumping energizing, it gives me energy. … I funnel my inhibitions into it. … I notice a reduced heart rate and anxiety when I am jumping. … It's an excellent stress reliever. … It's really good if you are having a bad day. Skydiving assists me with stress relief. If I have a bad day or something, you go and throw all your worries out the door. You don't have to worry about anything. It's just a very good stress reliever. … If I didn't have skydiving I would need a really good stress relief.

Rusty also noted a distinct change in his ADHD presentation when he was engaged in skydiving:

> The ADHD symptoms disappear and you finally feel relaxed. … My ADHD does not affect me when I'm skydiving but the off season is a terrible time because I lose my tolerance for things, I feel a bit crazy, and my ADHD gets really bad. … It [skydiving] definitely takes your focus and puts it on something all day and I don't have a problem. I know I get easily distracted like wow, while I'm sitting here talking to you, you asked, I would finish answering and I'd look and I'd be like oh, there's a fly over there. Oh, look at that plant and like really things run through my head. When I'm at the drop-zone, it's like I'm in the moment. … From the moment I step on the drop-zone to when I leave at night, I'm focused. Whereas, if I'm at work, I'm not concentrated on work the whole time.

Peyton described skydiving as an effective way to escape or reduce stress that he had experienced in other aspects of his life:

> Nothing else goes through my mind, not work stress, workplace drama, financial stress, my issues with attention, nothing. My stresses of the day just melt away. … It [skydiving] works as a great stress therapy. I feel like I can take a fresh perspective to any problems that were stressing me out before the skydive. … I turn to skydiving for stress relief, definitely.

Peyton also commented on how skydiving affected his perspective and attitude towards others:

> Skydiving has made me a better person. I think more positively of people, I give people the benefit of the doubt more now that I used to, and assume they're generally good people until they prove me otherwise. … It has taught me patience with more irritating people. … Even off the drop-zone I find that I feel better as a result of skydiving. I can handle people better, I get more done, and I feel less jittery.

In regards to his experience of ADHD symptoms, Peyton reported that skydiving alleviated his problems of inattention:

> What ADHD! When I am skydiving, I get tunnel vision. I feel more calm, more attentive, more focused. It is a feeling that last a long time after I have been skydiving. … I would say the feeling lasts a day or two but it varies depending on the intensity of the jumping I am doing.

Jack described a mindful experience that allowed him to forget his other concerns:

> It is a gravity-induced meditation. Once in the air it is being purely in the moment. … It starts when I step onto the drop-zone. I forget everything that was bugging me. I just feel calm and relaxed. … Sometimes I am surprised when I realize that I spent a day jumping and I had forgotten about problems at home or work.

Jack also noted a decline in the severity of his ADHD symptoms when participating in skydiving:

> I am able to focus. The anxiety I experience daily in my life from my ADHD disappears and I find myself at peace. It's a great feeling that lasts all day and sometimes into the next day.

Damion also described a mindful experience when skydiving and added that there is a feeling that allows him to transcend time:

> Walking to the [air]plane is when I know that I am free from everything in life for at least the next 30 minutes. … Falling gives you the calm feeling of nothing. It's a level of relaxation that I have never felt and will never feel in any other part of my life. … Looking around in the sky is very peaceful. Time may be passing but for 40 seconds, there isn't anything around me to prove to me that time is in fact passing. You are in a moment. It's like I have crossed off everything on my to-do list.

With respect to ADHD symptoms, Damion described an experience of his mind slowing down which seems to regulate the constant racing thoughts he often experienced:

> What I like most is that it slows my mind down. During the day, I feel like my mind is always racing from idea to idea, problem to problem. Once I am at the drop-zone I feel calm and when I am jumping my mind stops moving. … It is the one activity that I feel I have consistent structure with.

Noelia described a spiritual component to the mindful experience of skydiving:

> I have experienced spiritual development as a result. It [skydiving] gives me balance in my life. … Nothing is happening but the skydive. We are all living in the moment.

Noelia also saw skydiving as a way to escape the chaos and stress of the rest of her life:

> It's calming and all the fucking shit from the rest of my life dies. … It helps with stress. I don't know how to describe it to someone who does not live my life. Imagine the worst possible thing happening in your life. That's my life every day but none of that matters when I at the drop-zone.

When queried about the impact of skydiving on her ADHD symptoms, Noelia describe an "in the moment change," stating:

> I am usually focused on a task and the world stands still.

Sherry emphasized a significant change in her emotional experience and a mitigation of depressive symptoms as a result of skydiving:

> Skydiving gives me the endogenous opioid release I needed, but it also helps me mentally. It fought back a lot of depression that I was experiencing. It makes me feel good and it lifted me out of my depression. … I would be the most depressed mother-fucker out there. I might commit suicide if skydiving were out of the question. … Skydiving therapy should be offered to depressed people, anxiety people, and schizophrenics. … Skydiving has really helped keep the mental stuff in check, whether it's depression or my competing thoughts. … Without skydiving I can guarantee that I would have offed myself.

Sherry also expressed a relief in her ADHD symptoms:

> Skydiving gives me something I can focus on both in the sky and on the ground. It has quieted the monsters in my head. … If I could start each day out with a jump, I am sure I would never be diagnosed with ADHD.

Non-ADHD Group. Participants in the non-ADHD group also endorsed a Sense of Well-Being but to a lesser degree than participants in the ADHD group. Jason described skydiving as a way to regulate his emotions:

> I'm more reflective, less impulsive. I do not let my emotions drive me as much. It takes emotion out of your decision-making. … If I were to go skydiving on the weekend, then the entire week, I would feel calm. … It provides a clear mind and calm emotion, balanced state of mind.

Jason also noted that skydiving provided a way to relieve stress:

> Skydiving is a quick way of getting rid of stress and being able to maintain a calm mind and clear head, clear mind for the rest of the week. … Skydiving helps me relieve stress.

Oliver described a feeling of calmness and a reduction of stress:

> I feel a sense of freedom and relaxation, calm and peace. … Skydiving has been helpful for relieving short-term stress.

Kodey experienced a sense of freedom when skydiving and he also described skydiving as a tool for changing his mood positively:

> It's mainline freedom. It's the heroine of freedom. It's physical freedom and psychological freedom. I mean, if I have been in a really pissy mood, for whatever reason, it changes my mood instantly.

Brice emphasized that the mindful moments experienced in skydiving provided an opportunity to improve his overall well-being:

> The feeling of a dive is extremely relaxing and serene, forcing me to be completely in the moment. It has a significant, positive impact on my intellectual, emotional, and psychological well-being. It's also an excellent way to relieve stress.

Kenzie described a state of mindfulness when engaged in skydiving activities:

> I am so focused on that moment in time nothing else exists. I feel free, focused, grounded, and so in the moment. I feel relaxed, happy, and calm afterward.

Kenzie also spoke of using skydiving as a way to escape the busyness of the rest of her life:

> Sometimes I just go do a jump to clear my head. Sometimes I need to get away from life and the world and I go to the drop-zone and it all disappears. … When I'm out there, nothing else is relevant.

Summary. Participants in both the ADHD and non-ADHD groups reported a more positive sense of well-being as a result of participating in skydiving, although

participants in the ADHD group endorsed well-being to a greater extent than participants in the non-ADHD group. Participants in the ADHD group highlighted an experience of mindfulness that included being in the moment, transcending time, and releasing oneself from the burden of thoughts and feelings that originated from other aspects of life. Participants in the non-ADHD group described mindfulness more from a feeling of relaxation and a release of one self from other distracting thoughts and feelings. Participants in the ADHD group described skydiving as bringing upon a positive change to emotional state that included a change of mood and a reduction of the experience of stress. Participants in the non-ADHD group also reported a positive change of emotional state with a reduction in stress and a regulation of negative emotions.

All ADHD group participants also endorsed a reduction in ADHD symptoms as a result of participating in skydiving. Participants described experiencing an increase in attentional span and a decrease in racing thoughts while engaged in skydiving activities compared to when they were engaged in non-skydiving activities. Some ADHD group participants also noted that the suppression of ADHD symptoms lingered for some time (e.g., days) after engaging in skydiving activities.

Experience and Management of Stress

The Experience and Management of Stress refers to intentional participation in activities that are stress inducing and the actions taken to effectively cope with that stress experience. The experience and management of stress differs from stress reduction discussed as part of the sense of well-being subtheme. In the context of well-being, some participants described skydiving as a way of relieving stress resulting from non-skydiving activities. The Experience and Management of Stress subtheme arises from participants purposefully engaging in skydiving for the purpose of experiencing and managing the stress resulting from that participation. The stress experience of skydiving can involve the direct experience of discomfort (e.g., nausea), the possibility of pain, injury, or death, the process of putting one's life at risk, and vicarious pain as a result of injuries or death of others. The management of the stress refers to resisting against limits and being disciplined in responding to the stress experience. With respect to the Experience and Management of Stress subtheme, ADHD group participants provided a high endorsement while non-ADHD group participants provided a very low endorsement.

ADHD Group. Experience and Management of Stress was heavily endorsed by all of the participants in the ADHD group, with the exception of Jack. Rusty highlighted the experience of stress as a motivation for participation in the sport, emphasising the experience of resisting limits and the risk of injury or death of self and others:

> You can't go through life staying away from things because they make you uncomfortable. Being scared is part of the sport. It's about doing things that you're uncertain about because you want to push the limit. … You know that you can get injured or die but you can control those stressful thoughts. … Death of a fellow skydiver is humbling and eye opening but you rebound, check your equipment, and overcome the fear. … I don't want to be limited by stress in the moment, I want to overcome it.

Peyton described the pleasure of experiencing and overcoming stress. He also highlighted the ongoing reflection of the risk of injury and death to self and others:

> Of course you feel anxious when you leave the plane. You are letting go of the most secure object you have, the plane. If skydiving wasn't unsettling, it would not be fun. … I know I can be hurt on any skydive but I get over that so I can enjoy the jump. … Being able to put yourself in a position where you are risking your life, changes you and changes your perspectives in life. … When a friend is injured, you become very aware of your fragility.

Damion discussed being intentional about engaging in a risky activity and being disciplined to managed the stress of the experience. He also reflected on how the injury or death of others in the sport contributed to the experienced stress:

> Knowingly taking a risk with your life is a unique experience. You are aware of the risk but you harness your fears. … The training and knowledge prepares you to manage the stress. … When you see a friend hurt or killed, it hurts and it makes you reflect on what you are doing in the sport. This adds to that unsettled feeling you get on every jump. I would be worried if I didn't have that feeling.

Noelia spoke of being motivated by pushing herself to see what degree of stress she could experience and manage:

> Sometimes it's about seeing how much stress you can tolerate. You push yourself and push yourself. You think you might break but you don't. I don't think we should be so scared of injuries or dying. Life is full of risks but if we don't challenge the risks, we really miss out. One moment you feel stress that you have to respond to and the next you feel pure bliss. It's like jumping out of hot tub into a pile of snow.

Sherry emphasized the pleasure of overcoming the mental demands caused by the experience of stress:

> I enjoy the mental demands of a skydive. I believe I am mentally stronger than others. I imagine myself as a POW and having to keep from breaking, even under physical torture. … There is a lot of stress but it is a good stress. I feel energized knowing I can deal with it. There is no time to think, only do. You learn to keep a cool head in emergency situations.

Jack was the only participant in the ADHD group who did not endorse the Experience and Management of Stress subtheme. He described enjoyment of the challenge of skydiving but he denied the experience of stress as a motivator to participate in the sport. Jack stated, "I enjoy knowing I can handle the technical challenge but I do not find skydiving stressful."

Non-ADHD Group. In contrast with the ADHD group, Experience and Management of Stress was not endorsed by the non-ADHD group, with the exception of Kenzie. Kenzie briefly described her enjoyment of experiencing discomfort stating, "I like things that scare me, take me out of my comfort zone."

Summary. There is a notable difference in overall perspectives regarding the experience and management of stress in skydiving between the ADHD and non-ADHD groups. The ADHD group emphasized the enjoyment of the experience and overcoming stress, whether it was a direct (e.g., mental stimulation, bodily sensations) or indirect (e.g., vicarious pain as a result of death and injury of others). The non-ADHD group did not highlight the stress experience or the management of stress while skydiving.

Psychological Dialectic

Psychological Dialectic refers to an experience of dissonance as a result of tension or opposition of two interacting psychological experiences. A dialectic results from the mental or physical incongruity between multiple experiences occurring at the same time. Mental incongruities can occur when the mind experiences a state of oscillation between stress or calm or when there are contradictory qualities of the experience (e.g., beauty of a natural setting with the stress of a strenuous activity). Physical incongruities occur when the physical body vacillates between contradictory states (e.g., relaxed versus preparedness to respond physically). With respect to the

Psychological Dialectic subtheme, ADHD group participants provided a moderate endorsement while non-ADHD group participants provided a low endorsement.

ADHD Group. A subset of participants in the ADHD group endorsed the Psychological Dialectic subtheme. Rusty provided a number of descriptions exemplifying the dialectic experience. He described taking in the beauty of the scenery around him while attending the demands of the skydive, trying to remain calm when excited, having fun while being focused on safety, and being in the moment when under stress:

> The scenery is always different and beautiful but you are always thinking about what is going on. You're surrounded by this beautiful country. It's awesome but then you have to remember what you are doing! … You've got to keep cool and calm and collected even though you're full of excitement and adrenaline. You're always joking but you're always thinking about safety. … Things are happening but you're in the moment. You are feeling focused and in the moment, when you are experiencing a very stressful moment. … Sometimes I think I can really hurt myself by do something stupid, but I still feel safe. ... Things do slow down but you're processing everything so fast. … Despite the seriousness of the jump, it's exhilarating. It's … that's another very free feeling. … It can be absolutely terrifying, which makes it all the more fun. It's calm but it is also chaotic.

Jack described the experience of having two opposing mental or physical experiences occur at the same time while skydiving:

> There is a dual nature to skydiving as there is to life. It's like you have to balance two extremes. It is like an orgasm. There is this intensity and chaos yet it's so relaxing and calm. … It is a fascinating experience to hold the feeling that you might die, while at the same time feeling this sense of ultimate relaxation. You have these demands on your mind and body when doing the jump but at the same time you have this sense of being one with the world.

Noelia described the dialectic of experiencing calm when trying to be responsive to the skydiving activities:

> It is a dramatic experience when you are sitting in this moment of calm but you know that all around you are people and things that can increase your risk. It is about staying alert when you are very, very relaxed.

Sherry also described a juxtaposed experience of calmness with intensity:

> It is like heavenly quietness, a brief sense of being connected with nature, and then it's just fucking intense. … I like the relaxation and scenery as you are whizzing by a fucking unbelievable speeds.

Unlike the other participants in the ADHD group, Peyton and Damion did not describe a psychological dialectic experience. Peyton and Damion emphasized more of the relaxation experience of skydiving.

Non-ADHD Group. In the non-ADHD group, only two of the participants offered a slight endorsement of the Psychological Dialectic. Jason described a contrast between risk and safety:

> There is an internal conflict at times when I want to do something riskier to make the jump outcomes better but I also want to be safe. Then on the jump, you have this 45-second window in your life, where you're absolutely in control, but you're absolutely out of control.

Brice spoke of the contrast between excitement and calm:

> Skydiving is exhilarating, while having a very calming element.

Summary. There was a slight difference in perspectives between the ADHD and non-ADHD groups regarding the psychological dialectic. While the ADHD group partially endorsed the experience of a Psychological Dialectic, only a couple of participants in the non-ADHD group referenced the experience. Participants who endorsed the psychological dialectic described contradicting pairs of experiences that occurred simultaneously. These pairs of experiences included feeling relaxed while under stress or while excited, and feeling enjoyment while being attentive to risk and safety.

Chapter 5.

Discussion

The current study is intended to address two primary research questions: what psychological benefits do skydivers receive from participating in the sport and in what ways do the psychological benefits of skydiving differ between skydivers who meet the criteria for a diagnosis of ADHD and those who do not. As depicted in Figure 4.1, findings from the current study identified four subthemes common to participants from both the ADHD and non-ADHD groups: Achievement, Self-Esteem, Thrill and Adventure Seeking, and Status. Nine subthemes are identified as primarily endorsed by the ADHD group: Identity, Social Context, Risk Taking, Boredom Susceptibility, Disinhibition, Experience Seeking, Sense of Well-Being, Experience and Management of Stress, and Psychological Dialect. Two subthemes were identified as primarily endorsed by the non-ADHD group: Risk Management and Control.

5.1. Themes Common to ADHD and Non-ADHD Groups

Achievement, Self-Esteem, Thrill and Adventure Seeking, and Status were themes common to both groups of participants. The Intrinsic Motivation subthemes of Achievement and Self-Esteem were highly endorsed by participants in the ADHD and non-ADHD groups. All six of the ADHD group participants and all five of the non-ADHD group participants highly endorsed Achievement. All six of the ADHD group participants and four out of five of the non-ADHD group participants highly endorsed Self-Esteem, with the fifth non-ADHD group participant partially endorsing Self-Esteem.

In the current study, skydivers expressed an intrinsic motivation, Achievement, to master the technical knowledge and skills of the sport. The sport offers skydivers varying degrees of challenges and levels of accomplishment. Upon initially entering the sport, new skydivers must attain a basic level of competence that allows them to complete a skydive on their own. The initial achievements motivate the skydiver to continue to progress in the sport as the skydiver becomes aware of his or her ability to

overcome anxieties and to master basic skills. The demands of the sport, regardless of whether or not they are considered risky, and the growing breadth and depth of skills in the sport, create further motivation as the skydiver becomes aware of new challenges and the potential for further accomplishments. Achievements are assessed by both the skydiver and other skydivers in the community, resulting in a positive reinforcement framework that promotes the skydiver's continued pursuit of mastery. As the skydiver develops mastery, a differentiation between the skydiver and others begins to arise. As the skydiver becomes more experienced he or she begins to differentiate from novice skydivers and non-skydivers, a reward outcome that motivates further achievements. The drive for further achievements encourages the skydiver to push his or her limits and test their abilities, potentially increasing the risk taken to reach those achievements and justifying engagement in higher risk activities. These factors create an iterative achievement-challenge cycle for the progressing skydiver, which encourages continued participation in the sport.

Skydivers in the study also expressed the intrinsic motivation of Self-Esteem. A positive self-impression and self-worth arises from a skydiver's abilities to overcome fears and challenges and to achieve goals while engaged in skydiving activities. Injury and death are potential consequences of participating in skydiving and can be deterrents for many who might consider participating in the sport. Skydivers experience an increase in positive self-evaluation when they are able to forego the fear of negative consequences to focus on the application of skills or to enjoy the positive experiences of skydiving. Self-esteem is further promoted in skydivers when they face and overcome the numerous challenges, both predictable and unpredictable, that can arise. These challenges can include limits in knowledge or technical skills, group dynamics, or non-human challenges that can happen as a result of weather or gear. Self-esteem is also linked to achievement. As a skydiver develops mastery and achieves goals within the sport; they develop a greater sense of independence, autonomy, and self-sufficiency, which enhances self-esteem. The relationship between achievement and self-esteem is such that achievement fosters positive self-evaluation; in turn, increased self-esteem increases confidence for further achievements.

The Sensation Seeking subtheme of Thrill and Adventure Seeking was highly endorsed by participants in the ADHD and non-ADHD groups. Five out of six of the ADHD group participants highly endorsed Thrill and Adventure Seeking and the sixth

ADHD group participant offered a partial endorsement. All five non-ADHD group participants highly endorsed Thrill and Adventure Seeking.

Thrill and adventure seeking was expressed by skydivers in the current study in their descriptions of how the sport offered them unusual, risky, and exciting experiences. Skydivers often describe experiencing an adrenaline rush when skydiving. This concept refers to a stress experience resulting from an increased release of adrenaline. The adrenaline rush becomes an unusual experience that occurs while the skydiver is engaged in a pleasurable activity resulting in a psychological dialectic between stress and enjoyment. Skydivers also express enjoyment of engaging in physical activities where there is risk for bodily injury or death while being able to avert the potential negative consequences. Additionally, the challenge of achieving goals while processing the adrenaline rush and overcoming the risk creates an intense, exciting, and interesting experience with meaningful challenges. Combined, the unusual, risky, and exciting characteristics of skydiving make the sport a sensation rich experience.

The Extrinsic Motivation subtheme of Status was partially endorsed by participants in the ADHD and non-ADHD groups. Three out of six of the ADHD group participants highly endorsed Status while the remaining three participants of this group did not endorse Status at all. Of the non-ADHD group participants, two participants highly endorsed Status, two participants partially endorsed Status, and one participant did not endorse Status at all.

The subset of skydivers in the current study that highly or partially endorsed Status emphasized the desirability of being recognized for their achievements in a sport considered to be on the fringe of human experience. Some skydivers revel in the accolades offered by non-skydivers who recognize the skydiver's achievements as being extraordinary, unique, or impressive. Promoted status encourages ongoing participation in the sport and increased motivation to make further achievements. Additionally, the notion of status contributes to the skydiver's sense of identity.

5.2. Themes Primarily Endorsed by the ADHD Group

Identity, Social Context, Risk Taking, Boredom Susceptibility, Disinhibition, Experience Seeking, Sense of Well-Being, Experience and Management of Stress, and

Psychological Dialectic were themes more heavily endorsed by ADHD group participants. The Intrinsic Motivations subtheme of Identity was highly endorsed by all six participants in the ADHD group. Only one non-ADHD group participant partially endorsed the Identity subtheme.

Skydivers in the current study who endorsed the Identity subtheme described being a skydiver as an inherent and unique part of who they were as an individual. These skydivers expressed great pride in being a skydiver and they could not imagine who they would become if they were not a skydiver. Skydiving was described as an aspect of the self that felt more natural compared to the unnatural feeling of maintaining a façade to fit into the rest of society. The difference in degree of endorsement of Identity between the ADHD and non-ADHD groups was quite notable. The ADHD group participants described skydiving as an irreplaceable part of who they were. The non-ADHD group participants reported skydiving as a satisfying but replaceable experience much akin to a hobby or interest.

The Extrinsic Motivation subtheme of Social Context was more heavily endorsed by ADHD group participants than non-ADHD group participants. All six ADHD group participants heavily endorsed the subtheme of Social Context. Two of the five non-ADHD group participants heavily endorsed and three of the five non-ADHD group participants partially endorsed Social Context.

The social environment of skydiving creates a sense of belonging for the skydivers in the current study that endorsed the subtheme of Social Context. The skydiving community emphasizes a sense of acceptance and promotes diversity. The skydivers that endorsed Social Context consider the skydiving community a family that involves deep, meaningful relationships in a group where prejudice and criticism is less tolerated. The skydivers that endorse this subtheme describe the Social Context as fulfilling a human need that promotes value of self within relatedness with others. One difference between the ADHD and non-ADHD groups' endorsements of Social Context is that the non-ADHD group participants emphasized that the relationships with other skydivers were more instrumental in nature. Non-ADHD group participants highlighted the functional benefits (e.g., increasing non-skydiving opportunities) of the relationships with other skydivers. Non-ADHD group participants also described some difficulty initially fitting in with the skydiving community, which may be a reflection of the

instrumental ties they attempt to develop with other skydivers as opposed to the expressive ties that the ADHD group participants describe.

The Risk Experience subtheme of Risk Taking was more heavily endorsed by ADHD group participants than non-ADHD group participants. All six ADHD group participants heavily endorsed the subtheme of Risk Taking. Three of the five non-ADHD group participants partially endorsed Risk Taking.

Skydivers who endorsed the Risk Taking subtheme acknowledged the sport of skydiving included inherent undesirable consequences such as injury and death. They described being motivated in the sport to break from their normal level of comfort to encounter the unknown when they are not entirely in control. Skydivers who endorsed Risk Taking described the enjoyment of pushing limits and using risk to promote the adrenaline rush. These skydivers also described risk taking as inducing an appreciation for the sport and for life. Those who endorsed Risk Taking also emphasized that taking risks was better than the alternative of not participating at all. In contrast to the ADHD group, participants in the non-ADHD group spoke more of taking calculated risks and minimizing and avoiding risk through risk management and control strategies. The non-ADHD group participants appeared to decrease the extent of risk in the sport as a functioning of their perceived sense of control.

The Sensation Seeking subthemes of Boredom Susceptibility, Disinhibition, and Experience Seeking were more heavily endorsed by ADHD group participants than non-ADHD group participants. Of the six ADHD group participants, three participants heavily endorsed and one participant partially endorsed Boredom Susceptibility, three participants heavily endorsed and one participant partially endorsed Disinhibition, and five participants heavily endorsed Experience Seeking. None of the five non-ADHD group participants endorsed the Boredom Susceptibility, Disinhibition, or Experience Seeking subthemes.

Participants in the ADHD group who endorsed the subthemes of Boredom Susceptibility, Disinhibition, and Experience Seeking described skydiving as an opportunity to gain positive feeling, unique experiences that were challenging and intense. Skydivers who endorsed the Boredom Susceptibility subtheme described how the sport of skydiving is stimulating and inspiring. These skydivers also reported that skydiving allowed them to avert boring and repetitive aspects of their non-skydiving lives.

Skydivers who endorsed the Disinhibition subtheme reported gaining stimulation by engaging in the party atmosphere of the skydiving community and by engaging in non-conforming lifestyle choices. Skydivers who endorsed the Experience Seeking subtheme described direct and indirect opportunities for physical and mental experiences that were unique, intense, or unexplainable.

The Psychological Experience subtheme of Sense of Well-Being was heavily endorsed by ADHD group participants, and partially endorsed by non-ADHD group participants. In the ADHD group, four out of six participants heavily endorsed and two out of six participants partially endorsed Sense of Well-Being. In the non-ADHD group, one out of five participants heavily endorsed and four out of five participants partially endorsed Sense of Well-Being.

Skydivers in the current study who expressed a sense of well-being associated with skydiving described a change of emotional state, a reduction of stress, and a mindful experience. The skydiving experience provides the opportunity to engage in an activity that the skydiver finds enjoyable thus making their emotional state more positive. This positive emotional state in combination with the need to attend to the tasks involved in skydiving permits the skydiver to distract from the other non-skydiving events in their day, which contributes to a sense of reduction in stress. Skydivers who endorse a sense of well-being also describe how the intensity of a skydive, as well as the experience of freedom, creates a mental state in which the skydiver's awareness is on the present moment while they enjoy the experience. The ADHD group participants also highlighted how skydiving alleviates a number of attention related difficulties. The hyperfocus needed in skydiving combined with the intense emotional experience appears to reduce racing thoughts and anxiety and increase the attentional abilities of these individuals.

The Psychological Experience subtheme of Experience and Management of Stress was heavily endorsed by ADHD group participants. Five out of six of the ADHD group participants heavily endorsed the subtheme of Experience and Management of Stress. There was only one of the five non-ADHD group participants who offered a partial endorsement of the Experience and Management of Stress.

The nature of skydiving is such that skydivers can choose to put themselves in varying degrees of stressful experiences depending on the level of risk they are willing to take. For skydivers who endorsed the Experience and Management of Stress

subtheme, their intentional placement in stress and the subsequent resolution of that stress results in a feeling of accomplishment. Skydivers undergo physical and mental discomfort when engaging in the sport and pushing limits. The skydivers that endorsed this subtheme enjoyed the challenge of finding physical (e.g., application of skill) and mental (e.g., overcoming fear) solutions for overcoming the stress. The ADHD group participants appear to endorse the Experience and Management of Stress as a function of their preference for risk taking. Non-ADHD group participants endorse the Experience and Management of Stress less which might reflect their desire to manage and control or minimize risk.

The Psychological Experience subtheme of Psychological Dialectic was more heavily endorsed by the ADHD group participants compared to the non-ADHD group participants. Of the six ADHD group participants, two participants heavily endorsed and two participants partially endorsed the Psychological Dialectic subtheme. Of the five non-ADHD group participants, two participants partially endorsed the Psychological Dialectic subtheme.

In skydiving, a psychological dialectic occurs when the skydiver experiences two oscillating and opposite emotions or when there are polarized, simultaneous experiences. Skydivers who endorsed the Psychological Dialectic subtheme described an intense enjoyment of the skydiving experience along with an experience of stress or intensity. Many of these skydivers also described polarized, simultaneous experiences that typically mapped onto divergent emotional experiences (e.g., appeal of natural scenery versus the stress of focus on application of skills). Despite these vacillating emotional states, the experience appears to sharply regulate the emotional experience and, in essence, hones a skydiver's emotions to two experienced emotional states.

5.3. Themes Primarily Endorsed by the Non-ADHD Group

Risk Management and control were themes more heavily endorsed by participants of the non-ADHD group. The Risk Experience subtheme of Risk Management was partially endorsed by participants in the ADHD group and highly endorsed by participants in the non-ADHD group. Five out of six participants in the ADHD group partially endorsed Risk Management. In the non-ADHD group, four out of

five participants highly endorsed Risk Management and one participant partially endorsed Risk Management.

Skydivers in the current study described constantly assessing various factors to determine whether or not to participate in any particular skydive. Three factors that were prominent in the evaluation were risk from others, risk that could be minimized by specialized equipment, and risk from the planned skydive activities. For each of these factors, skydivers from both groups appeared to institute a cost-benefit analysis and constructed procedures to minimize the potential consequences of those risks. If the risk from others was too great, the skydivers would choose not to skydive with particularly high-risk individuals. To decrease the level of risk, skydivers often ensured the proper inclusion and functioning of redundant safety gear. If the planned activities appeared too risky, the plans were modified or the skydiver would choose not to participate in the skydive. The different degree of endorsement of Control between the ADHD and non-ADHD groups appeared to be a function of the threshold for risk held by participants amongst each group. The non-ADHD group participants described more concern for the impact of consequences of skydiving on other aspects of their life and emphasized a need to eliminate or avoid risk in skydiving. The ADHD group participants appeared to have a higher level of risk tolerance and tended to emphasize the need for a higher degree of risk taking to make the skydive enjoyable. Participants in the ADHD group were also more likely to jump with other skydivers, who had less experience in the sport or were known to take greater risks. The ADHD group participants also endorsed the use of less safety equipment and to engage in skydiving activities that involved more risk taking.

The Risk Experience subtheme of Control was also more heavily endorsed by the non-ADHD group. Out of the six ADHD group participants, one participant highly endorsed and two participants partially endorsed Control. Of the five non-ADHD group participants, two participants highly endorsed and two participants partially endorsed Control.

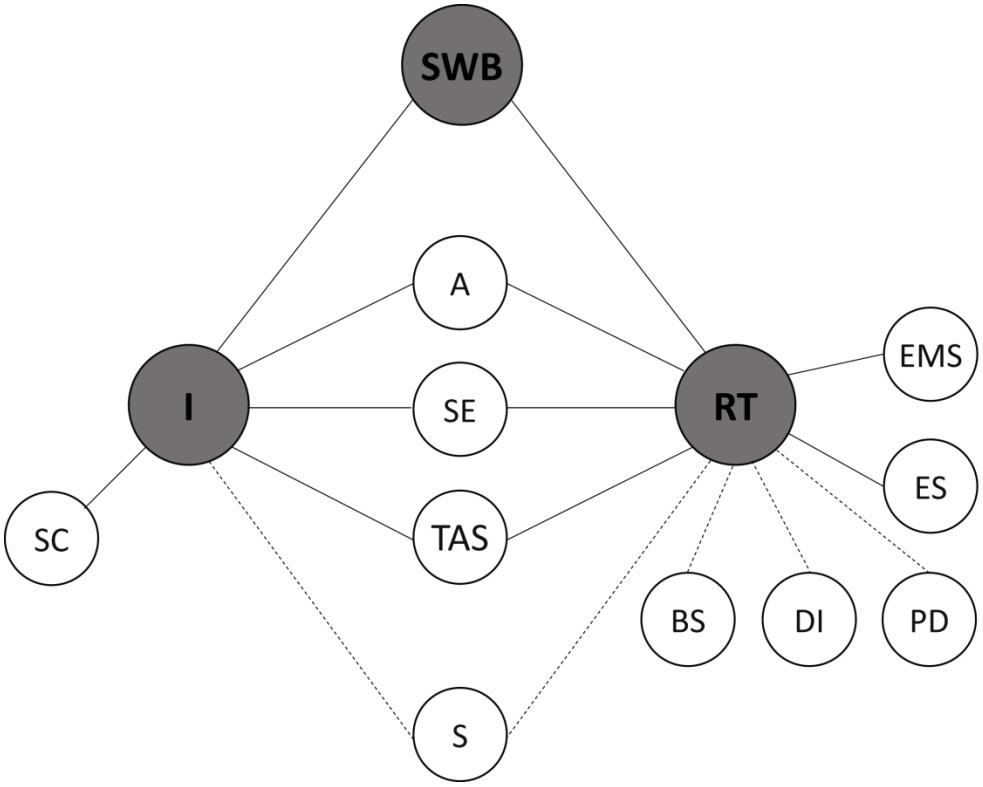
Control refers to a skydiver's ability to deliberately influence or direct events where increased risk is imminent. Skydivers in the current study described needing to overcome an emotional response and implement a logical or rational response in times of greater stress while skydiving. To master this response, skydivers rely on training,

equipment, and the environmental conditions (e.g., weather, other skydivers) at the time when the response is needed. Skydivers are trained on emergency procedures for various scenarios that might arise and they have access to specialized equipment, if equipped, to address some scenarios. Also, skydivers are trained to evaluate and make use of environmental conditions in handling emergency situations. As with the Risk Management subtheme, there is a slightly different nature of endorsement of the Control subtheme between the ADHD and non-ADHD groups. This difference in endorsement appeared to be a function of the threshold for risk and the extent of risk management. The non-ADHD group described a more extensive preparation for handling risk scenarios that included a determination to thoroughly integrate knowledge, skills, techniques, and plans. The ADHD group participants did not emphasize the same depth of preparation as did the non-ADHD group participants. Non-ADHD group participants were focused on being as prepared as possible for all emergency scenarios whereas the ADHD group participants exuded a belief that they could trust their abilities acquired through the minimal training requirements and their previous experience.

5.4. Interpretations of within Group Themes

In addition to the constellation of themes and subthemes endorsed by the ADHD and non-ADHD groups differing considerably, each group placed more or less emphasis on various collections of subthemes. ADHD group participants placed the greatest emphasis on the subthemes of Identity, Achievement, Self-Esteem, Social Context, Risk Taking, Experience Seeking, Thrill and Adventure Seeking, Sense of Well-Being, and Experience and Management of Stress. The ADHD group participants also endorsed, but with a lesser emphasis, the subthemes of Status, Boredom Susceptibility, Disinhibition, and Psychological Dialectic. Figure 5.1 depicts a subtheme map for the ADHD group.

Figure 5.1. ADHD Group Integrated Subtheme Map



Note. Solid lines represent a stronger relationship while dashed lines represent a weaker relationship. Achievement (A), Boredom Susceptibility (BS), Disinhibition (DIS), Experience and Management of Stress (EMS), Experience Seeking (ES), Identity (I), Psychological Dialectic (PD), Risk Taking (RT), Self-Esteem (SE), Sense of Well-Being (SWB), Social Context (SC), Status (S), Thrill and Adventure Seeking (TAS).

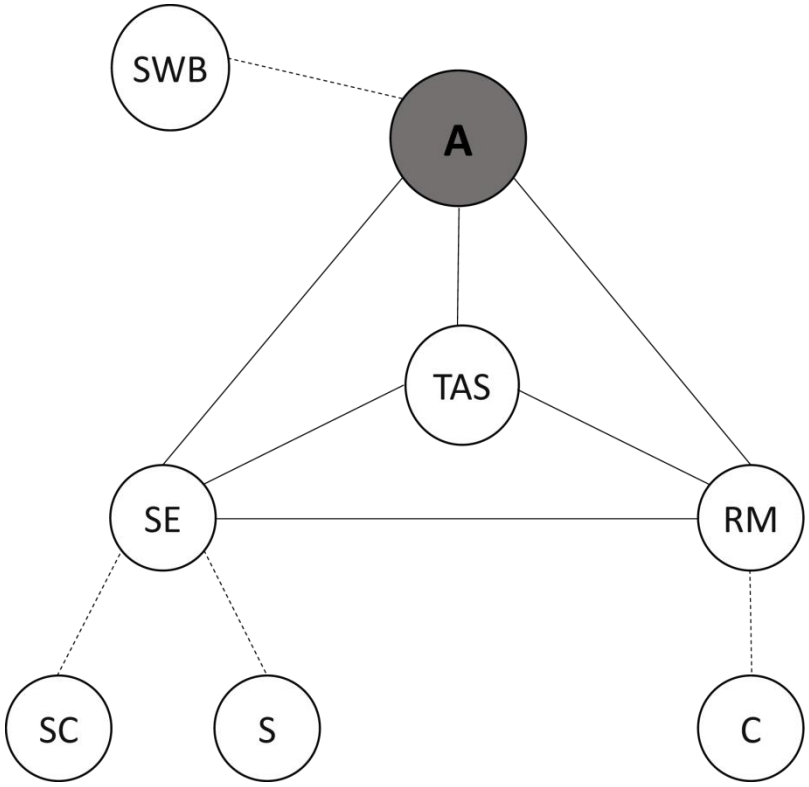
The motivation for ADHD group participants to engage in the sport of skydiving appears to be driven by the desire to seek a sense of well-being. Well-being arises for these participants when they feel a greater sense of identity and when they are engaged in risk-taking activities. A sense of identity is fostered by achievement and self-esteem. The skydiver is able to acquire technical knowledge and skills, push limits, and set and accomplish goals. It is through facing and overcoming challenges in the sport that the skydiver develops an intrinsic sense of accomplishment, which leads to a greater sense of self-worth. A sense of identity for the ADHD group participants also appears to be influenced by the skydiver's thrill and adventure seeking. These individuals see themselves as being accomplished individuals in the engagement in thrilling and adventurous activities. The ADHD group participants' sense of identity is further supported by social context and, to a much lesser extent, by the notion of status.

Recognition of skydiving accomplishments by peers and non-skydivers bolsters the skydiver's identity as a thrill seeker.

Risk taking, for the ADHD group participants, creates new and more demanding challenges as the skydiver progresses in the sport. Risk taking offers these skydivers the opportunity to intentionally engage in stressful activities that include the potential consequences of serious injury or death. Overcoming these challenges contributes to a greater sense of achievement and self-esteem, which in turn promotes a greater sense of identity. Risk taking also helps the skydiver satiate the drive for thrilling, adventurous, and unusual experiences. For the ADHD group participants, risk taking is a highly pleasurable activity as it offers unique physical and mental sensations. The psychological dialectic is one of these unique experiences that results from risk taking, offering the skydiver the opportunity to experience polarized mental or physical sensations simultaneously. There is also some support that skydiving satisfies other sensation-seeking drives. For some of the ADHD group participants, skydiving reduces boredom and creates opportunity for engagement in uninhibited activities. Status also plays a limited role in promoting risk taking as non-skydivers recognize the uniqueness of the skydiver taking on the risks in the sport.

Non-ADHD group participants placed the greatest emphasis on the subthemes of Achievement, Self-Esteem, Risk Management, and Thrill and Adventure Seeking. The non-ADHD group participants also endorsed, but with a lesser emphasis, the subthemes of Social Context, Status, Control, and Sense of Well-Being. Figure 5.2 depicts a subtheme map for the ADHD group.

Figure 5.2. Non-ADHD Group Integrated Subtheme Map



Note. Solid lines represent a stronger relationship while dashed lines represent a weaker relationship. Achievement (A), Control (C), Risk Management (RM), Self-Esteem (SE), Sense of Well-Being (SWB), Social Context (SC), Status (S), Thrill and Adventure Seeking (TAS).

Non-ADHD group participants appeared to be engaged in skydiving to satisfy a need for achievement. A sense of achievement results from a skydiver's engagement in a thrilling and adventurous sport that requires the acquisition of a significant amount of technical knowledge and skill to perform the sport safely. Non-ADHD group participants expend great effort in acquiring knowledge and skill with the intent to eliminate, avoid, or minimize risk. Successful risk management, and to a lesser extent the ability to direct events when faced with contextual-based risk, within the sport fosters a sense of achievement. The sense of achievement is reinforced by positive self-esteem which, similarly to the ADHD group participants, develops as a result of the skydiver successfully overcoming challenges in the sport. Self-esteem is also enhanced, to lesser extent, by social context and status when the skydiver is perceived by peers and non-skydivers as someone who has mastered aspects of the sport. Non-ADHD group

participants do perceive a sense of well-being as a result of their accomplishments which is partially fueled by the sense of achievement.

The achievement focus of non-ADHD group participants versus the Identity focus of ADHD group participants results in a distinctly different perspective on the experience of participating in the sport from each group. The ADHD group participants perceive their participation in the sport as a unique and irreplaceable core feature of their identity. The non-ADHD group participants perceive their participation in the sport as an achievement that can easily be replaced when a new, more stimulating goal arises.

5.4.1. ADHD Symptomatology

An interesting observation, one paramount to the goals of this study, are the endorsements by ADHD group participants suggesting that participation in the sport of skydiving at least partial alleviates the participants' ADHD symptomatology. Matthies et al. (2012) believed that risk taking was a core characteristic of individuals with ADHD and that these individuals engage in risky behaviours for the rewarding properties and to increase positive affect. The current study supports the findings of Matthies et al. (2012) and further suggests that risky behaviours, specifically skydiving, reduce or eliminate the adverse symptomatology of ADHD while participants are engaged in the sport and, for some participants, for a period of time after participation lasting up to a few days.

The DSM-5 (APA, 2013) describes ADHD in three primary constellations of symptoms: inattention, hyperactivity, and impulsivity. Biederman et al. (2000) and Buitelaar et al. (2010) have found that in adults with ADHD inattention is the primary presentation rather than hyperactivity and impulsivity. The behavioural manifestations in individuals with ADHD include wandering off task, lacking persistence, difficulties in focusing, and being disorganized (APA, 2013). In the current study, all of the ADHD group participants endorsed a significant reduction of inattention-related symptoms. The ADHD group participants emphasized an increased ability to attend to details and avoid careless mistakes, sustain attention through all stages of a skydive (i.e., planning, physical preparation, mental preparation, and execution of plans including flight to altitude, exit, freefall exercises, canopy control, and landing), establish goals and execute detailed plans to achieve those goals, keep organized, sustain mental effort over time, and avoid distraction from extraneous stimuli. Two of the most consistent

reports from ADHD group participants was an increase in attentional span and a decrease in racing thoughts. Many of the ADHD participants also noted a significant reduction in secondary anxieties that typically resulted from the onset of adverse ADHD symptoms. These participants described feelings of calm, slowing, and relaxation. Hyperactivity and impulsivity were not suggested by either group in the current study.

An additional observation in the current study was that the experience and management of stress was highly endorsed by ADHD group participants but not by non-ADHD group participants. This finding suggests that the intense emotional experience of risk taking in skydiving may activate the ADHD group participants to hyperfocus on the details of the skydiving activities. This state of hyperfocus permits the ADHD group participants to moderate the emotional experience which, in turn, has a therapeutic effect in reducing anxiety, increasing attention, and reducing racing thoughts. The risk taking activity forms a psychological eustress, or beneficial stress (Seyle, 1974, p. 171). The eustress is a positive cognitive response to stress that leads to feelings of fulfillment or positive affect (Lazarus, 1966; Nelson & Simmons, 2004).

5.4.2. ADHD, Risk Taking, and Sensation Seeking

Previous research regarding the possible links between risk taking, ADHD, and sensation seeking has been largely inconclusive (Farmer & Peterson, 1995; Robbins, 1966; Satterfield, 1987; Shaw & Brown, 1990, Shaw & Giambra, 1993; Zentall & Mayer, 1987). Garland (1999) and White (1999) proposed that ADHD was highly associated with both sensation-seeking personality traits and risk-taking behaviours, suggesting that individuals with ADHD seek stimulation and may go to extreme means to satisfy the need for stimulation. Individuals with ADHD are often characterized as sensation seekers and risk takers as a result of a combination of inattention and impulsiveness (Garland, 1999; Zuckerman, 1994).

The current study is unable to provide conclusive evidence of the relationships between ADHD, risk taking, and sensation seeking but the findings do provide some insight into how the relationships may be structured. None of the participants in the current study endorsed impulsiveness as a characteristic of their involvement in the sport suggesting that risk taking via skydiving is intentional and planned. All of the participants endorsed the sensation-seeking trait of Thrill and Adventure Seeking

suggesting that the seeking of unusual sensations via exciting and risky sporting activities is a motivator for all skydiving participants. None of the non-ADHD group participants endorsed Boredom Susceptibility, Disinhibition, or Experience Seeking suggesting that for non-ADHD participants the association between sensation seeking and risk taking is driven solely by the participant's desire for unusual sensations found in certain sporting activities (i.e., thrill and adventure). Within the ADHD group there was a heavy endorsement of Experience Seeking suggesting these participants may be motivated to participate in skydiving to satisfy their desire for sensations and new experiences of the mind and senses. This finding aligns well with the cardinal cognitive features of inattention in ADHD and suggests that Experience Seeking may be involved in the link between ADHD and risk-taking behaviours. Boredom Susceptibility and Disinhibition were only endorsed by approximately half of the ADHD group participants. The inconsistent endorsement suggests that Boredom Susceptibility and Disinhibition are not primary motivators for involvement in skydiving by ADHD participants as a whole.

In summary, there appears to be a greater link between sensation seeking and risk taking for ADHD group participants compared to non-ADHD group participants. However, caution is warranted when interpreting this finding given the ongoing debate regarding the validity of the SSS-V (Ball et al., 1983; Birenbaum & Montag, 1987; Manna et al., 2013; Ridgeway & Russell, 1980; Roberti et al., 2003; Rowland & Franken, 1986; Salvadori, Lazzeroni, & Primi, 2007; Zuckerman, 1994).

5.5. Cultural and Historical Perspectives of Risk Taking

The hermeneutic perspective assumes that the motivations for a phenomenon arise within the "context of historical traditions and sociocultural practices" (Sugarman & Martin, 2005, p. 259). As described in Chapter 1 (1.2 Theories of Risk Taking and 1.3. Extreme Sports), theoretical perspectives on extreme sport athletes have assumed that engagement in these sports is motivated by risk-taking (Baker & Simon, 2002; Brymer, 2002; Fave, Bassi, & Massimini, 2003; Olivier, 2006; Pizam, Reichel, & Uriely, 2002; Rinehart, 2000; Self, Henry, Findley, & Reilly, 2007) despite that these judgments may not reflect participants' lived experience (Brymer & Oades, 2009; Willig, 2008). Culturally, risk is a construct that is derived from society's aversion to uncertainty and

lack of control (Davidson, 2008, Fairlie, 1989). As a result of this aversion, risk has become associated with a negative connotation (Davidson, 2008). Society's preoccupation with risk avoidance and reduction has the unfortunate consequence of deeming anything perceived as risky as being "instantly labelled undesirable" (Brymer, 2010, p. 220). Within this societal frame, skydiving is considered risky because of the chance of serious injury or death and it is, thus, assumed to be an undesirable activity (Elmes & Barry, 1999; Pain & Pain, 2005; Self et al., 2007). Reinforcing this perspective are studies that suggest that risk taking in extreme sports is a way of deviant acting out (Self et al., 2007), satisfying a need for novelty, intensity, or unpredictability (Farley, 1991; Rossi & Cereatti, 1993; Schroth, 1995), or as being pathological and unhealthy (Elmes & Barry, 1999). In contrast, studies of extreme sport participants' lived experiences suggest that there is more to the motivations for participating in such sports that goes beyond personality traits, socialisation processes, and previous experiences (Celsi et al., 1993; Olgilvie, 1974; Slanger & Rudestam, 1997). Extreme sports participants can be thoughtful, intentional, well trained, and well prepared (Pain & Pain, 2005), be absent of impulsivity (Ogilvie, 1974), and not be inclined to search for uncertainty or uncontrollability (Celsi et al., 1993; Pain & Pain, 2005).

The current study highlights the perceived incongruence between the societal perspective of risk taking and the reported lived experiences of participants. The results of this study suggest that there are a variety of motivations for participating in skydiving despite the negative connotations that are often associated with the sport. While a subset of the study participants (i.e., ADHD group) expressed risk taking as one of the primary motivators, a subset did not express risk taking (i.e., non-ADHD group). In fact, both groups and, to some extent, every participant expressed a unique heterogeneous combination of motivators for their participation in skydiving.

The reality is that there continues to be an increase in participation in extreme sports with every participant having a personal collection of motivational forces driving their participation (America Sports Data, 2002; Brymer, 2010; Puchan, 2004). The construct of risk has always been a part of life. People have engaged in risky activities which have been motivated by positive (e.g., pioneering, exploration, science) and negative (e.g., deviance, power, war) forces. In the past few decades, lack of certainty and the need to control has associated risk with a negative connotation. However, the current study suggests that participation in an extreme sport, specifically skydiving, is not

simply about a desire to take risks but instead is more a function of many motivational factors that may be overlooked because of the focus on the negative aspect of risk taking. These findings suggest that the societal definition of the risk construct is inaccurate and primed for reconceptualization.

5.6. Summary

In following an IPA research design, the researcher completed an in-depth exploration of how participants comprehend the personal meaning of their experience while the participants are engaged in the process of interpreting their own experience of a specific activity. The current phenomenological study was aimed at capturing how individuals make sense of their experience of risk taking in the sport of skydiving and comparing those experiences between skydivers with and without ADHD. The study had the potential to reveal psychological benefits that risk taking may afford to individuals experiencing adverse symptomatology. Data was collected via a series of semi-structured interviews, and then analyzed in a co-constructive process between the researcher and the participants. Synthesis of the data resulted in the identification of emergent themes. A multi-perspectival approach was used which permitted the exploration of commonalities and differences in the sensed experience of two groups, namely skydivers with and without ADHD.

Findings in the current study identified various themes that were common or unique to the two study groups. Achievement, Self-Esteem, Thrill and Adventure Seeking, and Status were themes common to both the ADHD and non-ADHD group participants. Identity, Social Context, Risk Taking, Boredom Susceptibility, Disinhibition, Experience Seeking, Sense of Well-Being, Experience and Management of Stress, and Psychological Dialectic were themes more heavily endorsed by ADHD group participants. Risk Management and Control were themes more heavily endorsed by participants of the non-ADHD group.

While ADHD group participants appeared motivated to participate in the sport of skydiving by the desire to seek a sense of well-being, non-ADHD group participants appeared more motivated by a sense of achievement. ADHD group participants integrated the experience of risk taking while engaged in a thrilling and adventurous

sport into their identity, which resulted in a greater sense of well-being. Risk taking and identity integration is intrinsically driven for the ADHD group participants as successfully pushing mental and physical limits promotes self-worth and results in unique achievements. Non-ADHD group participants were primarily goal driven in their participation in the sport. Growing an extensive set of technical knowledge and skills permits the non-ADHD group participants to more effectively eliminate or avoid risk which, in turn, allows them to accomplish further goals within the sport. These notable thematic differences suggest that skydiving is primarily a replaceable hobby for the non-ADHD participants while for the ADHD participants skydiving is an irreplaceable aspect of how they define themselves.

An added benefit of the current study is that it employed the novel multi-perspectival IPA design. The IPA method involves the development of a systematic, rigorous, and comprehensive account of themes within the data for each participant. While mono-perspectival studies examine the sensed experience amongst participants of a homogenous group, multi-perspectival studies compare and contrast themes amongst participants who are homogenous with the exception of a particular characteristic under study. In the current study, participants were homogenous with the exception that one group met the diagnostic criteria for ADHD and one group did not. This design assisted in the identification of potential differences in the themes endorsed by participants from the two groups under study.

Overall, the current study's findings aligned with the results of previous qualitative studies of risk taking. Aspects of Intrinsic Motivation, Extrinsic Motivation, Risk Experience, Sensation Seeking, and Psychological Experience themes were endorsed by participant skydivers. The current findings further substantiate previous findings and offer encouragement regarding the validity of qualitative research approaches. Additionally, the current study provided novel results by refining the understanding of how motivations for engagement in risk taking may differ for subgroups of the skydiver population. Specifically, this study found that motivations for participating in the sport differed for skydivers with and without a diagnosis of ADHD. The findings of this study challenge the negative stereotype assigned to risk taking including the assumptions that psychological health requires physical safety and that risk taking is a sign of psychopathology. Behaviours that have often been described as reckless or

impulsive in the literature on sensation seeking and risk taking appear to have a psychological benefit for some individuals.

Fostering a sense of well-being through the integration of risk taking into one's identity appears therapeutic for skydivers with ADHD. Risk taking offers these individuals a way to feel competent and capable. These skydivers gain emotional resilience, confidence, acceptance, engagement, happiness, pride, and accomplishment. They engage in ongoing learning, face fears, and experience psychological peace. Despite the potential negative consequences, risk taking dramatically improves the lives of some individuals.

5.7. Limitations and Future Directions

There are several limitations to the study. First, the participants recruited for the study did not accurately represent the diversity of the skydiving community. While the skydiving community has a significant cultural diversity, the IPA method requires strict adherence to homogeneity in the participant sample (Smith et al., 2009). The findings from the study are limited in that they cannot be generalized to the skydiving community as a whole. On a related note, the second limitation is that the participants do not represent the diversity of risk-taking behaviours or psychopathologies that could be studied. The result is that the findings cannot be generalized to the larger population of risk takers or other psychopathologies. To address these first two limitations, future studies should consider designs that compare risk-taking experiences and psychological benefits of risk taking across different samples of risk takers with varied presenting psychopathologies.

A third limitation is the nature of qualitative designs, generally, and, specifically, the IPA approach. Smith et al. (2009) emphasize that the nature of IPA is non-prescriptive and adaptable. This flexibility can be concerning to researchers who come from more rigid, experimentation, random control trial, and quantitatively focused approaches. Additionally, in IPA studies the analysis is based on an interpretation by a single researcher or team who must attempt to *bracket* their own personal experience, knowledge, and understanding while conducting the analysis. This can raise concerns regarding the validity of findings. While strict adherence to IPA principles in the study

increase confidence in the findings, future research may consider replicating this study using quantitative approaches to provide additional support to the findings.

Despite the limitations, this study provides insight into the potential association between risk taking and psychological benefits. A more thorough understanding of these potential associations will inform and improve existing research, and help refine theories of risk taking. The current study encourages new areas of research such as:

- Which symptoms or disorders respond positively to risk taking? What are the specific psychological benefits that risk taking provides?
- Are there differences in the psychological benefits offered by different types of risks? Given the inherent negative outcomes of risk taking, at what point do the consequences of risk taking surpass the benefits?
- Is there an optimal level of risk taking?
- How could the psychological benefits of risk taking inform interventions?
- How does the cultural and historical connotations of risk taking influence the participation in and development of extreme sports?

The current study also provides another example of a multi-perspectival IPA. As IPA is a rather new and developing qualitative approach, the extension and application of its methods to new studies will refine its effectiveness in capturing the essence of participants' sensed experience. Multi-perspectival approaches offer a richer exploration of the subjective lived experiences of individuals, which provides more comprehensive understanding of the phenomenon under study.

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Appendix A.

Interview Guide

INTERVIEW GUIDE:

Psychological Function of Skydiving

Purpose of the Interview

The purpose of the interview is to explore the psychological function that skydiving plays in the lives of individuals who actively participate in the sport. As a secondary exploration, the interview investigates in what ways the psychological functions of skydiving may differ between skydivers who meet the criteria for a diagnosis of ADHD and those who do not.

Structure of the Interview

The interview will cover the following topics:

Interview 1

1. ADHD screening
2. Demographics
3. The individual's life experiences that led up to their involvement in skydiving

Interview 2

4. The individual's activity within the skydiving community
5. The individual's description of his experience of skydiving

Interview 3

6. The relevance of the individual's skydiving activities to other areas of his life

Wording and sequencing of questions may vary based on participants' responses. All topics must be included in each interview. The interviewer may select questions from the guide that best fit the respondent's answers, add additional questions that may further inform the inquiry, and exclude questions if the participant's previous responses have provided sufficient information.

PART 1: ADHD Screening

Please answer the following questions by rating yourself on a scale of Never (0), Rarely (1), Sometimes (2), Often (3), or Very Often (4). As you answer each question indicate which descriptor best describes how you have felt and conducted yourself over the past six months.

1. How often do you have trouble wrapping up the final details of a project, once the challenging parts have been done?	0	1	2	3	4
2. How often do you have difficulty getting things in order when you have to do a task that requires organization?	0	1	2	3	4
3. How often do you have problems remembering appointments or obligations?	0	1	2	3	4
4. When you have a task that requires a lot of thought, how often do you avoid or delay getting started?	0	1	2	3	4
5. How often do you fidget or squirm with your hands or feet when you have to sit down for a long time?	0	1	2	3	4
6. How often do you feel overly active and compelled to do things, like you were driven by a motor?	0	1	2	3	4

Note: Four or more marks in the shaded values suggest symptoms highly consistent with ADHD in adults.

PART 2: Demographics

1. What is your date of birth?
2. Where were you born? Raised?
3. What is your ethnic background?
4. What is your current marital status? Do you have children? If applicable, what ages?
5. What is the highest grade or degree you have completed?
6. What is your employment status? If applicable, what is your occupation?
7. What is your total individual annual income?

PART 3: Life Experiences

I would like to learn more about who you are as a person and your life experiences.

1. How would you describe yourself as a person?

   Additional prompt: How do you feel about yourself?

2. How do you think other people see you?

   Additional prompt: For example, your partner, family, friends, or school/work colleagues?

3. What was your family life like when you were a child?

   Additional prompts: What kinds of things did you enjoy doing with your family? What were your parents like? If you had siblings, what were they like? What values did your parents promote in your family? What kinds of things did you get in trouble for?

4. How would you describe your school experience?

   Additional prompts: What grade did you complete? What did you like (dislike) about school? What kinds of activities (e.g., clubs, sports) did you participate in? How would your teachers describe you? What kinds of things did you get in trouble for? Did you ever have to repeat a grade? Were you ever expelled or suspended?

5. How would you describe your work experience?

   Additional prompts: How many jobs have you held? What kind of jobs have you held? How long is your average/shortest/longest employment? What is your preferred work environment? Have you ever been fired or quit your job? If so, how many times?

6. How would you describe your romantic relationships?

   Additional prompts: Can you describe your first romantic relationship? If applicable, can you describe your current romantic relationship? How many serious romantic relationships have you been in? How long is your average/shortest/longest relationship? How would you describe your ideal romantic partner?

7. How would you describe the kinds of hobbies and activities you prefer to participate in?

   Additional prompts: What makes a hobby or activity interesting or fun? How would you describe the kinds of hobbies and activities you would prefer not to participate in? What other sports do you regularly participate in?

8. What sorts of things are important to you in your life?

   Additional prompts: What are your goals in life? What values are most important to you? What kinds your choices in life decisions (e.g., work, school, residence, partners)

9. Do you have any personal views about life or the world that you would be willing to share?

PART 4: Skydiving Community

I would like to learn more about your experience as a member of the skydiving community. Later I will be asking you questions about the actual experience of skydiving.

1. How did you come to be a skydiver?

   Additional prompts: How did you learn about skydiving? How did you first decide to try skydiving? How old were you when you made your first jump? How many jumps do you make on average each year? How many jumps have you completed in total?

2. How would you describe your experience being a member of the skydiving community?

   Additional prompts: What have you enjoyed (disliked) about your experience in the community? What benefits does being a member of the community bring you?

3. How would you describe the relationships you have with other members of the skydiving community?

   Additional prompt: How are your friendships with other skydivers different than your friendships with non-skydivers?

4. What other opportunities have you been exposed to as a result of being a member of the skydiving community?

   Additional prompts: For example, other sports, travel, or employment?

5. To what extent does your involvement in the skydiving community integrate with other aspects of your life?

   Additional prompts: In what ways do you integrate your skydiver and non-skydiver friends? In what ways do you express your experience in the skydiving community to others that are not part of the skydiving community?

6. What would your life be like if you were no longer a member of the skydiving community?

   Additional prompts: In what ways would you be intellectually, emotionally, or psychologically impacted? How would you respond to no longer being part of the skydiving community?

7. How do you react to the news of an injury or death of a fellow skydiver?

   Additional prompts: What do you think about when you learn of an accident? How do you feel?

8. How do you respond to someone who claims that the sport of skydiving is risky or unsafe?

   Additional prompts: In what ways do you feel skydiving is risky or unsafe? How do you justify your participating in skydiving?

PART 5: Skydiving Experience

I would like to learn more about your experience of skydiving.

1. How would you describe the experience of skydiving?

   Additional prompts: What happens to you? How do you feel?

2. How would you describe the experience of planning a skydive (e.g., organizing what you will do)?

   Additional prompt: What do you think about? How do you feel?

3. How would you describe the experience of preparing to board the plane for a skydive?

   Additional prompt: What do you think about? How do you feel?

4. How would you describe the experience of ascending to altitude in the plane?

   Additional prompt: What do you think about? How do you feel?

5. How would you describe the experience of exiting the plane?

   Additional prompt: What do you think about? How do you feel?

6. How would you describe the experience of freefall?

   Additional prompt: What do you think about? How do you feel?

7. How would you describe the experience of flight under canopy?

   Additional prompt: What do you think about? How do you feel?

8. How would you describe the experience of landing?

   Additional prompt: What do you think about? How do you feel?

9. How does completing a skydive affect you?

   Additional prompt: What do you think about? How do you feel?

10. Can you describe your most enjoyable skydive?

    Additional prompts: What factors contributed to making the skydive enjoyable? What was most memorable about this skydive?

11. Can you describe your least enjoyable skydive?

    Additional prompts: What factors contributed to making the skydive unenjoyable? What was most memorable about this skydive?

PART 6: Relevance to Other Areas of Life

I would like to learn more about the role skydiving has in your life.

8. In what ways has being a skydiver changed the way you think or feel about yourself?

   Additional prompts: What significance does being a skydiver have? Do you see yourself differently now compared to before you became a skydiver?

9. In what ways has being a skydiver been helpful or useful to you?

   Additional prompts: Have there been any intellectual or emotional benefits? In what ways has your thinking or feeling about the world around you changed since becoming a skydiver?

10. Does skydiving assist you with any difficulties that you experience in your life? In what ways?

    Additional prompts: Do you turn to skydiving or the skydiving community for support?

11. How does being a skydiver affect your relationships with other people?

    Additional prompt: For example, your partner, family, friends, or school/work colleagues?

12. How does being a skydiver affect your work/school activities?

    Additional prompt: How might your experiences at work/school change if you were not a skydiver?

Appendix B.

Sample Analysis of Individual Participant Transcript

Participant: Rusty, Interview Session 2 of 3, Interview date March 1, 2015

Transcript	Analysis
Interviewer: Do you think skydiving is a risky sport, why or why not? **Rusty:** It is a risky sport. It's kind of like being a daredevil. It is more about how much risk you can tolerate. Skydiving is somewhat risky but if you take the right safety precautions then it's not as risky.	**Salient:** Skydiving involves risk taking: **Salient statements:** • "It is a risky sport…" • "…like being a daredevil." • "It is more about how much risk you can tolerate." • "…take the right safety precautions…" Participant suggests that all activities have an associated risk and that engagement in an activity is determined by the individual's risk tolerance and the degree to which safety precautions mitigate the risk.
Interviewer: When you say it is "somewhat risky," where is the risk? **Rusty:** Risk is part of jumping with new people and when you're trying to progress in the sport, you have to push yourself a little bit, do things that are 'Okay, I've never tried this before but I'm going to try on this jump with this person.' There is a little bit of risk there because you're doing things that you're not used to and when they're in that situation but being scared is part of the sport. You are doing that you're uncertain about because you push the limit.	Participant provides example of how risk may arise while engaged in the sport. **Salient:** Risk involves pushing limits. **Salient statement:** • "You are doing that you're uncertain about because you push the limit." [Researcher's thought: this example suggests engagement with risk may be intentional as participant highlights pushing the limit despite uncertainty.]

Transcript	Analysis
Rusty: It does happen to us where people die. We all know that sometimes there's usually a chain of events that goes wrong. You live knowing your best friend can die soon. It's like the guy I did my 100th jump with. He passed away 2 months ago. I had just jumped with him and then the next day he died and you're like, 'holy shit!' Death is a real eye opener to what we do. **Interviewer:** Mmmhmm.	**Salient:** Participant emphasizes that there can be serious consequences. **Salient statements:** • "…people die." • "…sometimes there's usually a chain of events that goes wrong." • "You live knowing your best friend can die soon." • "Death is a real eye opener…" [Researcher's thought: participant is aware of the serious consequences that might arise when participating in skydiving]
Rusty: You have to take some safety precautions. I need to know everyone that I will be in the plane and air with. I f I don't feel safe to jump with them, I won't jump with them. (brief silence) I start with knowing who is coming with me, what their skill levels are at. You then make a plan for what you are going to do and get agreement with the other jumpers regarding the plan, including order, altitude, landing patterns. I always do gear check. It is important to take into account that every jump is different. There's always different things going on. **Interviewer:** So, is it still a risky sport if you take all those precautions? **Rusty:** You can chose to not engage in some activities if the risk is too great. You can ensure your gear is working. You can choose what you do and who you do it with. But….(brief silence) you can't control everything. Not everyone pays attention. Gear wears out. The weather is unpredictable.	**Salient:** Participant expresses an attempt to control as much as possible when engaged in the sport but notes that not everything is controllable. **Salient statements:** • "…take some safety precautions." • "…you can't control everything." **Emergent themes:** • risk taking • intentional engagement with risk • risk management: choosing not to participate in a risky activity • control of self • control of environment • lack of total control of outcome

Transcript	Analysis
Interviewer: So, if I understand you correctly, you perceive skydiving as involving risk, you choose whether or not to take the risk, and you try to control as much of the risk as you can but always knowing that you cannot control all of the risk? **Rusty:** (brief silence) Yeah, exactly. It is a risky sport. **Interviewer:** So why take the risk? **Rusty:** Maybe I wouldn't appreciate life as much if I didn't realize how quick you can be gone and how amazing it is. You can't go through life staying away from things because they make you uncomfortable. **Interviewer:** How amazing what is? **Rusty:** The sport. Skydiving. But life is amazing too. Skydiving just helps me appreciate it all.	[Researcher's thought: participant appears to see skydiving as risky and he describes a two-fold process to experiencing risk that included deciding to participate and then attempt to control risk when participating.] **Salient:** Participant views skydiving as intentional risk taking. **Salient statement:** • "You can't go through life staying away from things because they make you uncomfortable." **Themes:** • Risk Taking: Intentional participation in risky activity. • Risk Management: Choosing to participate or not. • Control: Attempting to mitigate risk while engaged in the activity.