Adolescents' Initial Experiences of Sitting Mindfulness Meditation

by

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Abstract

Mindfulness-based programs have become popular clinical interventions and are receiving attention in the scientific literature. This qualitative study explored the initial experiences of adolescents with "Sitting Mindfulness Meditation" (SMM: Kabat-Zinn, 1994, 2002), a technique that involves intentionally focusing one's attention on the physical sensations of the breath while engaging in non-evaluative and non-judgmental observation of one's thoughts, feelings, and sensations. This study explored SMM using a phenomenological design to answer the question, "What are the initial experiences of adolescents practicing SMM?" Participants, grade 11 and 12 students, were recruited from two secondary high schools in a large metropolitan Canadian city through poster advertisements and contacting high school counsellors. In order to capture the essence of the phenomenon being investigated, two semi-structured interviews were conducted. The first interview followed adolescents' initial experiences with SMM, using CD instructions from Kabat-Zinn's Mindfulness-Based Stress Reduction Program (Kabat-Zinn, 2002). The second research interview was conducted a week after the adolescents had practiced SMM every second day for a total of three sessions at home using the CD. The adolescents were encouraged to keep a journal of their experiences at home. All data were analyzed according to Giorgi and Giorgi's (2003) psychological phenomenological method. Eight major structures capturing participants' experiences of SMM emerged: a) expectations of SMM; b) attention and concentration; c) distraction; d) awareness; e) self-reflection; f) getting in touch with feelings; g) beneficial experiences; and h) conceptualization of SMM. This study contributes to a greater understanding of how SMM may be experienced by adolescents. Implications for future research and application of mindfulness-based interventions are discussed.

Preface

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Chapter I: Introduction

The Research Problem

Mindfulness practices and programs have gained recent popularity in research because of their clinical effectiveness (Baer, 2003; Bishop, 2002; Black, Milam, & Sussman, 2009; Burke, 2009; Greeson, 2009). The literature has shown the effectiveness of mindfulness-based programs for adults in various areas such as the treatment and prevention of relapse of depression, generalized anxiety disorders, eating disorders, stress and coping management for medical patients and employees, in improving quality of life, decreasing emotional distress, increasing positive states of mind, and facilitating and strengthening the quality of relationships among couples (Allen, Bromley, Kuyken, & Sonnenberg, 2009; Baer, 2003; Baer, 2006; Bishop, 2002; Burke, 2009; Dimidjian & Linehan, 2003; Greeson, 2009; Grossman, Nieman, Schmidt, & Walach, 2004; Shapiro, Oman, Thoresen, Plante, & Flinders, 2008). As a foundational skill of mindfulness-based programs, the concept of mindfulness meditation is defined as "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1994, p. 4). Compared to the research literature supporting the clinical effectiveness of mindfulness practices and programs for adults, limited research has been conducted on the effectiveness of such approaches with adolescents (Biegel, Brown, Shapiro, & Schubert, 2009; Black et al., 2009; Broderick & Metz, 2009; Burke, 2009; Dellbridge, & Lubbe, 2009; Lee, Semple, Rosa & Miller, 2008; Semple, Reid, & Miller, 2005; Schonert-Reichl & Lawlor, 2010; Sibinga et al., 2008; Thompson, & Gauntlett-Gilbert, 2008). The few emerging studies show promise that mindfulness-based interventions may be feasible and acceptable for adolescents suffering from psychological distress with preliminary support for its effectiveness (Biegel et al., 2009; Bogels, Hoogstad, Lieke, Schutter, & Restifo, 2008; Lee et al., 2008; Mendelson et al., 2010; Napoli, Krech, & Holley, 2005; Semple et al., 2005; Sibinga et al., 2008; Thompson &

Gauntlett-Gilbert, 2008; Zylowska et al, 2007). Moreover, it is suggested that mindfulness-based programs for children and adolescents not only have the potential to be a practical, cost-efficient, and preventative intervention in promoting well-being, but may also strengthen continuous therapeutic gain through increasing one's self-management strategies, locus of control and self-efficacy (Flook, 2010; Semple et al., 2005).

As the construct of mindfulness is based on inner experiences, there is a need to investigate it from a point of view of the participants who are experiencing it (Allen et al., 2009). However, most research on mindfulness has primarily utilized a quantitative methodology (Baer et al., 2006; Baer, 2003; Biegel et al., 2009; Bishop, 2002; Black et al., 2009; Bogels et al., 2008; Shapiro et al., 2008). Emerging qualitative research has begun to investigate the experiences of mindfulness with adults (Allen et al., 2009; Cohen-Katz, Wiley, Capuano et al., 2005; Finucane & Mercer, 2006; Griffiths, Camic, & Hutton, 2009; Mackenzie, Carlson, Munoz, & Speca, 2007; Mason, & Hargreaves, 2001; Proulx, 2008). It is assumed that adolescents experience mindfulness practices similarly to adults, despite a lack of empirical validation supporting such a view. Most mindfulness research conducted to-date involving adolescents has focused primarily on outcome measures and have modified mindfulness interventions in order to accommodate the developmental age of the participants (Biegel et al., 2009; Bogels et al., 2008; Lee et al., 2008; Napoli et al., 2005; Semple et al., 2005; Sibinga et al., 2008; Thompson & Gauntlett-Gilbert, 2008; Zylowska et al., 2007). There is a lack of research exploring the adolescents' points of view, capturing their experiences of mindfulness, and advancing our understanding of how this construct is perceived and experienced directly. There is no mention in the literature that the modifications to the programs made for developmental concerns were informed by an empirical understanding of direct experiences of adolescents. This study investigated the experiences of

adolescents with Sitting Mindfulness Meditation (SMM). SMM is a meditative technique and a component of mindfulness-based training programs in which one's attention is directed to the breath while observing one's thoughts, feelings, sensations and awareness openly and non-judgmentally. A more in-depth definition of mindfulness and SMM are provided in the literature review section. The adolescents' experiences of SMM were investigated using a contructivist framework, allowing for an exploration of how the phenomenon of interest is experienced by them from their subjective frames of reference (Schwandt, 1994). According to a constructivist perspective, participants actively engage in the construction and interpretation of their understanding of their experiences (Holstein & Gubrium, 1994; Schwandt, 1994). Using a constructivist framework, it is important to understand how adolescents are experiencing mindfulness practices by posing the research question, *"*What are the initial experiences of adolescents practicing SMM?*"*

The Rationale

The purpose of this study was to investigate how the practice of SMM, a component of meditation practice of mindfulness-based training programs, is experienced by adolescent participants for the first time in order to explore: a) their unique experiences pertaining to their initial exposure to this mindfulness practice, b) their experiences associated with continuous practice of SMM, and c) the meaning that is derived from these experiences. The practice of SMM was chosen because of 3 reasons: a) all mindfulness practices that are components of mindfulness-based programs share similarities in terms of procedures and desired purpose (Bishop, 2002; Bishop et al., 2004), b) this type of meditation is considered the foundational component of mindfulness programs and meditative practices (Kabat-Zinn, 1990), c) SMM is a beginner's skill and introductory practice enabling participants who have never been exposed to

meditation to get acquainted with basic mindfulness concepts and learn mindfulness meditation from simple step-by-step directions (Barnes, Davis, Murzynowski, & Treiber, 2004), and d) it has been successfully used in research with a child and adolescent population (Barnes et al., 2004; Flooke et al., 2010). Furthermore, only one component of mindfulness-based programs was investigated in order to narrow and focus on specific experiences that are related to a singular mindfulness-based phenomenon, extricating it from the other factors that are usually involved in the complete program, including group dynamics, support, and other non-specific factors. As mindfulness programs have not yet been formalized for adolescents, it is useful first to explore their initial experiences of one practice in order to gain a more complete understanding of how youth may conceptualize and perceive the mindfulness training program as a whole.

By exploring the early experiences of adolescents with SMM, specific themes related to this phenomenon were identified, which potentially may inform future research and applications of mindfulness-based interventions (Dellbridge & Lubbe, 2009; Kerrigan, Johnson, Stewart et al., 2010). More specifically, the research findings may be useful in addressing program modifications sensitive to adolescent experiences. The findings help to elucidate components of already established mindfulness theories (e.g., Baer, 2003; Bishop, 2002; Bishop et al., 2004; Carmody, Baer, Lykins, & Olendzki, 2009; Dimidjian & Linehan, 2003; Shapiro, Carlson, Astin, & Freedman, 2006), which can be used to improve and maximize the effectiveness of future mindfulness-based programs for this specific population. Lastly, the experiences described related to the initial exposure of practicing SMM from the perspective of the adolescents might strengthen the feasibility of adopting mindfulness practices and mindfulness training programs for this population, as already established in the literature.

This thesis will begin by examining definitions of mindfulness proposed in the research literature, followed by a description of the two main mindfulness-based programs that have been studied, and a definition of SMM. Then, the literature will be reviewed for the clinical effectiveness and relevancy of mindfulness-based programs for an adult population based on outcome studies. This will be followed by a review of the qualitative research on mindfulness with an adult population. Next, qualitative studies with a child and adolescent population will be reviewed, as well as outcome studies investigating the feasibility of mindfulness programs and mindfulness practice for this population. The last part of the literature review will examine the nature of the modifications typically made to mindfulness-based programs for children and adolescents. Lastly, a description of the methodology for the proposed study will be provided, including a section on the research design, the procedures of the study, and its delimitations and limitations.

Chapter II: Review of the Literature

The Definition of Mindfulness

The interest in the application of mindfulness as a clinical intervention has been strongly influenced by the work of Jon Kabat-Zinn (Bishop et al., 2004). Jon Kabat-Zinn is the founder and director of the Mindfulness-Based Stress Reduction (MBSR) program at the University of Massachusetts Medical Center, and Professor of Medicine emeritus (Williams, Teasdale, Segal, & Kabat-Zinn, 2007). His research interest in the mind/body connection and its influence on physical and mental health as it relates to the application of mindfulness meditation has led him and his colleagues to create the first mindfulness-based stress clinic in 1992, serving people from minority and low income backgrounds suffering from chronic pain and stress-related disorders. Kabat-Zinn has also been actively involved in providing mindfulness training groups for helping professionals from various backgrounds, and is the director of a joint program between his university's medical center and the criminal justice and corrections departments of Massachusetts, providing mindfulness training to prison inmates (Kabat-Zinn, 1994).

Most studies investigating mindfulness adopted Kabat-Zinn's definition of mindfulness, which describes the experience of mindfulness as the awareness that arises from "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1994, p. 4). According to his definition, during mindfulness, people purposefully are observing thoughts, feelings, impulses, sensations and distractions as simple events pass through their awareness, while accepting these non-judgmentally without identifying and reacting to them (Bishop et al., 2004). Researchers have emphasized that there is a need for a unified operational definition for mindfulness in the literature (Bishop, 2002; Bishop et al., 2004; Dimidjian & Linehan, 2003; Griffiths et al., 2009). Bishop et al. (2004) state that the literature

has investigated the construct of mindfulness in the absence of such a consensus. They point out that there have been inconsistencies in describing the components and processes of mindfulness, stating that without such a consensus on the definition of mindfulness, it is not possible to investigate the processes and mechanisms of mindfulness, nor is it possible to create instruments capable of measuring it. In an effort to find such a consensus and to elaborate on Kabat-Zinn's (1994) operational working definition, these authors identified two main components of mindfulness, namely self-regulation of attention, which is the ability to maintain one's attentiveness and concentration on mental activity in the present moment, and a personal orientation to the present moment that involves being non-judgmental, open, curious and accepting of the experience.

Bishop et al. (2004) state that self-regulation of attention requires the skill of sustained attention, which is the ability in maintaining one's awareness on experiences of "thoughts, feelings and sensations as they arise in the stream of consciousness" (p. 232) for prolonged periods of time, as associated with a continuous state of vigilance and being attentively present in the current moment. Such sustained attention is facilitated by the use of an anchor, which is defined as a point of directing and grounding one's attention (with one possibility being focusing on the breath) to allow an observation of the here-and-now experience especially at moments when there is "a general lack of awareness" or when "attention has become focused on streams of thoughts, worries or ruminations" (p. 232). The redirection of one's attention back to the experience of the here-and-now requires the skill of attention switching, which is said to result in the inhibition of elaborative processing of mental stimuli that may otherwise occur automatically. The second part of the proposed definition involves an intentional openness and curiosity of the experience of the here-and-now without trying to achieve a particular outcome

such as, for example, a state of relaxation or the manipulation of thoughts, feelings, or sensations. The researchers thus see mindfulness as a skill that can be developed involving intentionally self-regulating one's attention while maintaining an accepting orientation toward anything that enters one's awareness.

Shapiro et al. (2006) have criticized the above stated definition, arguing that the role of intention has not been emphasized in the formulation by Bishop et al. (2004). Furthermore, Shapiro et al. emphasize the role of intention stating that it is the underlying reason why the person engages in mindfulness meditation in the first place. This is consistent with Kabat-Zinn's (1990) emphasis on the importance of the practitioner's motivation, commitment, and self-discipline in mindfulness meditative practices. Kabat-Zinn argues that, "Fundamentally, it is the quality and sincerity of your effort in practicing and the depth of your seeing that are important" (p. 71). He also states that qualities such as trust in one's self, patience, beginner's mind (experiencing people and events as if experienced for the first time), and one's ability of letting go of past attachments to feelings, preconceived notions, ideas and attitudes, are all crucial in the understanding of mindfulness.

Bishop et al.'s (2004) conceptualization is guided by a post-positivistic framework that views mindfulness as something real and something that can be assessed and measured by instruments. Using a constructivist perspective, Allen et al. (2009) state: "Given that mindfulness is an experiential phenomenon and that the target of mindfulness-training is a person's experience of their thoughts, feelings, and bodily sensations, it is important to ask about people's experience" (p. 414). The responses of participants can then be compared to the definition as outlined by the researchers. If participants do not fully understand the construct of mindfulness the way it was intended, does that mean that mindfulness practices are not effective,

or does that simply show that the meaning and effectiveness is constructed by each individual according to his or her own experiences and backgrounds? This is especially valid as the process of a phenomenon (i.e., mindfulness) may be experienced differently by individuals based on their unique ways of perception and personal backgrounds (Allen et al., 2009; Krahn, Hohn, & Kime, 1995). Looking at mindfulness through more of a constructivist lens, we may uncover how mindfulness is understood, experienced, and how it may be seen as helpful from each practitioner's own perspective. Congruencies between such experiences and theories and the operationalized definition of mindfulness have been found (Allen et al., 2009). Elements of the other qualities not captured by the operational definition, but said to be part of mindfulness practices as outlined by Kabat-Zinn (1990), may also find relevance in the participant's experiences.

Nelson and Quintana (2005) argue that using a constructivist orientation might inform further generation or elaboration of the operationalization and the measurement of constructs. They also state that adolescents might view the studied phenomenon from their specific developmental stage, which might contribute and enrich its meaning. Allen et al. (2009) argue that experiences of mindfulness can provide important information to well developed theories of mindfulness, thereby strengthening their consistencies.

Kabat-Zinn (2004) states that it is important to distinguish between mindfulness-based practices such as Sitting Mindfulness Meditation (SMM), explained in more detail later, and mindfulness as a quality that can be developed through such practices. He states that these practices are tools of learning mindfulness. Thus, because the purpose of this study was to uncover the initial experiences associated with exposure to a single mindfulness-based practice,

rather than an investigation of the construct of mindfulness, it was deemed as appropriate to use Bishop et al.'s (2004) conceptualization of mindfulness as a guide.

Mindfulness-Based Programs

This section will briefly describe the two predominant mindfulness-based programs that have received empirical support in the literature, namely the Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 1990) and Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002) programs. Other therapeutic orientations using mindfulness interventions as a component of therapy, such as Dialectic Behaviour Therapy (Linehan, 1993) and Acceptance and Commitment Therapy (Hayes, Strosahl & Wilson, 1999) are excluded here due to a variation of the use, teaching style, purpose, and emphasis of such mindfulness practices (Burke, 2009). However, studies that emphasize variations of teaching mindfulness meditation skills similar to MBSR and MBCT programs are included because of their pertinence to the research question. This section will also describe and define mindfulness "SMM" which is an integral part of these programs. Lastly, a summary of the effectiveness of such programs is explored using meta-analytical studies.

Mindfulness research involves two main mindfulness-based programs, namely MBSR by Kabat-Zinn (1990) and MBCT by Segal, Williams, and Teasdale (2002). MBSR is the most frequently cited mindfulness training program in the literature (Baer, 2003) and involves the learning of mindfulness skills that are applied in everyday life in order to increase well-being and alleviate psychological distress (Carmody et al., 2009). MBCT is a manualized program based on the original MBSR program, while implementing parts of cognitive therapy to prevent relapse of people that formerly suffered from depression through mindfulness practices (Baer, 2003).

Mindfulness-Based Stress Reduction. MBSR (Kabat-Zinn, 1990) was initially developed to help with the management of chronic pain and stress-related disorders within an 8 to 10 week psycho-educational program (Baer, 2003). Groups of up to 30 participants meet for 2-2.5 hours weekly to learn and practice skills in developing mindfulness for symptom alleviation and reduction. At the sixth session, participants are encouraged to attend a 7-8 hour intensive mindfulness retreat. Besides practices of mindfulness meditation, these groups engage in discussions of symptoms and weekly homework assignments in order to develop and promote continuous mindfulness in everyday life. Mindfulness practices include the body scan, which is a 45-minute exercise in which participants are asked to lie down with eyes closed and to bring their attention on different body parts, noticing sensations, thoughts, and feelings that arise. Another component of MBSR is SMM, in which participants are asked to bring their attention to the sensation of breathing as a point of focus, while sitting in a relaxed position with eyes closed. Hatha yoga postures are also used, in which participants bring their attention to sensation in their bodies while stretching and moving in subtle ways. Other exercises include mindful walking, standing, and eating. These mindfulness exercises are to be practiced at home for at least 45 min every day, six days a week, and participants are encouraged to use CDs and audiocassettes in the beginning as guiding instructions.

Mindfulness-Based Cognitive Therapy. MBCT (Segal et al., 2002) is an eight week group intervention which integrates cognitive therapy with mindfulness practices in order to help participants view thoughts, emotions, and physical sensations as separate from one's being, helping "to prevent depressive relapse" by detaching mental events as simply events that are impermanent, fleeting, and not necessarily accurate or real representations of the person or reality (Baer, 2003, p. 127; Mason & Hargreaves, 2001). Thus, unlike cognitive therapy, these

thoughts or mental events are not seen as needing to be changed such as in cognitive restructuring. Rather, through mindfulness training, these thoughts will be seen as simply temporary thoughts passing through one's awareness without a need to evaluate their rationality or levels of distortion from reality. The practitioner observes these thoughts without judgment and notices its impermanent nature, which has been termed as reperceiving by Shaprio et al. (2006). MBCT is based on the same structure as MBSR programs and also emphasizes the development and application of mindfulness in everyday situations through the use of mindfulness-based practices.

Sitting Mindfulness Meditation. Both the MBSR and the MBCT programs use regular meditative practices to increase mindfulness during the training sessions and at home through homework assignments (Burke, 2009). SMM is a component of both MBSR and MBCT programs, and is used as a beginner's practice and introductory exercise of MBSR programs (Barnes et al., 2004). In the SMM exercise, individuals are instructed by the facilitator or by CD or audiotape instructions to sit in a relaxed upright position in a chair or crossed-legged on the floor with eyes closed, while intentionally bringing attention to the physical sensation of breathing in and out through their nostrils (or the rising of their chest and their abdomen) for usually 10 to 45 minutes per day, depending on the ability of the individual. The individuals are also instructed to notice and observe thoughts, feelings, physical sensations, or other external stimuli entering their awareness, to view and accept them non-judgmentally as passing events, and to let go of them while maintaining their attention on the breath. This process is usually repeated with the aim that the person learns such a non-evaluative, non-judgmental and non-reactive act of observing and acknowledging of all mental activity (Barnes et al., 2004; Bishop, 2002; Thompson & Gauntlett-Gilbert, 2008). Some researchers go so far as to suggest that

SMM may be "a potential key mechanism that may explain the effects of MBSR" (Biegel et al., 2009, p. 864), as their findings show that compared to the other mindfulness practices in the MBSR program, greater sitting meditation frequency and duration significantly predicted more frequent increases in Global Assessment Functioning scores and declines in depressive and anxiety symptoms from baseline to follow-up intervals.

The Effectiveness of Mindfulness-Based Programs. The majority of research on mindfulness has been conducted with adult populations. Two studies using a meta-analytic approach of prior research on the effectiveness of mindfulness-based programs have shown that participants in MBSR and MBCT programs on average score better on dependent outcome measures of psychological distress, pain, medical conditions and general well-being than the control group (Baer, 2003; Grossman et al., 2004). These findings supporting the effectiveness of MBSR and MBCT programs have been recently replicated (Carmody & Baer, 2009).

In Baer's (2003) meta-analysis, an examination of 21 studies involving mindfulness research was conducted using pre- and post-assessment measures of pain, anxiety, depression, general well-being, symptoms of medical conditions, such as fibromyalgia, psoriasis, and cancer, as well as eating habits. The majority of studies investigated the MBSR program in its original form or adapted to study the population at hand, while two studies investigated the MBCT program. Both MBSR and MBCT programs were included due to their emphasis on mindfulness training. Sample sizes ranged from 16 to 142 with participants ranging from 38 to 50 years of age. Studies that were investigated used pre- and post treatment designs without a control group (n=9), between-group designs with Treatment As Usual (TAU) or waitlist control groups (n=9) and follow-up assessments (n=3). TAU groups consisted of either medical interventions or unspecified mental health treatments.

The findings of the meta-analysis indicate that statistically significant improvements were noted in participants with chronic pain in terms of ratings of pain, alleviation of other medical symptoms, as well as general psychological well-being measures (Baer, 2003). Although such findings were maintained at follow-up sessions, most of these studies did not have a control group. Baer concluded that the empirical findings "suggest that mindfulness training, on average, may bring participants with mild to moderate psychological distress into or close to the normal range" (p. 137), although she cautioned that such clinical significance of the findings are tentative due to the limited number of studies, a lack of reported raw scores, as well as inadequate methodological designs.

These findings were consistent with the findings of the meta-analytical study by Grossman et al. (2004), despite differences in selection criteria of studies and methods of calculation. In this meta-analysis, both published and unpublished studies were included, which not only involved structured mindfulness-based programs, but also group based interventions for which the central focus was teaching mindfulness skills. The researchers examined the literature related to physical and mental health dimensions using standardized and valid measures with adequate internal consistencies that had either active control or TAU groups. Two separate meta-analyses were conducted, one involving the differences between treatment and control conditions, and a second which included studies both with and without control conditions.

Grossman et al. (2004) yielded a total of 20 studies meeting the inclusion criteria. The total sample size consisted of 1605 research participants. The results indicated that participants of mindfulness-based programs would, on average, score improvements on mental health and physical health dimensions compared to the control group. Studies using pre- and post-treatment comparisons without control groups also yielded similar effectiveness for mental health

measures, although not as pronounced for physical health measures. However, the researchers suggest that the effectiveness for mental health variables in the uncontrolled studies needs to be interpreted with caution, as the data seemed to be moderated by subject population variables resulting in significant heterogeneity among each subgroup.

According to both meta-analyses, some of the studies had methodological flaws limiting generalizability such as the lack of control or structured and active TAU groups (Baer, 2003; Grossman et al., 2004). These limitations make it difficult to attribute post-treatment gains specifically to mindfulness-based interventions. Small sample sizes were used and training standards for the researchers conducting MBSR and MBCT were not cited, thereby decreasing the study's standardization procedures (Baer, 2003; Carmody & Baer, 2009). Other criticisms included the use of inappropriate statistical calculations, measures that have not been empirically validated, as well as social desirability cofounds, and short follow-up intervals that were used in previous studies (Bishop, 2002). Furthermore, Bishop states that a possibility exists that the effectiveness of such programs are more related to the type of people it attracts rather than the intervention itself. Researchers continue to view MBSR and MBCT as potential interventions that require further rigorous randomized controlled studies in order to strengthen past findings. Researchers also recommend disentangling specific components of mindfulness-based programs from non-specific program components such as group support or cognitive therapy (in the case of MBCT) in order to gain further insight into how mindfulness works and its role in therapy (Allen et al, 2009; Baer, 2003; Bishop, 2002; Dimidjian & Linehan, 2003).

The literature on both mindfulness-based programs has shown their clinical effectiveness, despite methodological limitations. The majority of this research has been quantitative in nature. However, some qualitative research has been conducted on MBSR and MBCT programs and it is

important to consider this body of work. The next section will explore this research on mindfulness to understand how participants experience such programs from their own points of view.

Qualitative Research on Mindfulness with an Adult Population

This section will investigate the literature on MBSR and MBCT programs that have used qualitative designs. Eight qualitative studies involving clinical adult participants will be outlined including experiences of individuals suffering from depression and anxiety, cardiac rehabilitation, eating disorders, cancer and Parkinson's disease. Two qualitative studies, one including burnout of nurses, the other exploring the concept of reperceiving in a non-clinical adult population will also be reviewed. Lastly, a summary of the findings will be provided outlining common themes that emerged elucidating adult experiences of mindfulness-based programs.

Mindfulness and Depression. In order to address how MBCT works and the processes involved, Allen et al. (2009) devised a qualitative study of 20 participants of MBCT for relapse prevention of depression, examining participants' experiences 12 months after the program. The researchers argue that the lack of much needed knowledge of how MBCT works is due to an absence of qualitative studies examining how participants experience such programs. In semi-structured interviews that ranged between 30 to 60 minutes, researchers asked: "How do people describe and evaluate their experience of MBCT as treatment for recurrent depression?"

The thematic analysis revealed four major themes including control, acceptance, relationships, and struggle (Allen et al., 2009). Within the control theme, a heightened sense of awareness of triggers and warning signs combined with consequent action-oriented behaviours

was reported by participants allowing them to gain a stronger sense of control and personal agency over their depressive symptoms. Acceptance was attributed to group support, decreasing feelings of isolation, as well as an ability to identify and view depressive thoughts and feelings as transient mental activity rather than factual information about self-identity. Participants also described changes in the nature of their interpersonal relationships including becoming more aware of the importance for self-care, and reporting greater emotional closeness to others, stronger skills in communication, and a deeper sense of empathy. The struggle theme indicated that several participants had difficulty in practicing mindfulness exercises individually and in comprehending the notion of learning to accept without the desiring an outcome, such as a being cured from depression or being able to discontinue antidepressant medication. Limitations of this study included expectancy effects influencing participants' responses as they were aware of the roles of the researchers, complex and multiple relationships among the overarching and subthemes rather than a unified pattern, as well as limited transferability due to the use of participants in primary care being treated for depression.

Although acceptance is viewed as integral to mindfulness, Mason and Hargreaves (2001) identified early negative experiences with the tension of adopting an accepting orientation and "driving to get it right" (p. 203). These researchers used a grounded theory approach to explore seven participant's experiences of MBCT for depression. Consistent with the previous research findings, participants experienced the same challenges and in addition experienced difficulty in letting go of the expectation to find a "right" way to meditate. However, there was variability in how much participants' expectations changed and adapted during the intervention, suggesting the importance of prolonged exposure to and practice of mindfulness-based practices. There was also variability in how successfully strengthening the skill of mindfulness was conceptualized.

Similar group effects as the previous study were noted. A theme of "discovery/surprise" emerged consistent with the control and acceptance themes of the previous study.

A state of relaxation was experienced as being a wanted and beneficial part of the meditative practices by most participants (Mason & Hargreaves, 2001). This desire of attaining a state of relaxation, however, was also a deterrent to adopting a non-evaluative and accepting orientation, echoing the importance of one's intentions and motivations. Moreover, expectations of the program had strong influences on the participants' experiences. With a flexible and open orientation that was cultivated, participants experienced fewer challenges and negative experiences, and were able to reframe their understanding of the importance of acceptance of their depression and situation despite struggling with this process. Acceptance to them seemed to mean an attitude of trusting themselves and the process. It seems that unrealistically high expectations seemed to interfere with the process of "coming to terms." The researchers not that limitations of this study included an absence of investigation of long-term effects, comparisons to other treatments, and suitability for specific client characteristics.

In a mixed methods study by Finucane and Mercer (2006), looking at the acceptability and effectiveness of MBCT for 16 patients suffering from depression and anxiety used 30-45 minute semi-structured interviews with 11 of the participants 3 months after the completion of the MBCT program. The interview focused on 5 main themes, namely "participants' overall impressions," "the course techniques/methods/materials," "the format of the course," "ongoing mindfulness practice," and "coping skills" (p. 4). The study used depression and anxiety inventories for gathering quantitative data.

The researchers state that the qualitative findings echo the findings of the quantitative research literature (Finucane & Mercer, 2006). The qualitative findings indicate that participants had various reasons for joining the program including avoiding pharmacotherapy, and the role of commitment and persistence as a positive step toward healing. Group benefits reported were consistent with previous research, adding that the group format increased motivation for continuous mindfulness practices. Differences in amount of time spent practicing mindfulness at home were reported with common challenges relating to physical discomfort. The findings suggest that participants who were able to hold a flexible attitude, letting go of what they expected needed to happen and focusing on the meditation instead, were more likely to be persistent and experience benefits from mindfulness practices.

Most participants continued to use their skills 3 months after the course, some in the form of regular formal meditation, and others as integrating their skills into ever day life (Finucane & Mercer, 2006). Common reasons of using mindfulness practices included an improved ability in self-management, self-care, and coping. Attributed to the effects of the program, two participants reported being able to re-enter the workforce after almost a year due to their symptoms, one participant reported that her depressive symptoms had lifted altogether, and another reported being successfully able to quit smoking. Participants also reported improvements in their sleeping routine. Although the general perception was positive, one participant felt disappointed that meditation did not offer her the cure she expected, judging her success based on her level of inducing relaxation through her practice, while another described disengaging during guided meditation due to feelings of frustration at the difficulty of the task.

The researchers hypothesize that the skills of mindfulness may not have been developed for some participants who reported not benefiting from the program, stating that additional

practice may have counter this (Finucane & Mercer, 2006). Furthermore, they state that perhaps the absence of certain interventions for depression in the MBCT program may have limited its success in this study, stating the MBCT may be helpful alongside other psychotherapeutic interventions. Lastly, they state that differences in the participants' applications of meditative practices may have influenced the benefits of the program. Although the study used a small sample, and used a mindfulness meditation instructor with little prior training in MBCT, it showed that for the majority of the participants who were not previously exposed to mindfulness meditation practices, these practices were feasible, acceptable, and beneficial.

Stelter (2009) conducted a narrative study on the experiences of three participants during and after 6-8 weeks of the MBSR program. These three participants were purposefully selected due to the presence of psychiatric conditions and challenges with insomnia, stress, depression and anxiety, and agoraphobia. None of the participants had previous exposure to mindfulness meditation. The aim of this study was to explore experiences during MBSR to elucidate specific processes of change. Data collection and assessment of life events, symptom history, and reasons and expectations for participation was collected using three semi-structured 40 to 70 minute interviews held at the beginning, middle and end of the program. Furthermore, participants were asked to journal weekly diaries of their experiences with variability in rates of completion. The method of analysis consisted of open-coding of themes consisted with a narrative approach.

The findings of this study were presented in the form of 4 in-depth narratives of each participant. The findings suggest that mindfulness meditation was perceived as beneficial for well-being especially with regards to a gradual reduction in rumination and anxious thinking. The researcher suggests that reflecting non-judgmentally on bodily experiences may have

contributed to a shift toward self-reflection and consequent reformation of narratives. Furthermore, the participants seemed to be able to incorporate a non-judgmental focus and observation on the here-and-now as opposed to identification with thoughts.

The potential confounds limiting this study are the small sample size, potential of selection bias, and focus on outcomes of the MBSR program. Furthermore, during the study, there was a change of interviewers for the second interview which may have further contributed to a disruption in the formation of working relationships and continuity of the interviewing process. Although the researcher engaged in member-checking to ensure the confirmability of the results, there was no secondary auditing or validation of the data. Nonetheless, the study provided with a narratives of participants and their experiences of change during an MBSR program.

Mindfulness and Cardiac Rehabilitation. In a study by Griffiths et al. (2009) the question of how participants undergoing cardiac rehabilitation make sense and meaning out of MBCT experiences was explored using an Interpretive Phenomenological Analysis design. The researchers were interested in finding out themes that would emerge out of the participants' experiences and the value the programs has had on their lives. Semi-structured interviews were conducted 6 to 12 weeks after the program and focused on 6 participants' experiences of the intervention, group experiences, and the impact the intervention has had on their behavioural, emotional, and cognitive functioning. The results indicated 5 major themes which included "development of awareness, within group experience, commitment, relating to the material, and acceptance as an outcome" (p. 677). Although not all participants experienced MBCT as helpful, there was a consensus of reported increases of self-awareness.

Under the domain of awareness development, participants reported similar experiences as the above mentioned studies (Griffiths et al., 2009). Much like the previous studies, "within group experience" was seen by participants as validating, normalizing, and helpful, with suggestions of improving the program by providing more clarification of the purpose and theory of MBCT early on. The importance of a strong attitude of commitment was evident in the data as participants were able to experience more of the benefits of meditation with continuous practices. This is consistent with Shapiro et al.'s (2006) and Kabat-Zinn's (1990) proposed definition which includes an emphasis on the importance of motivation and intention for mindfulness practices. Furthermore, a committed attitude not only contributed to experiences of greater clarity, but participants described a sense of mastery about their ability to persevere.

Within the "relating to the material domain," responses indicated that meditative practices were enjoyable and effective in reducing stress, although the 45 minute body scan was experienced as being difficult due to its length and terminology used during the instructions (Griffiths et al., 2009). The participants that shared the most positive feedback about MBCT also shared the importance of being able to accept not only their cardiac problems, but also everyday events. These participants gained an attitude of acceptance which has been proposed to be an integral part of any mindfulness practice and purpose (Bishop et al., 2004; Shapiro et al., 2006). Participants who, in contrast, did not experience such acceptance viewed the intervention as not being as useful or helpful. Some limitations of this study included a small sample size, the ambiguity of the qualifications and training of the MBCT instructor, and the use of modifications made to the original MBCT format.

Mindfulness and Eating Disorders. Another study using a phenomenological design investigated the experiences of six women with diagnoses of bulimia nervosa after an eight-week

adaptation of MBSR called the mindfulness-based eating disorder (M-BED) group (Proulx, 2008). Using interviews and pre- and post-treatment self-portraits, the study explored how these women experienced their participation in this program. The interview consisted of questions about the effectiveness of the various parts of the group.

The findings suggest five main themes, namely the "sense of self before the group," "coping strategies before the group," "connection with one another in the M-BED group," "connection with themselves through meditation," and "shifts in relationship to self and others resulting new coping strategies at the end of the M-BED group" (Proulx, 2008, p. 59-60). Prior to the group, the participants reported negative feelings about themselves such as worthlessness, powerlessness, anger, sadness, and numbness, to just name a few, along with unhealthy coping strategies such as bingeing, purging, unhealthy dieting, and self-cutting. In the connection with one another in the M-BED group category, consistent with the literature, positive group effects were noted. According to Proulx, the participants felt challenged in the group, but learned through meditation to become "more self-aware, self-accepting, assertive, hopeful, intimate with others, and differentiated from family" (p. 63). This in turn seems to have lowered the impulsive and self-destructive behaviours, while enabling self-observation without reactivity.

In terms of shifts as a result of the program, reports included a decrease in purging, an improved ability to accept and let go of unrealistic ideals of being thin, an emergence to self-love, becoming aware of the role of destructive family members, and learning more constructive ways of thinking and self-care (Proulx, 2008). These results, consistent with previous findings, seem to suggest that the M-BED group has been effective for these participants. However, as the participants were also receiving individual counseling along with the group, it is difficult to attribute the findings solely to the M-BED. Furthermore, the fact that the researcher was also the

agent of treatment may have influenced and biased the data collection and analysis process. Lastly, although the study used a phenomenological design, the emphasis on treatment effects may have directed and therefore limited the statements of the participants regarding their experiences with the phenomenon.

Mindfulness and Experiences Living with Cancer. Mackenzie et al. (2007) wanted to investigate the effects of the experience of mindfulness meditation on the well being of cancer patients using a grounded theory approach. Nine patients, 7 females and 2 males who had been previous attendees of the 8-week MBSR program were selected. The purposeful sampling was intended to obtain a rich data set to aid in theory construction. A two-hour long semi-structured interview was used to examine the experiences and perceptions of the MBSR program and the link to living with cancer. The data was analyzed using grounded theory analysis.

The results showed five emerging themes, namely "opening to change," "self-control," "shared experience," "personal growth," and "spirituality" (Mackenzie et al., 2007). In the opening to change theme, patients experienced a change in the way they conceptualized their illness, their coping methods, and their attitude toward cancer treatment. In the self-control theme, participants stated gaining a sense of control of their own actions, feeling empowered by using mindfulness as way to self-regulate their emotions, to become aware of triggers, and to learn to cope appropriately. Shared experience or group support was seen as beneficial consistent with findings in previous studies. Personal growth was conceptualized as being able to find meaning in stress and turbulence, changing from a negative to a more positive perspective, learning to connect and deepen personal relationships with themselves and others, and deepening their spirituality. The development of spirituality was conceived by participants

as “the ability to identify and appreciate spiritual resources and tools that were not previously considered” (p. 66).

The theory proposed by Mackenzie et al. (2007) suggests that the MBSR program may help participants feel supported within a group context, while teaching novel strategies to increase their self-control, and empowering them to view the world in a more constructive way. This may lead to a reduction in symptoms and strengthening ways of coping with their cancer. Furthermore, through continuous cultivation of mindfulness, participants may also gain a deeper sense of meaning, spirituality, and intimacy with themselves and others. Ongoing groups aid in building stronger personal and supportive relationships while crystallizing the skills to be applied to other areas of life. The authors discuss that these themes seem to be consistent with the literature on the effects of MBSR.

The results of this study must be interpreted with caution. The participants in this study may have inherently unique characteristics such as high motivational and self-discipline levels, a heightened ability to self-regulate, and other factors that would set them apart from a normative sample. The authors also stated that the effects of the MBSR program may be unique due to individual’s life circumstances (Mackenzie et al., 2007). Overall, for this particular group, the MBSR program was an important part of their lives, as can be seen by one participant’s comments: “The programme has really transformed my life – I’ve got a much better life for it” (p. 68).

Mindfulness and Parkinson’s Disease. Fitzpatrick, Simpson and Smith (2010) explored the experiences of 7 male and 5 female participants with Parkinson’s disease after an 8-week MBCT program using an interpretive phenomenological analysis. Data was collected

using two 45-80 minute non-directive, semi-structured interviews before and after the program. For two participants only post-interviews were gathered, with one participant having attended only one MBCT session. The reason for drop-out included feeling a sense of alienation within the group dynamics.

Four major themes emerged including "changing patterns of coping", "the role of mindfulness in consolidating existing coping skills in the context of loss", "group support", and "the dualism of experience between Parkinson's and mindful meditation" (Fitzpatrick et al., 2010). Changing patterns of coping included improvements in coping, decreasing avoidance caused by stress and anxiety, greater awareness of the role of stress on physical symptoms, increased relaxation, decreases in rumination, and reframing and an understanding of the role of thought processed on coping. One participant reported feeling ambiguity between suppression versus acceptance of thinking. Building on existing coping skills included an understanding and attempt of non-striving and awareness in the here-and-now potentially reinforcing meaning and effectiveness of prior coping strategies. Consistent with other studies, group support was seen as helpful in creating a sense of belongingness of group members and validation of experiences which helped members to increase their confidence in exposure to socialization. Lastly, mindful meditation was contrasted by the distress of physical symptoms of Parkinson's disease in terms of providing temporary relief of symptoms, relaxation, and inner resources described as experiences of visualizations and "an escaping from the physical restrictions" (p. 188).

The researchers state that some of the limitations of the results include potential bias inherent in a sample that was interested and open to mindfulness. They also argue that this bias may not be as influential due to the emergence of similar themes consistent with other qualitative studies. The findings seem to provide empirical support for beneficial aspects of MBCT for this

sample of participants suffering from Parkinson's disease. They also argue that MBCT may not be suitable for all individuals.

Mindfulness and Burnout for Nurses. Cohen-Katz, Wiley, Capuano et al. (2005) investigated the effects of MBSR on nurses related to stress and burnout as part of a larger mixed-method study. The three part study investigated the results of the MBSR program with 25 nurses using randomized control groups both during and several weeks after program completion. The particular study explored here involved the qualitative data analysis of the data derived from past research findings as well as the administration of the MBSR program for 15 nurses. Data collection and analysis relied on demographic forms, weekly feedback forms, final evaluation forms, as well as e-mails, focus groups, and in-depth interviews.

The findings showed that the major reason for participating in the MBSR program included learning to cope with family, work and personal stress (Cohen-Katz et al., 2005). Challenges of MBSR included feeling restlessness, physical pain and/or medical issues, and coping with difficult emotions. The authors however, state that although restlessness seemed to be a challenge in the beginning of the program, with time, perhaps due to an improved ability to self-regulate, this seemed to give way to the emergence of emotional issues. Thus, the researchers speculate that this raising of self-awareness may be essential for nurses to heal their own unresolved issues. Benefits reported were consistent with previous research. In addition, reports included an increased work performance, improvements in public speaking and driving skills, and an ability to let go of perfectionist thinking. Participants rated the program as a 9.2 from a scale of 0 to 10, with 12 participants stating that the course was "extremely valuable" (p. 85).

There are certain limitations of the study including a homogenous small sample size consisting of mostly Caucasian female nurses. Furthermore, the structure of the interview may have limited and directed the topics of discussion. Nevertheless, the findings suggest that the MBSR program is seen as beneficial, pleasurable, and acceptable to the nurses in this study. Moreover, the authors concluded that the qualitative design allowed for not only the emergence of new data, including the positive impact of the program on the nurses' work relationships, but also of data confirming the healing aspects of the program, such as an increase self-awareness to deal with past emotional issues.

Mindfulness and the Experience of Reperceiving. As part of a larger clinical trial study on MBSR and attentional processes, Kerr, Josyula and Littenberg (2011) investigated the experiences of 8 healthy participants attending the eight week MBSR program through the use of unstructured weekly diaries. One participant dropped out after the third week for unknown reasons. Diaries were collected only until the seventh week of the program. Furthermore, there was variability in completion with three participants completing the required diaries, while the rest submitted partially completed diaries. Diaries were analyzed using grounded theory followed by an observational coding scheme due to the emergence of the common experiences suggestive of the mechanism of reperceiving as suggested by Shapiro et al. (2006) which involves the ability to avoid identification of one's experiences through non-judgmental and non-reactive observation. The data was coded based on the presence of passages suggesting reperceiving as well as reactivity for each participant.

The findings showed a commonality of reperceiving despite unique descriptions in terms of somatic, cognitive and emotional dimensions (Kerr et al., 2011). There were also some reports of struggle and distress at various points in the program. There also seemed to be a trend

of increases in depth, clarity and detailed descriptions with greater exposure to mindfulness compared to generalized and broader descriptions early on. Compared to the first five weeks, there was also an improvement of affect during the sixth and seventh sessions. All participants described developing "an observing attitude towards their own experiences" (p. 88) which involved greater meta-cognitive awareness and decreases in reactivity to experiences. The researchers also found that during the middle of the program there was an increase in reactivity which was accompanied by greater experiences of reperceiving suggesting a potential correlation. The researchers also noted that increases in experiences of reperceiving were found regardless of the content of the experiences. Thus, even negative and undesirable experiences as described by the participants were seen with less reactivity and judgment suggesting a shift of perception and attitude toward such experiences. Furthermore, a majority of participants described the process of somatic reperceiving which was seen by some as challenging and complex with some participants having strong initial reactions during the body scan exercise marked by anger and sadness. Nonetheless, all participants progressed to experiences of reperceiving.

The limitations of this study include the lack of transferability of the findings and the lack of ability to attain data saturation due to the small sample. Furthermore, the researchers state that the reliance on diaries restricted their abilities of clarification of meaning and limited further data collection and explorations specific to the process of reperceiving. Furthermore, variability of the frequency of diary completion for each week as well as the absence of data collection for the eighth and final week also furthered limited the findings. Nonetheless, these findings helped elucidate the mechanism of reperceiving as well the presence of accompanying challenges which may contribute to the development of future mindfulness-based programs.

In summary, the review of the literature on the adult participants' experiences of mindfulness programs shows certain thematic commonalities, namely regarding group specific effects, impact on awareness levels, attitudinal changes, as well as changes in lifestyle and personal relationships. These consistent findings reveal that mindfulness programs are seen as beneficial due to their group specific factors, offering a supportive environment to share experiences and facilitate connections with other group members, and motivating discipline with home-based meditative practices.

Participants also reported an increased level of self-awareness which resulted in an identification and awareness of triggers leading to a consequent plan of action, and the emergence and working through of past emotional issues. Attitudinal changes included a greater feeling of acceptance, a shift from negative to more positive perspectives, a stronger emphasis on self-care, greater self-worth, finding meaning in struggle, and a heightened sense of personal agency and self-control. Furthermore, reperceiving was set forth as a possible mechanism and process of change during mindfulness. Behavioural reported changes include symptom reductions, an improvement in coping skills, including taking more time for self-care, feeling more relaxed, living more in the present, applying mindfulness in everyday tasks, and improved sleep. An improvement in quality of personal relationships was also reported, including better communication skills, and deeper abilities of empathy and intimacy. Common struggles included task-oriented thinking resulting in wanting to find a "right" way to be mindful, unmet expectations, tension between accepting versus expecting treatment, physical discomfort during meditative practices, initial struggles with the process of reperceiving, and challenges in concentration and motivational levels in regular mindfulness practices.

These themes emerged after using a qualitative design to ask participants about their experiences of mindfulness-based programs. It is evident that the qualitative data is not only complimentary to quantitative findings, but may also contribute to possible interpretations and meaning of such data, enriching and grounding findings in the field. Moreover, discovery of new emerging areas, such as improvement of quality of relationships, may also inform future research. The data gathered qualitatively may also contribute to supporting pre-existing theories or new theory formulations, as evident in the literature review. Lastly, as seen above, the findings may also inform the application of the intervention with regard to common benefits experienced and reported difficulties with specific components and the structure of the programs.

The findings of these qualitative studies conducted with adults seem to suggest that the process of learning mindfulness is ongoing, process-driven, requiring patience, persistence, discipline, and openness. Participants who are not familiar with the concept of mindfulness may be confused about the purpose or goal of mindfulness-based exercises, especially regarding the concept of "non-striving" or not having an outcome or expectation. This confusion may lead to a conceptualization that there is a correct way or method to being mindful and that one is not able to master this method, which in turn may lead to frustration and disengagement. It may be expected that participants exposed for the first time to mindfulness practices may share some of the challenges and difficulties mentioned in the literature. However, the literature suggests that for some participants who remain open and flexible while continuing to practice mindfulness exercises, beneficial results start emerging. The benefits seem to be moderated by a sense of mastery and an increased awareness, as well as a gradual ability of engaging in reperceiving that seems to be therapeutic. This may also lead to higher motivation to continue practicing, as seen

by reports of continuous formal and informal mindfulness practices even after program completion.

Among the studies that have used qualitative designs, a predominant adult population was investigated. These qualitative studies have shown that mindfulness can be experienced with a certain commonality while also highlighting some unique individual experiences. The findings indicate how mindfulness is meaningful to the participants, often drawing on its beneficial aspects. It is evident that the adolescent population has not been adequately represented in the qualitative literature on mindfulness meditation (Dellbridge & Lubbe, 2009; Kerrigan, Johnson, Stewart et al., 2010) with only 3 studies focusing on exploring participants' subjective perceptions and experiences of an MBSR program and mindfulness techniques using qualitative designs.

Qualitative Research on Mindfulness with an Adolescent Population

This section will explore the literature on adapted MBSR programs and interventions for adolescents that have utilized qualitative designs. Three qualitative studies investigating adolescent experiences of mindfulness were investigated. One study involved clinical adolescent participants who were suffering from the Human Immunodeficiency Virus (HIV). The two other studies involved healthy adolescents, one including participants from low social-economic neighbourhoods, the other exploring the experiences of mindfulness-based interventions using a single case research design. Lastly, the research findings will be compared to those found in the adult population.

Mindfulness and the Human Immunodeficiency Virus. A pilot study conducted by Sibinga et al. (2008) investigated the feasibility and acceptability of an MBSR program for 11

adolescents ages 13-21 who were HIV positive. The feasibility was measured by attendance and completion of the program. The content of the program was retained from the original with minor adjustments and simplifications made to the content language. Participants attending 5 sessions were considered completers, which consisted of 5 adolescents, 4 of whom being female. The acceptability was assessed by a 30-minute semi-structured interview at the end of the program. Open-ended questions were used inquiring into the perceptions' of the adolescents, as well as the role the program has had in their day to day life. The data were coded using thematic analysis.

The findings of this study suggest five themes, namely, an "improved attitude," "decreased reactivity," "improved behaviour," "improved self-care," and the "importance of the group" (Sibinga et al., 2008, p. 37). Within the improved attitude, participants mentioned learning "how to cope with stress," "not letting every person or everything get me down," and trying to think more positively. The decreased reactivity theme included statements such as learning to "let things roll off," and "not get carried away." In the improved behaviour category, some participants explained that they learned to "think before acting" and to "be more calm". The self-care theme contains participants' statements including learning to "love myself more," learning to be "in-tuned with myself," and learn how to "deal with the pressures of life." Furthermore, participants rated the importance of the program out of a scale from 1 ("no importance") to 10 ("great importance") as a 9.6 on average, with all of them reporting learning valuable skills which they will continuously use in life. As a matter of fact, two to four weeks after the program, all 5 completers reported continuously meditating for one to two times per week.

The limitations of this study, as reported by the authors, included a small sample size, a selection and participation bias, and a lack of a heterogeneous sample (Sibinga et al., 2008). Furthermore, the interviewing process involved asking questions about the effects of the program, thereby limiting the direction and variability of the participants' responses. This may have also confounded the findings, as participants would possibly focus more on beneficial effects in accordance to the research purpose, rather than their own perceptions of the program.

Mindfulness with Adolescents from Low-Socioeconomic Neighbourhoods. Kerrigan et al. (2010) have investigated the experiences of 59 adolescents from a hospital outpatient clinics receiving ongoing medical treatment after completion of an eight-week adapted MBSR program. Participants ranged from 13 to 19 years of age and were African-American from poor socio-economic neighbourhoods with no significant psychiatric disorders. Adaptations were made to the language and schedule, transportation and class duration. The aim of this study was to explore the acceptability and feasibility of MBSR as well as the emergence of common themes. Participants were recruited using purposive sampling from a larger MBSR study. Data were collected through a semi-structured one hour interview. An ethnographic field guide was used to identify key elements of adolescents' stressors and coping methods before MBSR, their perceptions and experiences of MBSR, and shifts in cognition, behaviour and experiences associated with MBSR which aided the interview protocol. Data were coded openly as well as based on the results of the ethnographic field guide. The data were then analyzed using content analysis to identify both common and diverse experiences of participants.

The researchers identified common stressors involving school and relationship difficulties including interpersonal interactions at school. Among a few of the common coping strategies prior to MBSR participation mentioned included ignoring stress through retreating to

their rooms, watching TV and playing video games, as well as engaging in verbal conflict. Participants also discussed difficulties with regulation of stress and frustration using such coping methods. Common themes of perceptions and experiences of MBSR practices included an element of attention and awareness with a few participants describing it as attending to the moment to moment experiences. A few also mentioned getting in touch and realization of the role of thoughts, feelings, and bodily sensations during mindfulness-based practices. This self-awareness was attributed to acceptance of thoughts and feelings.

Mindfulness-based practices were seen by some as challenging in terms of the requirement of self-discipline and perseverance and finding a quiet setting at home to practice. SMM in particular was perceived as the most difficult practice. It was conceptualized as a method of stress-management in response to a perceived need as opposed to establishing a daily routine. Furthermore, a shift toward elements of reperceiving was also experienced by all participants. Although variable in intensity of this experience, many participants experienced an improved ability to avoid conflict, improvements in school performances, and greater self-care. This was experienced by most participants as relating to stressful events using a more non-judgmental and less reactive approach, while a few mentioned more global changes in self-concepts and relationships and transformations with regards to life in general with one participant experiencing a new world view, renewed energy, and a greater understanding of oneself relation to his relationship and life in general. Other participants also experienced insights and reframing of situations, although more grounded in the context of their day-to-day experiences. Reframing of situations was described as difficult to explain by participants although there was a commonality of perceiving mindfulness-based practices as contributing to a

shift to "look at stuff differently" (p. 5) which was experienced as beneficial in participants' social, academic and personal functioning.

Almost all participants expressed feeling positively about attaining relaxation and stress-reduction with everyone feeling satisfied about the perceived changes including greater perceptions of self-control. One participant described feeling cautious about the exercises initially but progressively experienced them as helpful in expanding her awareness of the impact of her behaviours. A few participants reported a desire to continue practicing mindfulness beyond the research.

The limitations of the findings included using a homogenous sample, as well as the emphasis on self-regulation. The focus on exploring the topic of self-regulation may have impacted the interviewing process as well as data-analysis by limiting the emergence of other experiences related to mindfulness-based practices. Furthermore, it may have contributed to due to participants' conforming to the expectations of the aim of the study especially regarding the desirability of self-regulation. However, the researchers state that the findings inform the application of mindfulness-based programs for adolescents especially due to the variability of experiences of mindfulness, the perceived challenges with some of the practices, and the balance of self-regulation of thoughts and feelings and the process of acceptance which is promoted in mindfulness (Kerrigan et al., 2010).

Mindfulness-Based Interventions using a Single Case Research Design. A single case study by Dellbridge and Lubbe (2009) explored the experiences of Lia (a pseudonym), a 17 year old female with five mindfulness sessions over a period of 10 weeks. Both informal and formal mindfulness training strategies were used including psycho-education on the definition of

mindfulness-based on the literature, the researcher's own interpretations, and mostly, Dr. Kabat-Zinn's MBSR CD instructions. The aim of the research was to gain an in-depth account of what the experiences and perceptions of mindfulness practices are for this particular participant and whether she could apply them in her daily life.

Dellbridge and Lubbe (2009) used five main dimensions of mindfulness from the pre-existing literature on theories of mindfulness and created five interview domains including present-centered awareness and attention, attitude and heart qualities, self-regulation, mindlessness, and universalism. The present-centered attention and awareness theme was dominated by being task and goal-focused for Lia, meaning, that she evaluated her success by her ability to sustain her attention on the task, rather than engaging in non-evaluative observing of mental activity that occurred during the mindfulness practices. According to the researchers, this, along with her interpretation of doing the task "right," potentially hindered her from experiencing mindfulness as an observer of her awareness. Lia also focused more on external processes, such as sounds, and interpreted them as distractions and indicators of a need to re-focus her attention on the task at hand, rather than interpreting these as internal experiences of feeling distracted.

The attitude and heart dimensions, which included intention and personal orientation, revealed that despite Lia's goal and task-orientation, the extent of learning mindfulness increased her intention and engagement in the process (Dellbridge & Lubbe, 2009). The researchers note that Lia's extent of self-criticism may have interfered with her ability to engage in mindfulness throughout the majority of the study, although she reported experiencing a letting go of self-critical and perfectionist tendencies. Within the self-regulation dimension, it became evident that Lia's tendency to self-regulate her attention was influenced and increased by her growing

interest in mindfulness. The data also revealed that sustaining self-regulation was a difficult task for Lia, especially as her efforts reflected an attempt to attain more developed states of mindfulness. However, the findings suggest that Lia was able to develop her self-regulation skills with practice and achieve a growing sense and understanding of mindfulness. Mindlessness is described as being on autopilot, unaware of automatic patterns of behaving (Thompson & Gauntlett-Gilbert, 2008). The findings reveal that the more Lia realized, understood and identified experiences as being mindless, the more she strengthened her mindfulness practices, and vice versa (Dellbridge & Lubbe, 2009). The last dimension of universalism of mindfulness revealed that although Lia felt confused about the secular nature of mindfulness meditation, she was able to view and apply it as a skill in daily living. The researchers felt that Lia's conception of mindfulness as a technique to be learned and used at will is incongruent with the literature that conceptualizes mindfulness as a particular way of attending and tuning in that exists universally and can be cultivated.

The researchers concluded that Lia's experiences were task-oriented within the majority of the dimensions, and that she was able to experience growth through continuous practice (Dellbridge & Lubbe, 2009). The limitations of this study included the single case design, limiting the transferability of the findings, especially given her perfectionist tendencies that may not be representative of a general population. Furthermore, the researchers indicated a strong working relationship with Lia was formed, potentially giving rise to researcher bias and expectancy effects. Lastly, the procedures for the implementation of the mindfulness practices and data collection, as well as the instructor's training level in mindfulness were unclear.

Similar to an adult population, mindfulness may be experienced as having an impact on adolescents' attitudes and perspectives, especially pertaining to acceptance and letting go, self-

awareness levels, feelings of self-worth and self-care, and a sense of coping. These findings show preliminary support for the value of investigating experiences of adolescents with mindfulness and mindfulness practices. However, due to the limitations of the research methodology, a full account of such experiences from several adolescents' points of view is missing. Consequently, this study will aim to address this in the literature, and will contribute to the investigation of the experience of SMM. Before an in-depth exploration of a proposed qualitative research design is outlined, the literature on quantitative research on mindfulness with children and adolescents will be reviewed.

Quantitative Research on Mindfulness with Children and Adolescents

This section will outline the quantitative research on children and adolescents and mindfulness using MBSR, MBCT or modified versions of the two programs. First, a meta-analytical study on feasibility of mindfulness programs for this population will be reviewed, followed by specific studies investigating mindfulness-based programs and practices for a clinical sample of children and adolescents suffering from various difficulties including psychiatric disorders, attention deficit disorder (ADD), attention deficit hyperactive disorder (ADHD), anxiety, and insomnia with substance abuse. Next, the effectiveness of mindfulness-based programs among a non-clinical sample will be explored, including the effects of SMM on blood pressure and heart rate, the feasibility and applicability of the program with inner-city students and other educational settings. Lastly, a description of the modifications that were made to the original mindfulness-based programs in the literature regarding research on mindfulness with a child and adolescent population will be given.

Feasibility of Mindfulness-Based Programs with Children and Adolescents. Initial research and pilot projects of mindfulness-based programs for children and adolescents show

preliminary positive results, although further empirical research supporting their effectiveness is needed (Biegel et al., 2009; Burke, 2009; Dellbridge & Lubbe, 2009; Lee et al., 2008; Thompson & Gauntlett-Gilbert, 2008). A meta-analysis of 16 studies investigating specifically the effectiveness of sitting meditation interventions among adolescents 6 to 18 years old yielded findings comparable with meta-analytical research for an adult population for physiological, and psychological and behavioural outcome measures (Black et al., 2009). The majority of the studies included mindfulness meditation (n=6), MBSR (n=2), and MBCT (n=2). Compliance rates, as measured by attendance, were promising ranging from 68% to 90%, and retention rates, as measured by the percentage of completed measures and follow-ups ranged from 64% to 100%. Attrition does not seem to be a major problem in research of mindfulness-based programs. However, small sample sizes may have limited these results. Nonetheless, these findings contribute to feasibility of mindfulness practices and programs for adolescents.

In a review of mindfulness research on pre-school, elementary school-aged children, and adolescents by Burke (2009), an investigation of 14 studies showed that, on average, participating in mindfulness-based programs seem to be attributed to having a small to medium impact on improving scores on the specific mental health assessment measures that were used in these studies. Similar to the previous study and mindfulness research in adults, methodological flaws including small sample sizes, reliance on self-report outcomes, lack of randomized control groups and minimal objective measures, use of a non-clinical population, and biases in recruitment were reported. Furthermore, researchers state that adaptations in methods of applying mindfulness programs which lead to content variations make it difficult to investigate specific components of mindfulness training (Biegel et al., 2009; Burke, 2009). Although studies suggest that most participants reported enjoying the program, these evaluations are based

on participants who have completed the program, with those who had dropped out possibly having differing opinions (Baer, 2003).

The effectiveness research on mindfulness meditation practices for a child and adolescent population using rigorous randomized control designs is limited. According to Burke (2009), this gap is due to the novelty of this area of research for this population. Both Burke and Kabat-Zinn (2003) state that with mindfulness research being a novel and emerging area of interest, it is common for the literature to be initially more descriptive in nature before focusing on experimental designs demonstrating clinical effectiveness and efficacy. Despite these limitations, the literature suggests a consensus on the acceptability, tolerability, and feasibility of mindfulness-based programs for children and adolescents, and some promising and emerging findings on its effectiveness, including a randomized clinical study by Biegel et al. (2009).

Mindfulness and Psychiatric Disorders. Biegel et al. (2009) conducted a randomized control trial of MBSR with 102 adolescents ages 14 to 18 who were under current or recent psychiatric care at an outpatient psychiatric facility. The control group consisted of 52 participants receiving TAU in the outpatient psychiatric facility, including individual or group therapy and/or psychotropic medication treatment, while the remaining 50 participants received TAU and participated in a modified version of the 8-week MBSR program. Adaptations included the use of adolescent-relevant themes and language and a reduction in home work assignments. The Diagnostic and Statistical Manual of Mental Disorders (4th ed. American Psychiatric Association, 2000) was used for diagnoses and global assessment of functioning (GAF) made by the adolescents' mental health clinicians as part of their regular treatment. These mental health clinicians were kept blind to the intervention and control groups. In this sample, 49% of participants were diagnosed with mood disorders and 30.4 % with anxiety

disorders at pre-treatment. Measures were obtained at pre-test, post-test (conducted after the completion of the eight week MBSR program), and at 3-month follow-up interval. The clinical measures that were made by the mental health clinicians included diagnostic change rather than change in severity of the diagnosis which, according to the authors, contributes to a conservative standard. Self-reports were also used to measure perceived levels of stress, psychological distress, anxiety, symptoms of depression and somatization, self-esteem, and sleep quality.

The results of this study suggest that MBSR may be an effective intervention for an adolescent outpatient population (Biegel et al., 2009). Among both completers and the intent-to-treat group that participated in both MBSR and TAU, there were significant reductions in symptoms of anxiety, depression, somatization and stress levels compared with the TAU only control group. Among participants who completed the MBSR program, there were also reductions in obsessive symptoms and reports of fewer interpersonal difficulties compared to the TAU control group. Furthermore, participants in the MBSR group reported an improvement in self-esteem and sleep quality. Compared to the control group, the clinical measures reported an increase in GAF scores, as well as a higher percentage of mental health changes strong enough to constitute a variety of modifications to the pre-existing diagnoses. This diagnostic change was relevant for 45% of the MBSR group with anxiety disorders, and especially pronounced for participants with mood disorders who at follow-up scored less than half that of their pre-test scores.

Some of the limitations of this study include a lack of assessing for diagnostic reliability due to an absence of multiple clinician ratings and standardized interviewing methods used (Biegel et al., 2009). However, the authors argue that clinicians were blind to the groups and the use of their ratings for research, thus no differences in diagnoses or GAF ratings were expected.

Due to this study being the first randomized control trial research with adolescents, the standard level of significance ($p < .05$) with no adjustments to statistical significance levels were used, resulting in a liberal method of testing for treatment effects. Lastly, the treatment effects may have been confounded due to the MBSR group receiving more clinical attention and treatment than the TAU control group.

Mindfulness and Attention Deficit Hyperactive Disorder. As mindfulness requires sustained attention, studies have explored the effects of mindfulness-based programs on children with Attention Deficit Disorder (ADD) and Attention Deficit Hyperactive Disorder (ADHD) in an effort to increase children's abilities to pay attention (Bogels et al., 2008; Napoli et al., 2005; Zylowska et al., 2007). In a study by Napoli et al. (2005), 228 children in grades 1 to 3 participated in the Attention Academy Program, which consists of 12 bi-monthly 45 minute sessions over the period of 24 weeks, including body scan, movement, and SMM exercises. The aim of the program was to increase students' attention of the here and now experience without judgment, while facilitating the experiencing of events as new and novel. Only participants who attended all classes were used for the analysis, which totaled 194 participants, as 34 missed more than one session. From these 194 participants, 97 were randomly assigned to the experimental group receiving the intervention, while the other 97 comprised of the control group engaging in quiet reading time in a separate classroom. Although different from MBSR and MBCT, this program included similar mindful practices such as attention on the breath, body scan exercise, and body movement exercises, as well as discussions with the instructor to gain feedback on such exercises. Measures included a comprehensive scale to measure the presence of ADHD using teacher ratings, self-reported test anxiety, and objective neuro-cognitive attention measures which included sub tests for visual attention as well as sustained attention measures.

Results indicated that compared to the control group, students who participated in the program had significant increases in selective attention, teacher-rated attention and social skills measures, as well as reductions in self-reported test anxiety measures and teacher-rated problem behaviours on the ADHD measure (Napoli et al., 2005). However, sustained attention did not seem to have a strong contributing factor to the overall score variance as compared with the other measures on attention. The authors note that there is a possibility that the study's validity had been affected due to the use of the clinical ADD-H Comprehensive Teacher Rating Scale (Ullmann, Sleator, & Sprague, 1997 as cited in Napoli et al., 2005) with a non-clinical sample. Furthermore, possible biases of teacher-ratings who were not blind to the treatment group, a lack of control for non-specific factors such as support or group effects, and differences in content and format of training strategies compared to MBSR and MBCT groups, including the absence of homework assignments limit the generalizability of the findings.

Similar results were found by a recent pilot study by Flook et al. (2010), investigating the role of the Mindfulness Awareness Practices (MAP) on executive functioning, which refers to behavioural and emotional self-regulation and meta-cognitive abilities among 64 elementary children ages 7 to 9 using randomized control groups. The MAP consisted of 30 minute bi-weekly sessions over eight weeks and included the use of a three minute SMM at the beginning of each session, followed by games and activities complementing each week's learning lessons, and concluding with a five minute body scan or lying down meditation. The duration of the first two meditative practices were extended gradually throughout the program.

The results showed that significant improvements were found within the domains of behaviour and cognitive regulation, and overall executive functioning scores from pre and post-treatment scores as rated by teachers and parents (Flook et al., 2010). Children with low baseline

scores of overall executive functioning shifted to more moderate and normative levels after the program and showed more significant improvements compared to those with higher baseline scores. Within the meta-cognitive index, improvements were reported on the clinical subscales measuring the child's ability to initiate and monitor. Significant improvements were also noted within the subscale of the behavioural regulation index measuring the child's ability to shift. The researchers point out that "these are central skills practiced by engaging in mindfulness exercises" (p. 79), especially involving sitting meditation, during which children are prompted to initiate focusing their attention on the breath, to observe and monitor their awareness throughout the exercise, and to re-shift their attention in case of distractions. Furthermore, parents reported that improvements were also generalized to non-school related settings.

A major limitation of this study includes the potential of bias due to using ratings of teachers who were not blind to the experimental group (Flook et al., 2010). However, the researchers argue that due to the presence of within-group variability among these ratings, systematic biases may not be as prevalent. Although the researchers state that the parents were blind to the nature of random assignment, it is dubious that they would be able to remain unaware throughout the duration of the study. Other weaknesses include the use of a non-active random control group, and a lack of standardized objective measures. Nonetheless, the results seemed to be consistent with the previous study, indicating that mindfulness meditation practices may be feasible, holding preliminary support for its effectiveness in promoting self-regulation and meta-cognition.

Another study by Bogels et al. (2008) examined the effects of MBCT program on 14 adolescents ages 11 to18 with primary diagnoses of ADHD, Oppositional Defiant Disorder (ODD), Conduct Disorder (CD), and Autism Spectrum Disorders (ASP) who were referred to a

community mental health centre. This age range was used as the researchers felt that younger children might not have the "meta-awareness" needed for mindfulness practices to be effective. Parents of the participants were also included and received MBCT training. The study used a waitlist during which participants received family treatment while waiting for the program. The study also used an 8 week follow-up assessment. Outcome assessments measured improvement on personal goals and personal change, internalizing and externalizing symptoms, behaviour problems, objective measures on ability to sustain attention, mindfulness awareness, and quality of life.

Compared to the waitlist that had no improvements on most measures, there were significant improvements in personal goals (including goals of parents), ability to sustain attention, mindfulness awareness, impulsivity, social problems, happiness, and a reduction in internalizing and externalizing symptoms (Bogels et al., 2008). These results were maintained at the 8-week follow-up interval. Furthermore, those participants who completed the program had an increased improvement over the ones that dropped out. The researchers noted that some of the limitations of the study include a small sample size, a lack of a randomized waitlist group, which gave rise to a range of waiting periods for families, reliance on self-reports of study participants rather than inclusion of more objective reports of teachers or other family members, and difficulty in extricating the effect of MBCT on child and parents separately (Bogels et al., 2008). However, they state that mindfulness training is feasible and has potential with an adolescent population with externalizing disorders in the form of ADHD, ODD, CD, and ASP. They also argue that MBCT can be combined with other treatments and may be especially suitable for adolescents that are not responsive to medication.

Zylowska et al. (2007) wanted to find out whether an 8 week mindfulness-based programs would be feasible for adults and adolescents with ADHD. The adolescents needed to be 15 years or older with a previous diagnosis of ADHD in order to be included in the study. The program followed MBSR guidelines with the exception of adding psycho-education about ADHD, shortening sitting meditation periods (or using walking meditation instead), emphasizing mindful awareness in everyday life, using visual aids in assisting with explanations of mindfulness concepts, and including "loving-kindness meditation" with the hope of increasing the participants' self-esteem levels. Measures included self-reports of ADHD, depression, and anxiety symptoms, as well as attention measures, verbal IQ, and a scale assessing overall self-reported satisfaction levels with the program. The study included 24 adults and 8 adolescents, and only one adolescent dropped out due to time management conflict with school work. The majority of the participants attended six to eight sessions, and had high satisfactory ratings.

Results showed that there were significant reductions in self-reported ADHD symptoms by 78% of the participants of which 30% reported a 30% symptom reduction, which according to the researchers is clinically significant (Zylowska et al., 2007). Significant improvements in performance on neuro-cognitive measures requiring attention were also noted. However, according to the researchers, findings may have been confounded by practice effects. Although improvements in depression and anxiety were found among adults, adolescents were rated as not having significant anxiety in the pre-assessment, and only minor changes in depression were found. Researchers believe this is due to the small sample size. Furthermore, they state that the generalizability of these findings are limited due to a lack of a control group and a sample consisting of mostly female, Caucasian participants from medium to high socioeconomic

background. However, the researchers agree that mindfulness training is feasible and may hold potential among at least a subset of adolescents with ADHD.

Mindfulness and Anxiety. In a pilot study by Semple et al. (2005), a six week school-based group intervention adapted from the original MBSR and MBCT programs was provided to five children ages 7 to 8 who were initially included because of reported anxiety symptoms. Programs consisted of 45 minute sessions and were tailored to keep younger children interested and engaged in the process. Assessment measures used in this study included a teacher form of problematic behaviours, two self-reported anxiety measures, and a self-reported measure of mood.

Findings indicate improvements in academic performance as well as a reduction in both internal and external problematic behaviours as evaluated by the teachers (Semple et al., 2005). A summary of the case reports revealed that mindfulness was conceptualized differently for each participant. Furthermore, it became evident that all participants were overestimating their abilities of being aware of their surroundings, which they started realizing through engaging in mindfulness exercises. Anxiety outcome measures were not included because participants were either not reporting or minimizing anxiety symptoms on the measures, and because the researchers felt that the wording of these measures were not conducive for the developmental stages of these children. Other limitations include a lack of random assignment and control group, possible expectancy effects confounding findings as teachers were aware that children were receiving an intervention, and the unexpected younger-than-planned ages of the nominated children.

Due to the exploratory nature of this study, treatment effectiveness could not be established (Semple et al., 2005). However, the clinicians confirm the feasibility of teaching mindfulness to children with adaptations to the length and nature of each practice. They concluded that children had the capability to understand concepts of mindfulness, engage in mindfulness practices within sessions, and apply them in their everyday lives.

Mindfulness and Insomnia Related to Substance Abuse. In a study by Bootzin and Stevens (2005), mindfulness meditation was incorporated in a broader substance abuse treatment program in order to treat insomnia, and reduce worrying and mental health distress for 55 adolescent ages 13 to 19 years old. The treatment consisted of six group-based 90 minute sessions held weekly. The first part of treatment sessions focused on improving sleep using non-mindfulness related interventions such as stimulus control instructions, the use of bright light to influence sleep and waking circadian rhythms, psycho-education about sleep hygiene, and cognitive therapy. Mindfulness meditation using the MBSR format was incorporated at the second week for the latter half of each subsequent session. Outcome measures used in this study included daily sleep diaries completed by participants, the use of actiwatches measuring body movement at night to give statistical estimates of sleep regardless of participant's subjective assessment, saliva tests measuring dim light melatonin onset, and questionnaires measuring self-reports of substance abuse, mental health distress, and the frequency and intensity of worrying and sleepiness.

Findings of this study reveal that although substance abuse increased for all participants during the intervention, at the 12-month follow-up interval, participants who completed the program reported a reduction in substance abuse compared to a continuous increased rate of substance abuse for non-completers. There was also significant improvements in sleep

efficiency, sleep onset latency, number of awakenings, and self-reported quality of sleep for participants who completed four or more treatment sessions. Significant improvements were also noted for all participants on questionnaires showing reductions in mental health distress, worry, and sleepiness, although there were no significant differences between completers and non-completers. Participants rated the program as valuable and as important with "improved sleep", "ways to relax", and "more energy" being some of the beneficial effects reported. These results have been confirmed by a similar study conducted by Britton, Bootzin, Cousins et al. (2010) who in addition found strong and positive correlations of frequency of SMM and/or body scan practice with improvements of sleep especially sleep duration ($r = 0.56$ for total sleep time and $r = 0.66$ for time in bed) and higher self-efficacy scores at follow up ($r = 0.50$), suggesting that practice of mindfulness-based exercises may intensive positive outcomes. Furthermore, they conclude that these findings are impressive in light of the relatively low amount of practice needed to obtain such results, which consisted of five to ten minutes per day for one to two times per week.

It is unclear how much of these findings are attributed to the effects of the mindfulness-based intervention, as the treatment program consisted of other non-mindfulness related components. Furthermore, due to the high rate of drop-outs, the completer group may have shared inherent participant characteristics that could have influenced the results of the study. Other limitations include an absence of a randomized control group and the reliance on self-reports.

Sitting Mindfulness Meditation and Effects on Blood Pressure and Heart Rate. In a study by Barnes et al. (2004), the role of meditation on blood pressure and heart rate among adolescents was investigated. Seventy-two students in seventh grade were assigned to either a

meditation group, which received the MBSR SMM instructions, or a health education control group. Participants in the meditation group conducted 10-minute meditation sessions of SMM at school as well as at home for a total of 20 minutes over a period of three months. They also attended a 20 minute session per week with the meditation instructor to clarify and discuss their experiences of meditation. Participants in the control group met for 20 minute sessions to become educated about strategies of preventing high blood pressure and cardiovascular disease, and were also prescribed daily 20 minute walks. Both groups thus received the equivalent amounts of direct contact time with the instructor. Measures included assessments of ambulatory blood pressure and heart rate, and self-reported questionnaires on the expression of anger, exposure to violence and stress related to the neighbourhood setting, and the frequency of physical activity.

Findings suggest that SMM was feasible for this particular population with an average attendance of 88.5% for the meditation group, and an 86% self-reported compliance rate for home meditation practice (Barnes et al., 2004). Using a multivariate analysis of variance on pre and post-test measures of systolic blood pressure (SBP), diastolic blood pressure (DBP) and heart rate (HR), the meditation group showed significantly lower levels of resting SBP, daytime after school ambulatory SBP, DBP and HR compared to the control group. Both groups did not differ in active lifestyles, gender, ethnicity, anthropometrics, or expectancy beliefs of beneficial effects on health. The results were obtained despite the lack of MBSR certification of the meditation instructors. In addition to a lack of familiarity with MBSR concepts, other limitations of this study include a conceptualization of mindfulness as a concentrative meditation technique, a lack of a follow-up interval to assess continuous treatment gains, and the possibility that the

treatment group received more supportive type of interactions compared to the psycho-educational nature of the control group.

Mindfulness in Educational Settings. Despite the lack of evaluation of mindfulness-based programs for an adolescent and child population especially in comparison to the empirical data conducted on adults, there has been a recent growing trend in incorporating such programs within the educational system (Garrison Institute Report, 2005). According to the Garrison Institute, contemplative practices emphasizing mindfulness have been promoted in developing social-emotional learning among students by integrating such practices within the school curricula. Furthermore, the aim of such integration is also to strengthen student's capabilities of self-regulatory and attention processes, and to develop positive traits such as patience, compassion, kindness, generosity, and empathy.

Mendelson, Greenberg, Dariotis et al. (2010) conducted a randomized control trial study with 97 fourth and fifth grade students from low socioeconomic backgrounds using a 12-week mindfulness based program. Out of four schools, two were randomly assigned to the intervention (N=51), while the other two served as wait-list controls (N=46). Pre and post-assessment prior and after completion of the intervention were conducted assessing both voluntary, and implicit and involuntary stress responses to social interactions, depressive symptoms, and evaluating school-based relationships. The intervention was administered four days a week during school hours and based on the Holistic Life Foundation which consisted of physical exercises including yoga, breathing techniques, and guided visualizations promoting mindfulness. Exercises emphasized attention on breathing as a source of focus while gradually exposing participants to more advanced practices throughout the intervention. Furthermore,

psycho-education was provided on stress-management and mindfulness-practices, as well as promoting positive relationships and well-being.

Completion of 75% of the intervention sessions was attained by one school with 73.5% attendance rate compared to fewer than 40% for the other intervention group. Attendance rates were attributed to absenteeism from school on that particular day, as well as teachers preventing attendance of these programs as a way of disciplining behavioural disruptions in class. Based on 3 focus groups assessing student and teacher's evaluations of the program, students reported positive experiences and an acquisition of skills seen as helpful for everyday coping. Teachers supported the program being integrated into the school curriculum. Furthermore, participation in the program was received by enthusiasm from students.

The findings showed that the intervention group reported significant improvements in involuntary stress responses compared to the control group including decreases in rumination, intrusive thinking and emotional arousal. Furthermore, there was a trend toward a decrease in impulsivity of actions and a reduction in physiological arousal. Although not statistically significant, there was a noted pattern for decreases in depressive symptoms and negative affect. There were no differences in relationship factors with a trend favouring the control group with regards to experiencing greater levels of trust in their friends compared to the intervention group.

The researchers concluded that mindfulness-based programs in school seem feasible for adolescents, showing potential in reducing maladaptive coping strategies by decreasing involuntary stress responses including decreases in worrying (Mendelson et al., 2010). The researchers also hypothesized that the absence of significant findings on domains such as mood and relationships may be attributed to the possibility of the need of adjustment requiring greater

time to develop as opposed to changes in involuntary stress responses. However, they also state that the small sample size may have limited the power needed to identify group differences. Furthermore, students participating in this research may have had inherently higher motivation thereby limiting generalizablity. Lastly, the reliance of self-reports may have been confounded by social desirability.

Lee et al. (2008) investigated 25 children ages 9 to 12 with academic difficulties from a reading program offered in a community setting using a modified 12-week MBCT program. The modified program included shorter exercises, reinforcements, and parental involvement, especially with homework practices. Participants were matched for age and gender, and were randomly grouped to the MBCT program or a waitlist. Pre and post-assessments were made by researchers blind to the status of the groups and included standardized assessment measures of externalizing and internalizing behaviours, an anxiety scale and anxiety inventory, as well as a depression scale. Qualitative measures included the use of questionnaires consisting of both closed and open-ended items to assess both the children's' evaluation and experience of the program, as well that of the parents including their perception of noticeable changes in their child's behaviours.

Results showed a significant reduction in the parental ratings of their children's externalizing behaviours for completers of the program, but no effects on internalizing behaviours or child self-reports (Lee et al., 2008). No significant findings were found for the anxiety and depression measures. Researchers noted that due to a small sample size and a lower than normative baseline score for this sample, there were difficulties in detecting clinically meaningful changes. However, findings on the feasibility of the MBCT program showed that 68% of participants qualified as completers of the program, and that the attendance levels were

94% and 78% for the completers and the intent-to-treat group, respectively. Acceptability, as measured by children's and parents' feedback surveys showed that 94% of children either "Liked" or "Loved" it, that 88% of parents rated it as "High" or "Very High", and that the majority of children and parents found that the program contributed to improving the school and home settings, while making recommendations to friends and others. Moreover, according to the statements made by children and parents, the program, especially the breathing exercise, was effective in managing and coping with anxiety at school before and during exams, and made noticeable differences in the school setting.

According to the researchers, a floor effect due to the use of clinical measures on a non-clinical sample, a small sample size, and a lack of power in the detection of differences in intervention effects between-groups limit the findings of the study (Lee et al., 2008). Furthermore, an absence of a control group and reliance on self-reports also contribute to an inability to attribute treatment effects to the MBCT program, and limit generalizability of the findings. Nonetheless, the researchers state that in their clinical opinion, the majority of the children were able to understand and apply the concepts of mindfulness, some being able to integrate the skills learned in this program in their day-to-day lives. In order to reinforce and solidify children and adolescents' understanding and application of mindfulness, the researchers, like most of the abovementioned studies, have used modifications of the original MBSR and MBCT programs to cater to relevant developmental needs.

A similar study conducted by Semple, Lee, Rosa and Miller (2010) using the same research design replicated the well-received response and attendance rates and found significant reductions of problems of attention, and problems of external and internal behaviours. In addition, unlike the study mentioned above, the researchers also noted significant decreases in

anxiety symptoms for a subgroup of participants with elevated pre-scores of anxiety. These scores were maintained at the three month follow up assessment. The researchers suggest that MBCT may show promise for children and adolescents with attentional and behavioural difficulties which is consistent with attention deficit and hyperactive disorder (ADHD), although they warrant further research with a larger sample with diagnoses of ADHD.

In a study by Schonert-Reichl and Lawlor (2010), 246 students from grades 4 to 7 from 12 different elementary schools were introduced to a 10-week mindfulness-based education program consisting of 40 to 50 minute weekly lessons. The aim of this program was to develop students' emotional and social competencies through cultivating mindfulness using mindfulness practices such as mindful focusing on the breath, sensations, thoughts, and feelings. The program also promoted management of negative emotions and cognitions, and validation and acknowledgement of self and others. In this study, participants were asked to practice mindfulness exercises three times a day for at least 3 minutes per session. Pre- and post measures were used assessing levels of optimism, school and self-concepts, positive and negative emotions, and teacher ratings of students' social and emotional competencies. Out of the 12 participating schools, six participated in the program (n =139), while the remaining six were selected as a waitlist control group (n=107).

The findings of this study suggest that the program was easily and effectively incorporated into the school curriculum by teachers who indicated its success in positively influencing and benefitting the students, and in promoting the students' social and emotional skill development (Schonert-Reichl & Lawlor, 2010). Compared to the control group, there were significant increases in optimism and a positive trend favouring increased positive affect for students in the program. There were significant improvements in general self-concepts only for

pre-adolescents ages 9 and 10, as compared to the control group, while early adolescents ages 11 and 12 showed decreases in self-concept compared to the control group which scored higher. Compared to those in the control group, teachers scored students having completed the program as significantly higher in attention, social and emotional competence, and emotional regulation, and significantly lower in aggressive and oppositional behaviours. The authors speculate that the difference in self-concept scores among pre-and early adolescents may reflect the interaction of specific developmental changes and the cultivation of self-awareness that may impact early adolescents to adopt a more critical self-evaluation compared to pre-adolescents (Schonert-Reichl & Lawlor, 2010). Some of the reported limitations according to the authors include the use of individual student analyses as opposed to a multi-level model (as matching was based on classrooms rather than individuals), the use of teacher ratings of students rather than direct observational data, and an absence of a follow-up assessment interval.

Joyce, Etty-Lea, Zazryn, Hamilton, and Hassed (2010) investigated a 10-week mindfulness-based pilot program consisting of 45-minute lessons emphasizing the cultivation of awareness and focus of body and mind through mindfulness meditative practices congruent with the MBSR program with 175 students from grades 5 and 6 ages 10 to 13 years from two suburban elementary schools. Each session incorporated weekly group discussions with formal mindfulness meditation practices. Teachers were instructed to lead the sessions and were given flexibility in the way they administered the program based on the needs of each classroom. Due to a lack of resources, no control group or follow-up intervals were included in this study. Pre- and post-assessments measured students' self-perceived strengths and difficulties in emotional and behavioural functioning, as well as the presence of depressive symptoms before and after

program completion. Qualitative feedback was also obtained from teachers evaluating the effectiveness and feasibility of the program.

The results indicate that there was a significant decrease for all participants' scores on self-reported emotional and behavioural difficulties from pre- to post-assessment, with a stronger effect for participants with borderline-diagnostic and diagnostic baseline scores based on a normative sample (Joyce et al., 2010). No significant findings were reported on participants' perceived strength scores. At program completion, significant improvements were found for participants with baseline scores at borderline and diagnostic ranges for depressive symptoms. Teachers' feedback was generally positive with four out of nine teachers reporting some difficulties for students who were less motivated to participate, and the other five stating that overall the program seemed to be enjoyable and beneficial to all of their students. Teacher-reported benefits as observed in their students included a greater sense of relaxation and ability to focus, increased openness to new ideas, and a greater ability to use breathing techniques on a regular basis. Some of the limitations of the study include the absence of a control group, the reliance on self-report measures, and the lack of standardization in program administration. Furthermore, the study may have benefitted from including the perceptions and experiences of the students for the purposes of evaluating and assessing the feasibility of the program.

A study by Broderick and Metz (2009) investigated a five week mindfulness-based program for 120 senior high school girls 17 to 19 years old from a private Catholic suburban school. The objective of the mindfulness-based program is to assist students in learning mindfulness for managing negative emotions and cognitions in a group setting. Each session involved introduction of the lesson followed by group discussions and practicing in-class mindfulness meditation. Sessions ranged from 32 to 42 minutes held biweekly as part of the

students' regular school curriculum consisting of a total of 42 class sessions. The control group consisted of 30 students 16 to 17 years old from the same school. Pre- and post-measures were used to assess positive and negative affect, difficulties in emotional regulation, rumination, and frequency of somatic symptoms. Student participation and satisfaction with the program were also evaluated.

The findings indicate compared to the control group, students in the program showed significant decreases in negative affect, and significant increases in positive feelings such as calmness, relaxation, and self-acceptance (Broderick & Metz, 2009). Compared to the control group, students completing the program showed significant improvements in emotional regulation, emotional awareness and a greater clarity about their feelings. Furthermore, 86.5% of the participants rated the program as satisfactory or very satisfactory stating that the in-class meditation practices were most useful to them. The most important and valuable skill that participants reported learning as a result of the program was an improved ability to manage stressful emotions and cognitions. No significant findings were reported for differences in rumination between the intervention and control group.

The majority of the participants (64.6%) reported practicing mindfulness techniques outside of the classroom-setting throughout the program (Broderick & Metz, 2009). For participants practicing mindfulness for four or more days a week outside of class, there was a significant decrease in overall somatic complaints, compared to those who practiced for a shorter amount of time or those who just practiced mindfulness in the program. However, there was an increase in specific somatic complaints including dizziness and feeling over-tired for those who practiced mindfulness for four or more days a week compared to those practicing mindfulness only during the program. The authors report having difficulty interpreting these findings

suggesting possible contributive factors such as participants' heightened awareness of fatigue due to greater levels of mindfulness or the nature of specific mindfulness techniques used. Some of the limitations of this study as stated by the authors include a homogenous sample consisting of mostly Caucasian females from a similar socio-economic status, the use of a small control group consisting of students from a different age range, and potentially inflated treatment effects due to attrition in the control group.

Huppert and Johnson (2010) were interested in exploring personality characteristics of 173 fourteen and fifteen year old male students from 2 different religious schools associated with the effectiveness of this program and conducted a controlled trial of a four week mindfulness-based program consisting of four 40 minute sessions per week based on the MBSR structure. Furthermore, participants were encouraged to practice mindfulness at home using a CD with guided instructions. Pre and post measures included assessment of mindfulness, resilience, personality characteristics, and well-being. During the follow-up assessment one week after the intervention, an online questionnaire was given assessing the amount of time spent practicing mindfulness outside the program and an evaluation of the program including its effectiveness. Only the data that were completed was analyzed consisting of 78 students in the intervention group, and 56 in the control group who attended normal religious studies class.

The results indicate that all measures were significantly interrelated with higher scores of mindfulness being correlated with higher scores on the resilience measure ($r = 0.33$) and greater well being ($r = 0.40$). Furthermore, resilience scores were correlated with well-being ($r = 0.55$). With regards to the mindfulness scale and personality characteristics, conscientiousness and emotional stability contributed significantly to the mindfulness score. With regards to home-practice, 33% of participants reported having practiced at least three times a week, with 34.8%

having practiced more than once but less than three times a week, and 32.7% having practiced once a week or less. Two students reported practicing daily with seven reporting not practicing at all. The amount of practice was significant in predicting changes in mindfulness and well-being, but non-significant for resilience. The majority of students evaluated the program positively and as useful with 74% stating the desire to continue practicing mindfulness. Although most of the students reported that the length of the program was desirable, 43% felt it would have been more beneficial to extend its length.

Limitations of this study included the use of measures that have not been validated for adolescent population, the low internal consistency of the brief measure of personality and the use of self-reports. Furthermore, the generalizability of the findings is limited due to the homogenous sample consisting of males primarily from Caucasian ethnicities. Lastly, the absence of a random assignment and the lack of standardization of intervention administration may have also confounded the results.

Adaptations to Mindfulness-Based Programs for an Adolescent Population. Among some of the common reasons for adaptations to the MBSR and MBCT programs include children's difficulties with prolonged concentration combined with a tendency to get bored easily, which prompted researchers to include the use of greater variety in mindfulness exercises, and the implementation of an incentive plan for attendance and completion of tasks and homework assignments (Bogels et al., 2008). However, it seems that in each study, researchers modify the program structure according to their own assumptions and reasons, rather than exploring how mindfulness practices are experienced by the participants directly. Furthermore, the literature states that there is a lack of clarity of what developmental stage needs to be reached before mindfulness practices can be viewed as effective (Thompson & Gauntlet-Gilbert, 2008).

How can there be certainty that adaptations are consistent with adolescents' experiences of mindfulness practices if these are not grounded in empirical findings? Without an exploration of how mindfulness practices are experienced by adolescents themselves, these important questions will be difficult to be determined.

Summary and Conclusions. The literature suggests that mindfulness-based programs are feasible for a child and adolescent population (Biegel et al., 2009; Black et al., 2009; Bogels et al., 2008; Broderick & Metz, 2009; Burke, 2009; Britton et al., 2010; Flook et al., 2010, Huppert & Johnson, 2010; Joyce et al., 2010; Lee et al., 2008; Mendelson et al., 2010; Napoli et al., 2005; Schonert-Reichl & Lawlor, 2010; Semple et al., 2005; Semple et al., 2010; Zylowska et al., 2007). These programs also show promising preliminary findings of the potential of mindfulness. Despite these valuable contributions to the literature, there is a lack of research focusing on mindfulness as it is seen through the eyes of adolescent participants while taking into consideration the importance on basing modifications to the mindfulness-based programs on their experiences. The literature would be incomplete and limited if the emerging interest in research and application of mindfulness-based practices for children and adolescents ignores the experiences and voices of the very population that it is investigating and serving.

Chapter III: The Methodology

The Research Design

This study used a phenomenological approach in order to explore adolescents' initial experiences of Sitting Mindfulness Meditation (SMM). In this section, phenomenological research will be defined, including a brief description of its historical background as well as its purpose. Then, a rationale for using such a phenomenological research design in conducting this study will be given. Lastly, a description and rationale for the psychological phenomenological approach used in this study will be outlined.

Phenomenological research is defined as "a strategy of inquiry in which the researcher identifies the essence of human experiences about a phenomenon as described by participants" (Creswell, 2009, p. 13). Phenomenology has its roots in the philosophical writings of Husserl and Heidegger, with an emphasis that a human being is not only "essentially embedded, intertwined and … immersed in the world it inhabits" (Larkin, Watts & Clifton, 2006, p. 105), but also is not to be understood separately from its consciousness and intentionality (van Manen, 1997). Based on this philosophical perspective, Schutz argued that research in the social sciences would need to emphasize peoples' experiences, exploring their subjective interactions with the objects of their experiences (as cited in Gubrium & Holstein, 2000). Consistent with a constructivist framework, the understanding of a phenomenon needs to be examined from "the point of view of those who live it" (Schwandt, 1994, p. 118), especially since participants are not passive bystanders of an objective worldview, but are actively constructing and creating knowledge based on their own interpretations and subjective understandings of what makes sense and meaning to them (Brocki & Alison, 2006; Holstein & Gubrium, 1994; Schwandt, 1994). Thus, a phenomenological approach aims to capture, as closely as possible, participants' perceptions from their own frames of reference by exploring their experiences and meaning of a

particular phenomenon as they present themselves to their consciousness (Brocki & Alison, 2006; Creswell, 2007; Nelson & Quintana, 2005; van Manen, 1997). This type of exploration involves the researcher's intentional attachment to and understanding of participants' reflections on these experiences (Giorgi, 1997). According to Giorgi (2005), the goal and strength of phenomenology is its ability to clarify the meaning which the phenomenon holds for the individual and "the contributions it has made in our understanding of consciousness and subjectivity" (p. 75).

In this study, the phenomenon of interest was that of SMM. In order to investigate this phenomenon, adolescents' initial experiences of SMM were examined at two different time intervals by asking the research question, "What are the initial experiences of adolescents of the mindfulness practice of sitting meditation?" A phenomenological approach was used for 3 reasons, because, a) it is deemed to be a good fit with the research question and the nature of the phenomenon being investigated; b) it is suitable for complex phenomena unfolding over time (Giorgi, 2008); and c) there is evidence in the literature that such an approach has been successfully used in research on mindfulness with both adults (Griffiths et al., 2009; Pruolx, 2008), and adolescents (Dellbridge & Lubbe, 2009).

As seen by the consensus of the definition, mindfulness involves a highly subjective and internal process. Since mindfulness practice is an internal experience, a study using a phenomenological approach would allow an in-depth exploration of the people's constructed meaning of the phenomenon as it presents itself to their consciousness. Such a method would also be open to nuances in experiences that could emerge to contribute to a rich account of how the phenomenon is experienced by each participant (Krahn et al., 1995). This is especially relevant for a phenomenon such as SMM, which will be experienced differently on an individual

basis based on one's own ways of perception and unique personal background (Allen et al., 2009; Krahn et. al, 1995). Furthermore, this approach is not only conducive to topics that have not been explored in depth and needing to be discovered (i.e., SMM with adolescents), but can also provide explanations and elaborations of the meanings of previous quantitative findings of the studied phenomenon (Creswell, 2007; Nelson & Quintana, 2005), as seen by the review of the literature with adult populations. Researchers have encouraged qualitative designs among child and adolescent populations as a method in understanding a phenomenon considering the participant's own perspectives, developmental needs, experiences, meaning and context (Fiese & Bickham, 1998; Krahn et al., 1995; Nelson & Quintana, 2005).

This study used the phenomenological psychological method as outlined by Giorgi (2003). This method allows for scientific analysis by observing descriptive accounts of participants' experiences and conducting a "scientific phenomenological reduction while simultaneously adopting a psychological perspective" (p. 247). The outcome is an analysis of the data to create a description of the essential structure or theme of the experience grounded in a psychological orientation. As part of this method, scientific phenomenological reduction is used, in which the researchers bracket their experiences, assumptions and preconceived knowledge, as well as the objects and events being studied, but not the intentional acts of the participants and their relation to these objects and events. The method's absence of bracketing these acts differs from the transcendental phenomenological reduction that is grounded in a more philosophical orientation. Furthermore, during phenomenological reduction, the phenomenon is considered just as it is given, that is as "something that is being presented" to research participants, thus requiring the researchers to withhold the idea that the phenomenon actually exists in the way that it is presented and experienced by participants (Giorgi, 2008, p. 41).

Another point of departure of the psychological phenomenology with the philosophical one, as explained by Giorgi (1997), is its consistency with the quest of the discipline of psychology to unearth scientific psychological essences of experiences. According to this author, the philosophical approach seeks essences that are universal and general, rather than ones that are contextualized within a specific discipline. Giorgi explains that each discipline would have to determine the meaning of the individuals' experiences related to its context and particularities. Thus, psychological scientific essences seek out contextual based meaning consistent with the specific orientation of the discipline of psychology. Furthermore, rather than having philosophical roots, the application of imaginative variation (as explained in the data analysis section below) of psychological phenomenology is grounded in empiricism. Giorgi claims that the psychological phenomenological method "meets all four criteria of the scientific criteria" (p. 259), namely in its ability to be "systematic, methodical, critical, and general" (p. 258). It is due to this emphasis on scientific rigor, and this method's purpose to "produce, clear, precise and systematic descriptions of the meaning that constitutes the activity of consciousness" (Polkinghorne, 1989, p. 45) that makes the descriptive phenomenological psychological approach a good fit with the research question of this study.

Participant Recruitment

Upon obtaining ethics approval by the Behavioural Research Ethics Board of the University of British Columbia and the School Board District Research Committee, participants were recruited from two secondary high schools in a large metropolitan Canadian city including a mainstream as well as an alternate program. The study was advertised via the school's counsellors and teachers as well as through advertising posters (see Appendix A), which were distributed throughout the school. High school counsellors and teachers recommended

participation in this study to their students. The recruitment process was facilitated by an existing working relationship between high school counsellors and their students. Interested students were then asked to contact the researcher via e-mail and phone at which time they were informed about the goal of the study as well as the participation requirement. Prospective participants that met criteria for the study were given consent forms to be completed by their parents/guardians and then returned to the researcher. Subsequently, a day and time for completion of the study was scheduled at the participant's high school. As an incentive for participation in the study, each participant's name was coded by a number and entered into a draw for a $30 gift certificate to the local mall. Once the data collection was completed, the winner was notified and received the remuneration.

Adolescents between the ages of 16 and 18 in grades 10 and 11 were recruited based on 2 main reasons, namely in order to a) minimize difficulties of expression and articulation of their experiences and comprehension of the interview questions which more commonly occurs with younger participants due to their developmental stages (Nelson & Quintana, 2005); and b) because of their developmental readiness of engaging in self-reflective and meta-cognitive processes, which the literature suggests commences at the age of 12 years, becoming more developed in older adolescence (Bogels et al., 2008; Fox & Riconscente, 2008; Mevarch & Amrany, 2008; Ormond, Luszcz, Mann & Beswick, 1991). By studying adolescents in this age range, it was hoped to increase the likelihood that they had reached a more advanced meta-cognitive developmental ability that Bogels et al. (2008) view as "important for mindfulness training" (p. 206). Eligibility of selection was based on a) not having had any prior experience with SMM due to the relevance to the research question; b) absence of any physical conditions that would limit their ability to sit for a period of 10 minutes; and c) fluency in English, a criteria

consistent with the study by Dellbridge and Lubbe (2009) because of the need for a detailed account of an experience that may not be easily described. Ten participants were recruited, as this number was deemed sufficient due to the depth of the data collected and obtaining data saturation with regards to addressing the research question and providing a detailed account of experiences of the phenomenon (Brocki & Wearden, 2006). This number is also consistent with the recommended number of participants proposed for phenomenological studies (Creswell, 2007; Giorgi, 2008).

Demographic Information. The participants consisted of 4 females and 6 males with an average age of 16.7 years from various ethnic backgrounds including Caucasian (n=3), Chinese, Vietnamese, Filipino, First nations, Thai/Caucasian, Hispanic, and German/Irish/Filipino. Five of the participants attended a mainstream program, while the remaining 5 attended an alternative school. Reasons for participation included curiosity in participating in a study about mindfulness, learning about health benefits and stress management, learning to meditate in everyday life and becoming a happier person, and gaining relief from insomnia and depression. None of the participants mentioned prior experience with SMM. Two participants described having had experiences with yoga through a program at school, one described being exposed to a type of meditation he called circular breathing, and another described not being certain of the type of meditation he learned. Half of the participant (n=5) described that one of their family members had done meditation before.

Data Collection

Participation in this study first entailed the completion of a parental/guardian consent form (see Appendix B) and a participant ascent form (see Appendix C). The research meetings were held at a quiet, private, and confidential office at the participant's high school either after

school or during school hours (if the participants had spare blocks). Upon receiving the completed parental/guardian consent and assent forms, the voluntary nature of the study as well as the content and implications of these forms were emphasized to participants. Participants then completed the demographics information form (see Appendix D).

Upon obtaining all of the forms, the research procedures were explained to participants (see Appendix E) and they were invited to listen to the Mindfulness-Based Stress Reduction (MBSR) CD recording (Kabat-Zinn, 2002) containing instructions on how to do SMM (10 minutes) using headphones and a portable CD player. Such mindfulness CDs have been used in successfully promoting both in-session and homework practices of SMM in research with adolescents (Barnes et al., 2004; Biegel et al., 2009; Bogels et al., 2008; Britton et al., 2010; Dellbridge & Lubbe, 2009; Huppert & Johnson, 2010; Zylowska et al., 2007). After the first session of SMM, the researcher conducted a qualitative interview with the participants about their experiences using a semi-structured interview protocol (see Appendix F) in the hope to elicit as much depth and quality of meaning from their reflections. The interview protocol was created according to a) Allen et al.'s (2009) conceptualization of mindfulness as pertaining to participant's thinking, feeling and bodily sensations; and b) relevant domains of mindfulness as derived from the qualitative research literature including attention and awareness, acceptance and attitude, struggles, and expectations. The researcher attempted to minimize the use of probes during the interview in order to let participants' reflections direct data generation. Counselling skills such as active listening, paraphrasing, clarification and empathy were integrated into the interviewing process in order to deepen participants' responses and elaborations on their experiences and promote a sense of safety and trust. The length of the interviews was variable lasting from 30-60 minutes, depending on the depth of participants' reflections.

Given that the goal of this study was to obtain a rich account of the phenomenon of interest and ensure it constitutes experiences of SMM; at the end of the interview, the researcher gave the participants the CD and encouraged them to practice every second day for a week, which according to the literature seems to be a reasonable demand for mindfulness-based programs for adolescents (Britton et al., 2010; Huppert & Johnson, 2010). The researcher also encouraged participants to keep a written journal account of the session number and the accompanying experiences after the practice (see Appendix G), similar to the concept of weekly mindfulness practice diaries that were used in Biegel et al.'s study (2009) and the "Home Practice Records" used by Lee et al. (2008) and Semple et al. (2010). It was hoped that in the week following the initial practice of SMM and the interview, the participants will have had a minimum of four 10 minute sessions of exposure to SMM, including the one at the initial interview session. After a week, the researcher invited the participants for a second qualitative interview to explore whether continuous practice and exposure of meditation have enriched their experience of SMM. This second meeting repeated the above procedure for the fifth and last meditation practice session using the CD. The follow-up interviewing protocol (see Appendix H) explored how participants were experiencing SMM after having practiced it at home following the same interviewing schedule as the first interview. At this point participants were asked if they wish to be contacted by e-mail or phone in order to receive information about the findings of the study.

Data Management. The data were stored on a password-protected computer file at the UBC Department of Educational and Counselling Psychology, and Special Education. In order to maintain anonymity, informed consent and assent forms as well as the demographic forms were identified by the coded number representing the participants. This data were kept

separately from the informed consent and assent forms. All forms and data were kept in a confidential, locked, drawer in the office of the thesis supervisor at the Faculty of Education of the University of British Columbia. In line with university policy, all data will be destroyed after five years.

Data Analysis

The two sets of interviews were digitally audio recorded and later transcribed verbatim using Dragon Naturally Speaking, a professional transcription software. With the help of ATLAS.ti, a qualitative data analysis software, data was analyzed for emergent themes through a number of systematic steps outlined by Giorgi and Giorgi (2003).

As suggested by Giorgi and Giorgi (2003), first, the reflections and elaborations of each transcript were read in their entirety (one at a time) to allow the researcher a complete and holistic picture of the participants' responses, and to outline how the sections contribute to the phenomenon as a whole. Second, participants' experiences were coded into meaning units (sentences or paragraphs) by selecting passages in the transcript that stood out to the researcher, being mindful of the studied phenomenon and phenomenological reduction. Third, the researcher was guided by *free imaginative variation*, which is a process of philosophical phenomenology that attempts to reduce the meaning or phenomenon to essential structures or themes that are seen as the unique essence contained in the meaning or phenomenon, without which they cease to be perceived as that particular phenomenon.

According to Giorgi (2008), during the process of free imaginative variation, the researcher considers and generates various different possibilities of meanings beyond the ones stated in a description, including ones that negate those initially identified by the researcher. This facilitated the emergence of a description that is more general and "inclusive of the actual

meaning discovered in the description (Giorgi, 2008, p. 46). Thus, being guided by the process of free imaginative variation, the researcher elicited meaning from the participants' idiosyncratic statements captured in the meaning units that were consistent with a psychologically-oriented perspective to illustrate the studied phenomenon. At this stage, two potential pitfalls were avoided, namely the over reliance on the use of the participant's personal lives as a frame of reference, as well as the use of psychological terminology which might have confounded the original meaning and introduced unnecessary possibilities of interpretation (Giorgi, & Giorgi, 2003). The authors encourage a balance in which the statements are expressed in "ordinary language twisted toward psychologically heightened revelations" (p. 253). In order to reduce researcher bias and distortion of data, all descriptions of research participants were transformed from first-person to third-person statements (Giorgi, 2006). The researcher also bracketed his own ideas and assumptions about the phenomenon of SMM, and let the participants' perceptions elucidate the descriptions. This process will be discussed in more detail further in this manuscript.

Fourth, in order to gain an understanding of the essential ingredients contained within these newly *transformed meaning units*, the researcher was further guided by imaginative variation in creating a descriptive statement about these paired meaning units with regards to the phenomenon (Giorgi, 2003). This formed the *general structure* of the phenomenon of SMM. This structure was then compared to the meaning units in order to ensure that it accurately captured and included the essential ingredients and constituents as presented in the meaning units. Lastly, the findings of each data set were represented by a general descriptive statement, which was made in relation to the general structure, the transformed meaning units, and the raw

data. This statement helped to clarify the relationship between the various essential ingredients as it related and elucidated the phenomenon from a psychological perspective.

As each individual transcript was analyzed in this method, a general structure across all transcripts was made which included detailed information for the purpose of comparison. In this study, all of the data collected from each participant (qualitative interviews and journal entries) was first analyzed separately and then vertically. That is, cross-comparisons across participants were made between all general structures derived from both sets of interviews and compared to the journal entries. Thus, the data analysis followed these sequential steps: a) analysis of the first interview transcript; b) analysis of the second interview transcript; and lastly c) an analysis of the journal entries. All three sources of data were analyzed separately resulting in three uniquely generated general structures.

After the generation of these three descriptive statements, between cross-comparisons were made to elucidate the consistency of the data. Repeated comparisons led to minor revisions of the general structures in order to more accurately represent the experiences of the participants. The final outcome was a final descriptive statement capturing as closely as possible the essence or general structure of the phenomenon for each participant. Each of these individual essences of the phenomenon was then compared horizontally across those of all other participants. It was hoped that this type of analysis would reveal common and unique structures for each individual as well as for all the participants. However, due to unique experiences reported by participants in this study, the structures were grouped as either being individually based, as general structures that were shared within this group, or both.

During the generation of the general structures for each participant, the researcher collaborated with an auditor in order to ensure proper verification of the emerging results. In this

study, the auditor was a graduate student in organizational psychology with prior experience in qualitative data analysis. The auditor matched the themes generated by the researcher with the relevant passages in the interviews. The auditor's selection of interview passages was then compared to those of the researcher to ascertain consistency. Through the auditing process, a few additional interview passages were categorized under some of the pre-existing themes. Furthermore, auditing resulted in the discovery of a new theme.

Researcher's Subjective Stance

The primary researcher in this study was a master's level counselling psychology student, with a particular interest in mindfulness and adolescence. One of the main assumptions that the researcher holds about the phenomenon of SMM is that it has potential to be a powerful coping tool, which some adolescents may be able to learn and apply in certain situations. The researcher experiences meditation as an internal and spiritual process requiring patience, motivation, and a struggle between desiring a certain state of mind and letting go of expectations. The strongest challenge is the required discipline and the perseverance needed to reap the benefits of meditation. The researcher has experienced that the more the mind is focused on the object of meditation, the calmer and clearer the mind becomes, bringing with this experience not only an increased mental acuity and awareness, but also an intrinsic feeling of joy and peace. It is due to these beneficial experiences, that continuous practice is worthwhile. Thus, these experiences guided the researcher to believe that high level of intrinsic motivation and a strong desire to learn and apply a meditative routine is necessary for participants to realize the full potential and usefulness of meditation in their day-to-day lives. This would include having sufficient self-discipline to cultivate an on-going practice of mindfulness meditation.

Consistent with the researcher's experience with adolescent engagement in therapy, having worked with this population as a youth worker for nearly five years, and having completed the internship as a child and youth mental health clinician, the researcher assumed that for this particular study, some adolescents may have lacked this intrinsic motivation and self-discipline in order to truly benefit from mindfulness meditation. This may have presented itself as a tendency of not following through consistently with the home practice of SMM or practicing the exercises with minimal effort, especially if some participants did not take the study's requirements seriously. Furthermore, a potential expectation was that participants would struggle with the process of meditation, wondering about the purpose, and whether they are "doing it right", as consistent with the research literature. It was also assumed likely that some participants may have disengaged at such moments. The researcher also believed that adolescents would have experienced challenges in understanding the concept of non-striving during meditation. It may have been possible that they conceptualize SMM as task and goal-oriented, setting expectations for themselves. Another possible expectation was that adolescents may have realized how difficult it is to focus on the breath, even for a short period of time, and to observe without evaluating their experiences. Additionally, the researcher expected adolescents becoming more aware of awareness of their mental processes concerning concentration and evaluation of stimuli, experiencing a sense of relaxation, and experiencing possible feelings of curiosity or even joy about the process.

Another main assumption of the researcher is that adolescence is a developmental period with a potential heightened a sense of vulnerability, insecurity, and risk of exploitation, and that consequently therapeutic interventions, including SMM may be especially suitable for some. On the other hand, the researcher assumes that adolescence is also a time in which beliefs, attitudes,

and one's way of thinking has not been crystallized, resulting in openness to experiencing novelty. It was assumed that this openness may have contributed to an interest in participating and may have resembled a "beginner's mind", possibly strengthening the first time experience of SMM.

Managing the Researcher's Subjective Stance

In order to address the assumptions about the phenomenon of SMM, which could have potentially influenced the results of this study, the researcher used various means of managing his subjective stance. These methods were used throughout the study and included engaging in self-reflexivity, bracketing and continuous peer debriefing with the thesis supervisors and committee members.

Self-Reflexivity. By exploring personal situatedness, researchers engage in self-reflexivity, a process of critically examining and outlining how the research question, literature review and procedures, as well as the expected outcomes are intertwined with their assumptions, beliefs, worldviews, experiences, cultural historical and social background, and the investment in the research topic (Gergen & Gergen, 2000; Morrow, 2005). In addition to increasing the researcher's awareness of subjectivity and its contribution to the research process, self-reflexivity helps to inform the reader about personal perspectives that are influential throughout the research (Morrow, 2005).

According to Giorgi (2006), it is not sufficient to simply list one's biases and assumptions in order to avoid them, but rather it is more efficient to be aware of their impact throughout the research process. By stating the researcher's main assumptions, as outlined above, and being cognizant of potential biases that may arise during each of the research steps, the researcher, to the best of his ability, attempted to avoid the tendency to direct and elicit

biased information during the interviewing process. Furthermore, the researcher reflected on his own feelings and thoughts when faced with statements that were inconsistent with his biases during data collection and analysis. The researcher also reflected on the influences of his cultural and social context on the different stages of the research process, including the interview as well as the interpretation of the data. Since the researcher was personally invested in supporting the significance and usefulness of SMM for adolescents, he attempted to be consciously aware of a heightened risk of confirmation bias. In order to avoid this, as well as other types of biases influencing the research process, the researcher frequently monitored thoughts, feelings and beliefs through dialogue with his supervisor and continuous journaling. The use of journaling after each interview and during data analysis enabled the researcher to write down any reflections about the process while being cognizant of the influences of his assumptions and biases. The act of journaling may have led to the identification of emergent biases and continuously strengthened self-reflexivity throughout the study.

Bracketing. In phenomenological approaches, the researchers engage in bracketing their preconceived notions and assumptions during the research in an attempt to be able to capture the phenomenon as closely as possible to the way the participants are experiencing it (Creswell, 2007; Giorgi, 2003). During bracketing, researchers try to set aside their own experiences, beliefs and assumptions in order to allow for an observation of the subjective external realities of the ways the participants interact, relate and experience phenomena (Giorgi, 1997; Gubrium & Holstein, 2000). Furthermore, this type of reduction aims to minimize researcher bias and to avoid missing novel components of a phenomenon due to the researcher's familiarity with the phenomenon (Giorgi, 2003).

Rather than assuming that youth are not motivated or capable of learning or understanding mindfulness meditation, or that there is a "true" way of experiencing meditation, the researcher, to the best of his ability, attempted to bracket such assumptions. Furthermore, as the researcher is a practitioner of a concentrative meditative tradition that is different from the origins of mindfulness meditation, he bracketed his own meditative experiences as well as his ideas and understandings of the process of mindfulness. This type of bracketing was reflected in the researcher's choice of refraining from his regular meditative practice and from being exposed to the SMM meditation CD used in this study before or during data collection and data analysis. The researcher engaged in bracketing by actively being aware of allowing the data to unfold and emerge from the participants' own voices without any needed evaluations or interpretations. This helped the researcher to approach this process from a place of curiosity, rather than pre-conception or reactivity.

Peer Debriefing. Another way that the researcher's subjective stance was managed was to engage in frequent peer debriefing contacts. Peer debriefing involved discussions with the primary thesis supervisor and the auditor who were seen to "serve as a mirror, reflecting the investigator's responses to the research process" (Morrow, 2005, p. 254). This helped clarify and strengthen self-reflexivity and answer any other ambiguities that arose. Furthermore, peer debriefing provided alternative points of views and perspectives, which both challenged and enriched those of the researcher.

Analysis of the Researcher's Subjective Stance. A few of the aforementioned assumptions were observed throughout the study, namely that SMM was perceived as a coping and relaxation tool, that participants had difficulty with the process of SMM especially regarding non-judgmental, non-evaluative and non-goal oriented self-observation, and that SMM involved

a process of self-awareness of cognitions. Participants perceived SMM as pleasurable and beneficial with expected levels of curiosity. A few participants had expectations of "doing SMM properly". Consistent with the researcher's assumptions, there was variability in the perceived suitability, usefulness and applicability of SMM. Although there was openness to experiencing SMM and participating in this study, the researcher was unable to ascertain whether this resembled "beginner's mind" or strengthened participants' experiences. Nonetheless, there seemed to be a general trend that some of the participants' expectations and prior exposure to practices such as yoga guided the description of their experiences.

The assumption of necessity of high level of intrinsic motivation to experience usefulness and beneficial effects of SMM was not observed, although it seemed that participants who completed their home practices and journals described more in-depth experiences during the interviews. Furthermore, participants were observed engaging in SMM during the interview and also reported practicing SMM at home, which challenged the assumption that they would lack motivation and self-discipline in this study. However, a few participants indicated difficulties with motivation as further highlighted by the fact that only 6 of the participants completed their home journals. Lastly, the researcher was surprised to discover the novelty, variety and depth of participants' experiences of SMM, especially pertaining to experiences that had not been mentioned in the mindfulness research literature.

The researcher engaged in frequent journaling prior and after each interview in order to enhance the processes of self-reflexivity and bracketing and to reduce the likelihood of bias. Furthermore, the researcher took the opportunity to reflect and journal during the period when participants listened to the MBSR CD. Biases were identified during journaling and managed through self-reflections on the researcher's relation to the setting and the context of the working

relationship with participants, as well as the researcher's impressions of participants during the interview process.

Prior to each interview, the researcher stated his assumptions and how they may have impacted the interviewing process. This was followed by an evaluation of progress of the minimization of biases at the end of each interview. In order to address the potential biases that may have arisen due the presence of the researcher's assumptions, the researcher actively created strategies of solidifying the act of bracketing by reinforcing the perspective that the purpose of the study is to explore unique and individual participants' experiences of SMM. This perspective was used to challenge biases of conforming to traditional views and understanding of mindfulness. As a result, the researcher reminded himself to remain open and receptive to all experiences described, and to allow the data to emerge from participants. Furthermore, the researcher frequently noted moments during which he was questioning participants' levels of engagement, being sensitive to non-verbals such as yawning, shifting body position, and tone of voice during the interview. Throughout the interviewing process, self-reflections were made on the impact of such non-verbals on maintaining his assumptions and hindering the process of bracketing. The researcher, to the best of his ability, actively recognized such questioning as part of his assumptions and consequently dismissed them during the interviews. Furthermore, this was strengthened through self-reminders that differing motivational levels constituted nuances of the experiences of SMM, which is exactly the focus of exploration of this study. Other examples of bracketing involved the choice to refrain from reading the participant's home-session journal accounts during data collection in order to minimize its influence on the interviewing process.

As a consequence of the act of journaling, greater levels of self-reflexivity were also observed. Examples include identification and a consequently increase in self-awareness and

insight especially regarding the need of pleasing and protecting participants, balancing relationship building with data-collection, and improvement of interviewing skills. The researcher intentionally allowed for longer periods of silence between the researcher and participant responses in order to capture as much depth of the experience as possible without actively guiding the process. The researcher also attempted to balance adherence to the interview protocol with the exploration of reported experiences. Furthermore, journaling facilitated a self- awareness and exploration of the impact of the day's events on the researcher's bodily sensations, thoughts and feelings prior to the interview. As a result, the researcher allowed for time prior to the interviews for relaxation and letting go of the day's events which resulted in a general reduction in stress and anxiety. The researcher also became aware of asking leading questions as well as the potential of bias that could arise due to noticing potential emerging themes during the interviews. At this point, the researcher engaged in the process of peer debriefing with the primary research supervisor to discuss and address ways of prevention and reducing such biases.

Rigor and Trustworthiness of the Study

Although methods such as self-reflexivity and bracketing might have increased the researcher's awareness of potential bias with respect to SMM, it was not sufficient in guaranteeing the validity of the study's findings (Gergen & Gergen, 2000). As a result, attempts were made to also strengthen the study's rigor and credibility through maintaining standards of accuracy, verification, dependability, and transferability (Morrow, 2005). Moreover, in processing the qualitative interviews with participants, the researcher was able to establish catalytic validity (Stiles, 1993).

Accuracy. The concept of accuracy refers to the steps taken to ensure the trustworthiness of the interview transcription process (Poland, 1995). Although Poland argues that transcription is inevitably an interpretive process, he suggests several ways that will decrease the likelihood of transcription error. In line with these suggestions, this study attempted to ensure accuracy through maximizing the sound quality of the interview recording by using adequate equipment, proper microphone adjustment, and by encouraging participants to use a slow, yet clear and audible tone of voice. Furthermore, the researcher was the sole transcriber and was immersed in the data having knowledge of the investigated topic to reduce errors due to unfamiliarity with the phenomenon. The use of field notes outlining aspects of non-verbal communication of the interviewee and the context of the interview, using Poland's syntax of transcription analysis as a guide (Table 3, p. 302-303), and repeated verifications of the transcripts with the original recordings aimed to strengthen the trustworthiness of the transcription process.

Verification. Verification, or confirmability, is the process of ensuring that the findings of the study accurately reflect the data, striving to capture the experience or situation as closely as possible to the perceptions of the participants. Thus, the data needs to be analyzed in such a manner that it contributes to meaningful interpretations and adequacy of the entire study (Morrow, 2005). In order to achieve verification, the researcher immersed himself in the data and frequently consulted with the primary thesis supervisor and the auditor during data analysis. In case of any ambiguity in deriving themes between the researcher and the auditor, the primary thesis supervisor took on the role of the judge for further consultation and consensus.

In this case, the primary thesis supervisor was a visiting assistant professor and faculty member of the UBC Department of Educational and Counselling Psychology, and Special

Education. The auditor was a graduate student completing her Master's in Organizational Psychology, who had extensive experience with qualitative data analysis. Additionally, an associate professor in the Department of Educational and Counselling Psychology, and Special Education at UBC with extensive knowledge and research experience with mindfulness programs for children and adolescents in school settings served as the mindfulness research consultant.

In order to avoid biases in the researcher's inclination of searching for congruent and confirmatory evidence, the data were also investigated for data containing any possible discrepancies or inconsistencies. As outlined in the data-analysis section, this was strengthened by repeated cross-examination of themes derived from the same participants across different data sources aimed to accurately represent participants' experiences. This relates to the concept of adequate discrepant case analysis mentioned by Morrow (2005). Consistent with Morrow's recommendations, this study used various methods of data collection, including two interviews at differing times in the research (the initial experience, and the experience after having practiced SMM), as well as journal or written accounts of the participants' experiences in their naturalistic context in order to attain an adequate and credible data set and "to achieve the goal of adequate variety" (p. 255).

Dependability. Dependability stands for a clear outline of the data collection and analysis processes, to clarify the consistency of the research methods used in this study (Morrow, 2005). In this study, dependability was ensured through the maintenance of a paper-based *audit trail*, in which all of the steps of the research were clearly outlined and could be replicated. The audit trail included an outline of the interviewing process, data collection, and data analysis, including quotations and meaning units, a list of transformed meaning units, the pairing up of

meaning units and the creation of general structures for each interview. This process was supervised and analyzed by the primary thesis supervisor. Furthermore, the audit trail was analyzed for researcher biases and assumptions through discussions with the auditor in establishing confirmability.

Transferability. This concept describes the extent to which the readers of the study are able to transfer the descriptions of the phenomenon to similar contexts or individuals who have had similar experiences (Morrow, 2005). Transferability of the findings was hoped to be enhanced through the inclusion of demographic information, through recruitment from two different schools, and through recruitment of approximately equal number of male and female participants from various ethnic backgrounds. Also, a few researchers have proposed that mindfulness is a naturally and universally occurring phenomenon (Dellbridge & Lubbe, 2009; Kabat-Zinn, 2003), which may contribute to commonalities in how it is experienced and hence provide further support for the transferability of the results.

Catalytic Validity. Catalytic validity is defined as the re-orientation, greater self-understanding and renewed sense of energy participants gained as a result of engagement in this study (Stiles, 1993). According to the participants' responses on the demographic forms as well as their experiences as captured during the interviews, there was reported enthusiasm and interest in contributing to this study. Specifically, 2 participants expressed hopefulness in reducing specific psychological distress and stress through exposure to SMM. Two participants also expressed their interest of general involvement in a research study. By stating that this research may help inform future applications of mindfulness-based programs for adolescents, participants were willing and happy to contribute. Lastly, as a result of the interviewing process, participants gained greater clarification and understanding of SMM and mindfulness.

All participants reported that participation in this study has resulted in learning about mindfulness, relaxation and stress-management with a few directly expressing gratitude for it. Three participants also expressed strong interests in receiving the findings of the research. One particular participant described a desire to continuously apply SMM in his life and in his potentially future career as a counsellor and advocated for its use throughout schools. His enthusiasm can be captured by the following quotes: *"I pictured myself doing that [introducing SMM] at a school in 30 years. It was weird. It was good."*

R: So in your everyday life, it's -)
I: Evaluation, evaluation, judge, judge, judge.
R: And then having a break from that -)
I:Is amazing. Have you done this?
R: No, I haven't myself.
I: You have to. You do.

Another example of catalytic validity is captured by the following quote, indicating the relevance and importance of involvement in this study for this specific participant:

> *"Well, I plan to go to like college and do a lot of studies and everything, and hopefully play basketball in the future, and like this [SMM] ….this will definitely help me in the future because I won't be stressed-out."*

Moreover, the quote as seen below indicates the positive experiences of one participant as a result of participation in this study in terms of the potential of improving his well-being: *"I can see this meditation making a dramatic change on my life."*

Lastly, the interviewing process contributed to greater understandings and insight into the meaning and relevance of SMM and mindfulness, with one participant gaining an understanding of his ability to let go of both negative and positive thoughts. His experience is illustrated in this quote:

> *"That's weird because when I started talking to you about 10 minutes ago (laughs), I thought that letting go was like actual things that are going on around you like 'Oh, I'm having troubles with so and so. Gotta let that go'. But, oh weird, I didn't know that any thought is a thought and to let that go…. I guess at first I thought to let go…of a negative thing. But to let go of a positive thing is probably twice as good because then you're accepting it."*

This type of realization was also evident for another participant who reported becoming aware of the non-goal directedness of SMM during the interview, which is portrayed in the following quote:

> *"Well, I wasn't aware that that I wasn't supposed to have a goal beforehand."*

As seen from the above mentioned examples, catalytic validity was attained in this study as described by participants as receiving beneficial experiences due to engagement in this study.

Chapter IV: Results

The goal of this study was to explore the experiences of adolescents during the practice of Sitting Mindfulness Meditation (SMM). The main research question addressed was "What are the initial experiences of adolescents practicing SMM." The data analysis procedures followed a number of systematic steps outlined for phenomenological research, as proposed by Giorgi (1997, 2003, 2006, 2008). The subsequent section will describe the salient results that emerged from this study.

After data analysis, eight major structures emerged, capturing participants' experiences of the phenomenon of SMM being investigated. These structures constituted the experiences of SMM for these ten adolescents and included: a) expectations of SMM; b) attention and concentration; c) distraction; d) awareness; e) self-reflection; f) getting in touch with feelings; g) beneficial experiences; and h) conceptualization of SMM. Furthermore, the journal entries and the participants' development of experiences of SMM through time are reviewed in relation to these eight structures. Lastly, a summary will be provided outlining the interrelations of these individual structures constituting the experiences of SMM.

Expectations of Sitting Mindfulness Meditation

Based on the demographic data collected prior to being exposed to SMM, 8 of the participants reported that they had some expectations about the practice they were about to engage in for the first time. That is, all of the participants described prior knowledge of meditation to include experiences of relaxation. Seven participants expected mindfulness to involve experiences of stress-management. Three participants reported that they hoped to gain clarity of mind, 2 reported expecting a self-reflective process, and 2 reported hoping to

experience an overall improvement in their quality of life. For example, one participant shared to want to *"learn about relaxation and more about stress and peace of mind."*

Furthermore, half of the participants stated that one of their family members had done meditation before. Individual expectations included improvement in schoolwork, regulation of emotions, and decrease in depression and insomnia. One participant described meditation as an eastern practice involving monasticism and another perceived it as potentially being difficult to do. Additionally, during the first interview, 3 participants described feeling cautious prior to exposure to the CD due to unfamiliarity with what to expect, including an apprehension of failing to meet expectations, and an apprehension of potential negative effects. This feeling of apprehension is highlighted in the following passage:

> *R: What are some of the worries that you had before listening to it [SMM]?*
>
> *I: Just how would it affect the rest of my day. Would it make me calm and relaxed or would it just make me more stressful and worried about whatever I have to do.*

Attention and Concentration

All of the individuals who participated in this study experienced the phenomenon of SMM as a process of attention and concentration, which was defined as intentionally directing and maintaining one's attentive resources toward one or more specific phenomena, while minimizing the focus on other ones. Participants discussed concentration with respects to various aspects, including their breath, the verbal instructions of the SMM CD, their own reflections, personal visual images and silence.

Concentration on the Breath. All participants reported paying particular attention to their breath. They described this process as focusing attention on either the sensations of inhaling and exhaling through their nostrils, the sound of the breath, as well as the expansion and

contraction of their stomachs. Three participants described that having their eyes closed facilitated concentration on the breath. One participant described his concentration on his breath as the sensation of inflating and deflating compared to a balloon. That is, he stated:

> *"I kinda get that deflating and then inflating kind of feeling. Like if you're a balloon…I think that's the most prominent feeling that I get while I'm meditating."*

Concentration on the breath was experienced by 8 participants as relaxing and as helpful in counter-acting distraction. Three participants described breathing out distractions through exhalation as seen by the following quote**:**

> *"I was still thinking about Bio, but then after I was like 'Oh, this - I'm doing this meditation, so I should just let it go cuz I'm here to meditate (laughs). So I should just meditate'. And then I started breathing and …I breathed it out and forgot about."*

Furthermore, concentration on the breath was also seen as helpful in clearing the mind, slowing thought processes and consequently gaining a relief from anxiety and stress as portrayed by this participant's description: *"Whenever I think of something that stress me out, I usually overthink about it, but during [SMM], I didn't have to think about anything, which is a nice change of pace."*

Concentration on Verbal Instructions. Nine participants reported paying specific attention to the verbal instructions of the CD. For 7 individuals this process was reported to be helpful; however, for the remaining 2 it was seen as a distraction. For example, 2 participants stated that the verbal prompts of the narrator allowed them to strengthen their concentration on their breath and posture. That is, 4 participants described verbal instructions as one of the

methods they used to attain concentration during SMM. One participant shared that paying attention to the verbal instructions contributed to a sense of relaxation. Another participant described his attention to the instruction as helpful in giving him a sense of concentration, something which he does not experience during school lectures. He explained:

> *I: I can like listen to something while I'm sitting, but I have to be usually doing something else in order to keep me focused. Like, when a teacher is doing a lesson or something, I'm usually doodling on piece of paper.*
>
> *R: So what about with this exercise?*
>
> *I: I could just listen to it without having to busy myself with anything. Just have to listen to it and that's it. Don't have to do anything else.*

On the other hand, 2 participants described a need to balance their attention between the verbal instructions and their concentration on their breath and posture. In addition, for 3 participants, the CD reportedly interfered with their ability to focus on their breath and posture, and experienced greater concentration during moments of silence. One of the individual who took part in the study shared the following experience:

> *R: So I'm wondering what it is about that silence?*
>
> *I: I'm not sure. Probably because it gave me an opportunity to just do the exercise on opposed to focusing on what he's saying and do the exercise.*

However, through greater exposure to SMM, the verbal instructions were perceived as less distracting.

Concentration on Thought Processes and Self-Reflection. Half of the participants said that during the SMM, they attended to their thought processes, which they defined as observing

the various cognitions that were entering their awareness. Some examples of their thoughts they were attending to included school-related issues, childhood recollections, and past relationships. It is important to note that these thoughts were not always described as distractive in relation to SMM. Rather, participants expressed that engaging in such self-reflection was relaxing, helpful in problem-solving and increasing their self-awareness on the meaning and impact of events in their lives as one participant explained:

> *"I left what I usually do every day behind and just focused on thinking about what it really means to be me…Now I may know a little bit more about who I am and why I was created."*

For example, one participant stated that while practicing SMM, she was continuously wondering whether or not she would have a pop-quiz, an issue that was on her mind prior to the interview. More specifically, she stated:

> *"It wasn't like I gave up on Bio because I don't know if it's true that I'm having a test or not…And I guess it brings back to the reflecting thing. Like I'm reflecting I didn't study."*

For three participants, the concentration process was more reflective and personal. That is, one participant described re-living childhood memories and contrasted this from his current self-concept and identity. It seemed that the meaning and value of such experiences became magnified during SMM as seen by this quote:

> *"I found the part that I threw away when I was getting older, because I was more focusing on just getting by in school and not even really doing much…But it's cool coming back to reality and looking back and being able to say 'Wow. I had some fun times'."*

His experience of concentration was contrasted to those of others due to an emphasis on focusing and observing his awareness during self-reflection. One participant also described self-reflection as *"going from your physical to your mental realm."* He explained: *"I was trying to pull it all in and be in my head instead of being in my surroundings. That's kind of what I tried to focus on most."*

Three participants contrasted the theme of attention and concentration on their thought processes from that of distraction from other stimuli and distinguished it from regular thinking, stating that it was marked by thoughts and feelings about oneself as outlined by this quote:

> *"The last part of the silence…it was totally focused on me and how I was feeling and what I was thinking, I guess clearer, like different perspectives on what I was thinking."*

Concentration on Visualizations. Half of the participants also discussed concentrating on visual images, a process which they found to be deeply relaxing. Some examples included visualizing themselves swimming in the ocean, relaxing on a beach, walking through a peaceful garden where birds were flying, and seeing different colours. These experiences were described as a contrast to thoughts of completing regular duties such as homework, chores, or extra-curricular activities. They were also described as internal experiences involving imagination and the "mind's eye" according to one participant. For example, two participants reported observing colours, which they described as a kaleidoscope and qualified as relaxing. One individual described the image of a garden and shared the following quote:

> *I: It's like, you picture in your head a garden, lots of birds flying around. Everything is in harmony.*
>
> *R: Okay, so it's harmonious. It feels -*

I: Perfect.

Another participant described lying and swimming in the ocean which was perceived as enjoyable. She stated:

> "*I started to picture me in the ocean sitting on a board just like relaxing, tanning, the waves carrying me away and that made me so relaxed, just imagining that."*

The Process of Concentration. Participants had different reactions to the process of concentration; for half of the participants it was quite challenging, whereas for the remaining half it was surprisingly easy. For those who had difficulties, they discussed a continuous struggle between the act of maintaining concentration and counter-acting the state of distraction. This concentration process was experienced as frustrating and challenging and is outlined below in the section called reaction to counter-acting distraction. This struggle was highlighted by one of the participants who described being unable to concentrate due to concerns she had about a friend. She stated:

> *"I wanted to be able to focus but I couldn't. And then I tried to make myself focus, and that didn't work, and I was like, 'Okay, well, if I just like last time let it be, then it works itself out', but it didn't do that this time (laughs). And it was just kind of irritating because it didn't go the way I planned it to (laughs). It failed."*

Moreover, participants' expectations also seemed to play a role in their ability to concentrate. That is, 2 individuals reported that they were not very motivated to continuously work on their concentration, as the process was too difficult. For example, one participant shared that her motivation was lower because she felt like she needed to attain a certain level of concentration, and experienced frustration every time she became distracted. Thus, she concluded that she was incapability of concentrating and hence stopped trying. Her experience is evident in the following:

"And when I was distracted, I just kind of like stayed distracted, I didn't really care. I was like 'Oh well, I can be distracted for like a minute or so'."

Conversely, 3 participants reported that while the process of concentration was challenging, it improved when they were able to let go of their expectations. That is, when they stopped imposing a certain state of concentration on themselves, they were able to sustain greater focus and attention. For example, one participant reported that she was better able to concentrate when she dismissed her self-expectations. More specifically, she stated:

"I was determined…and then that determination kind of …fizzed off until like 'Okay, if I can't do this, I can't do it. Then I'm just (sighs) gonna kind of like let it be, just kind of follow along with the tape', and then that's what I did and then like everything was all calm."

For 3 participants, the process of concentration was reportedly relatively easy to attain. That is, they shared that it is usually difficult for them to concentrate on daily tasks such as schoolwork, as they struggle with short attention spans or attention-deficit disorders. However, during the practice of SMM these individuals found themselves able to sustain their attention and focus by concentrating on different aspects of their experiences. By way of example, one participant stated that he was surprisingly able to maintain his concentration when he started listening to the CD. He stated:

"Normally, I'm really fidgety cuz of my ADHD and that just went right away. It was just, sit there and listen and concentrate. It was good."

Concentration on Silence. One participant described his attention being on the silence while integrating other stimuli as part of it. Three participants saw silence as promoting greater

concentration through allowing them to solely attend on their foci of concentration as highlighted by this quote:

> *"The silent part was actually very helpful cuz it was just time…for yourself with no one else talking to you."*

However, silence was also seen by a 3 participants as being sources of distraction with one participant describing a feeling of confusion yet being intrigued that arose due to not knowing what to concentrate on during silence. One participant described engaging in counting of his breaths during the silent moments, which was reported to contribute to the perception of SMM lasting longer and thus leading to greater levels of relaxation.

Distraction

All participants experienced distraction which they defined as noticing a disruption of attentiveness and concentration during SMM. This was described as recognition of intrusive thoughts not related to the foci mentioned above as seen by this quote:

> *"Just like getting distracted, thinking about other things. Your mind goes like 'Oh, this and this and this' like the worries or whatever….thoughts that confused me while I was breathing or caught me off track….taking over room that shouldn't be taking over."*

Distraction was reported by 4 of the participants as repetitive in nature and was experienced as preventing clarity of mind and relaxation as can be seen in the following passage:

> *"As soon as I opened my eyes, these pictures and everything and the brightness of the room just distracted me….It reminded me of everything that I have to do again going through my day….like the stressors and everything….I was totally out of my*

peaceful place and it was just like the whole thing never happened. And then as soon as I closed my eyes again, it was back."

Participants discussed distraction with respects to its origins, reactions and impact on the experiences during SMM.

Sources of Distraction. Sources of distraction were reported as being external, attributed to stimuli in the surroundings and being outside the person, and internal, attributed to thoughts, sensations, and feelings within the person. Internal distractions were seen by 4 of the participants as a perception of bodily discomfort, and as occurring during the silent part of the CD, as one participant explained *"When there was no sound, I felt really distractive with my thoughts so I had to keep focus on my breathing"*.

Three participants reported thoughts of school tasks, re-experiencing past social situations, thoughts about relationships, planning the day's activities and remembering songs and TV shows. For 2 participants, there was a change from external to internal distractions after practice as captured by this quote:

"Now, having done it, this being the third time, I've realized that it's not so much that I'm getting distracted by my actual physical surroundings, it's more so my mental surroundings, but I'm using the physical ones to excuse that my head is going somewhere else."

Examples of external sources of distraction included noticing items in the interviewing room, as well as disruptions of concentration due to the presence of outside noises. One participant distinguished between external distraction feeling uncomfortable, abrupt, and internal ones which were described as less disruptive and involving visualizations and sounds. He stated:

"One of them is really clicky and tinny and weird….it's very short. Everything just happens very quickly….whereas the other one is a lot more like flowy. I don't know how to explain it. It's sounds and visions and dead air…It's different, you can tell the difference."

There was variability in explaining the causes of distraction with one participant attributing it to her mood and the day's events, one participant attributing it to sleepiness, and another to his usual overactive and ruminative thought processes. As one participant explained:

"I usually don't have very good control over my thoughts. My brain has a tendency to just run wild… I am actually feeling quite good right now."

Reactions to Distraction. Reaction to distraction was defined as participants' feelings and perceptions towards the recognition of being distracted. Half of the participants described their reaction as strange, yet intriguing and involving recognition and consequent questioning of the content and sources of distractive thoughts. As one participant described:

"How do these things keep coming into my head? How did that thought come into my head? I wasn't thinking about it but now I am. It was weird….Like I'll go from one thing to another, and it's just (pause)….how did that happen so fast?"

On the other hand, for 3 participants distraction was not as bothersome as they saw it as a confirmation of their attention difficulties in school and everyday life. This extended to some participants feeling indifferent toward distraction, being able to accept it without the need of active manipulation and perceiving it as transitory. Furthermore, these participants also reported counter-acting distraction as a surprisingly simple task.

However, for half of the participants, distraction was seen as irritating due to a perception of challenge of maintaining concentration, relaxation, and a sense of harmony. These

participants described distraction as undesirable and needing to be controlled. For example one participant stated:

> *"I just kept getting distracted and it was actually irritating me. And I was like 'No, I have to focus. I need to do this'."*

The struggle of the constant need to manage distraction was outlined by one participant who described an experience of the mind being torn between concentration and a desire to engage in regular thinking:

> *"It was very, very interesting because my head is telling me to do this, while my head wants to think of this, so it's kind of bizarre in a way. And my head just wants to focus, but then my head wants to think of other stuff too."*

Although 2 participants recognized distraction as inevitable due to the ongoing process of thinking, others saw it as a signal for the need to regain concentration as outlined by this quote:

> *"I felt like I needed a reminder. So then I'd look around the room and then every time I saw the wall or the ground then I'd remember cuz he told me 'Stare at the wall or the ground to focus your attention'. So I'd look over there and I'd look at the wall and I'd be like 'Oh yeah. '"*

Counter-Acting Distraction. Counter-acting distraction was defined by participants as regaining and maintaining concentration after recognition of distraction. It was first experienced as a realization of distraction followed by conscious efforts and actions taken to regulate distraction and re-experience concentration. One participant described counter-acting distraction as *"consciously"* shifting *"thoughts back to focusing on the breath*."

Eight participants described counter-acting distraction through following verbal instructions on the CD, concentration on the breath, through self-talk, through dismissal of

distractive thinking, and through acceptance. Three participants described sensations of breathing out distractions through deep exhalation. Self-talk was seen as helpful in reinforcing the act of meditation through self-reminders as one participant put it:

> *"Just kept telling myself to calm down, just think about nothing, just relax. And then it just went away."*

Dismissal of thinking was described as ignoring distractive thoughts and worries, and a temporary and intentional disengagement in usual analytical thinking process. This was described as by one participant about temporarily discontinuing thinking about her ex-partner:

> *"I just shoved those thoughts aside and then was like 'Okay. I breathed him in and breathed him out' and then…I was like 'Okay, let it go it's in the past' and I got to breathe successfully with a clear mind."*

Acceptance was described as an observation of thoughts in awareness without the need of actively dismissing distractions as outlined by one participant who stated:

> *"I just thought of it [distraction] like 'Oh, it's there' and then I could listen to everything kind of blend together instead of one separate thing just interrupting me. It's just part of the silence."*

This kind of acceptance was mostly observed by participants who were able to perceive of distraction as being transitory in nature and as passing events. One participant in particular reported being unable to accept cognitive distractions due to a fear of becoming absorbed by ruminative analysis of their content.

Despite the perceived challenges, participants continuously persisted counter-acting distraction, feeling surprised and rewarded by their perceived ability and success with it as illustrated here:

> *I: I was happy with myself.*

R: What parts or what made you happy with yourself?

I: How I was able to stay focused and keep my ADHD from taking over.

Awareness

All participants experienced self-awareness during SMM, which they defined as observing and getting in touch with experiences presenting themselves to the stream of consciousness as they emerged in the here-and-now. Awareness involved recognizing decreasing thoughts, bodily sensations, the passage of time, and one's breathing. For 2 participants this awareness was directed outwardly, in integrating surrounding sounds and sensations into their experience of SMM. That is, as they became increasingly aware of their external surroundings, they reached greater concentration and clarity of mind. This outward awareness is highlighted in the following quote:

> *"Instead of isolating one thing to listen, I can hear everything and not pay attention to just one thing…. It's not annoying like it usually would be. It was more calming cuz you know where those noises are, what they are instead of focusing on one thing and everything being muffled."*

However, the remaining 8 participants described their awareness as an internal process, which involved thoughts, attitudes and feelings about themselves or the content of the day. For example, one participant stated that she became aware of valuing self-care in her life. She stated:

> *"It's just nice to be like 'Okay, this is (says her name) time'. It doesn't really matter what I look like or what people think about me. It's just what I think about myself and how I feel about myself."*

Awareness of Decreasing Thought Process. Half of the participants described that during SMM they became aware of a reduction in their thoughts and distractions, which led them to be better able to concentrate and in turn achieve greater clarity of mind. They defined clarity of mind as a temporary suspension and emptiness of thoughts and emotions. This experience is captured by the following quotes:

> *"When everything is calm and nothing is happening, it gives me a simpler thinking than I usually do and that helps [me] to think about it instead of adding on to it with overanalyzing."*

> *"So there is nothing around me. It's kind of just dark…blank and nothing can get me…I feel safe in there…There was no thought. No thoughts or feelings that can worry me can come into there. It's just peace."*

For three participants, achieving clarity of mind resulted in the loss of awareness of their external surroundings during SMM, as captured in this participant's description:

> *"I was aware of my breathing, thoughts, and that's it. Just basically myself cuz I was able to forget everything around me and my environment."*

Clarity of mind was perceived as positive, as it increased relaxation and decreased stress. Moreover, according to 3 participants, this relatively novel and rare experience of clarity of mind transformed their perceived stress and anxiety into feelings of safety, reassurance, privacy, and security. For example, one participant described:

> *"It [SMM] created the sense of privacy…I just felt neat because I could forget all my troubles."*

This positive experience was further highlighted by one of the participants who voiced surprise at his ability to reach this state without using substances, explaining that his overactive mind has been the root of his psychological distress, insomnia and self-hostility. He stated:

> *"There just wasn't as much clutter as I usual have…I usually am quite conflicted in myself and it's rare that I get an opportunity and just have my mind completely clear. It's an experience I haven't had in a while without the use of drugs or alcohol."*

Awareness of Body. With respect to bodily awareness, 4 participants stated that they were unaware of their bodily sensations, while the remaining 6 participants reported that they experienced sensations of stillness and physical discomfort. That is, 3 participants voiced surprised at their ability to sit motionlessly, which was an uncommon experience for them. As one participant shared, this new ability was attributed to concentration during SMM. She described:

> *"I didn't really feel my body. The only thing I felt was myself breathing…I felt like I was in a whole different place, like I wasn't even sitting in a chair. I totally forgot that."*

Moreover, 2 participants described feelings of weightlessness, which they experienced as a release of bodily tension and rigidity, and led to feelings of relaxation. This feeling of weightlessness can be seen in the following quote:

> *"My body started feeling more and more weightless instead of all tense. It just let itself go basically. It's good."*

On the other hand, 2 participants reported having an awareness of their back and knee pain, with one individual experiencing a numbing sensation in contrast to his usual knee pain. The awareness of pain was seen as distracting the process of concentration for one participant. He reported initial difficulty accepting his lower back pain, stating:

> *"It was tough, for one, because physical things are always a lot harder to let go of than mental things especially for me. I'm just like that….but I felt like sticking through to the end and that kind of kept me motivated to keep within center."*

In addition, 3 participants became aware of having muscle tension, sensations of hunger and fatigue during SMM. For example, one participant described *"the feeling of exhaustion setting in"* which to him was desirable due to wanting to gain relief from insomnia.

Awareness of Time. Two participants described being surprised at their awareness and perception of the passage of time moving fast which seemed to be related to the extent of concentration and engagement during SMM. For one participant, the passage of time during SMM was surprising as illustrated in this quote:

> "*I couldn't believe that it was 10 minutes, it was like 'Wow, that went really fast'."*

Another participant reported perceiving both a slowing of time during SMM, and yet as occurring faster than expected upon its completion. For one participant the slowing down of time was due to breath-counting. He stated:

> *"It made it draw on a lot longer than ten minutes…it was 10 minutes, but it seemed a lot longer if you count your breaths. So that calmed me more than normal."*

Only one participant who expressed boredom during SMM described that the practice seemed too lengthy.

Awareness of Breathing. Six participants were aware of their breathing during SMM. They described this awareness as an experience that is different than regular breathing due to intentionally concentrating on the process of inhaling and exhaling. One participant described this awareness as a contrast from her usual lack of awareness of the breathing process throughout the day as seen by the following quote:

> *"When I breathe normally like I'm walking down the hall or something, I wouldn't even notice myself breathing. But then now, it feels like I can feel different parts of my body getting the air …. And I'm like 'This is how I breathe and all the oxygen is delivered around my body and I can feel it'."*

Moreover, 3 participants reported moments during which they were solely aware of the breath, which was experienced as relaxing. They viewed their slowing down of breathing as helpful in focusing concentration, counter-acting distraction, releasing stress, and contributing to an overall sense of relaxation. For one participant the awareness of breathing as well as the act of visualizing allowed to experience a deepening of relaxation as described below:

> *"At the beginning I was just breathing and that made me more calm… then I imagined myself tanning, going on waves. That made me feel even more better."*

Although not a common occurrence, 2 participants talked about their awareness of their breathing as an uncomfortable experience. For example, one participant reported a sensation of heaviness in her chest during exhalation. Another participant reported adjusting her breathing pattern in response to the belief that the slowing of breathing may lead to insufficient oxygen intake.

"When I was listening to myself breathe cuz… I would find that I'm breathing super slow cuz I'm trying to hear it. And then once in a while, I'd have to take a giant gasp of air (laughter) to make up because [it] was so slow."

Self-Reflection

Nine participants described engaging in self-reflection during SMM, a process that they defined as actively processing and analyzing thoughts, feelings, attitudes and sensations. Through this self-reflection, participants reported gaining insight, experiencing a sense of acceptance, reframing perspectives, as well as processing loss. Self-reflection was distinguished from regular thought patterns by a focus and clarification on the role of thoughts and emotions, the management of anxiety and stress, and an in-depth self-analysis. Moreover, this process was seen as a novel, enjoyable, desirable and contributing to relaxation.

Three participants described self-reflection as questioning and contextualizing observed thoughts, feelings and sensations in relation to meaning and relevancy in their lives. This experience was highlighted by one of the participants who described adopting a third person point of view while reflecting on his childhood memories and life events. That is, he described:

"Leaving my body for a second, being able to be that third person and look…was cool because it kind of made me remember when I was younger…. And that also helped me realize what's also going on in my life too."

Participants also reflected on the thoughts and emotions that distracted them during SMM, the stress they experienced due to school and relationships, as well as their need for self-care in their everyday lives. One participant explained the process of self-reflection as exploring her thoughts that contribute to her stress as seen below:

"I never really had the chance to just sit down and breathe. And then when I was breathing, I thought about what's taking over my head while I'm breathing. So it's [thoughts] blocking me from just having a clear mind…and I'm like 'Oh it's kinda like useless I'm thinking about this'."

Three participants learned about the process of concentration and distraction through reflecting on the sources, frequency and content of their distractive thoughts. For example, a participant disclosed exploring and analyzing her relationship, as it was identified as a source of distraction. She stated:

"I was thinking about him while I was going silent. I'm like 'Why am I thinking about him? That's stressing [me] out'. Then I realized, he was a big stressful part of my life and he was in the past…I tried to concentrate on my breathing, but it was so hard cuz he kept…going in my mind."

Self-reflection also allowed 3 participants to understand the impact of overanalyzing thoughts with regards to exacerbating anxiety and stress. For one participant in particular, this connection led him to disengage in over analyzing his thoughts, especially during the completion of his homework. He illustrated his experience in the following manner:

"*It's easier to dig things through my head whenever I'm thinking of a question instead of finding them from billion different places and trying to fit it together."*

Overall, the self-reflection that can occur during SMM was perceived to be very helpful. That is, the positive impact of self-reflection was highlighted by one participant who discussed the extent to which she learned about how her thinking contributed to her stress and anxiety, comparable to three years of psychotherapy:

"I was really surprised…so pleased about the outcome cuz I never thought this would come out of it, like me analyzing so much. I feel like I went to therapy for three years…but it was just a few weeks. I was really happy about the outcome."

Furthermore, she reported that these experiences were in some ways superior to psychotherapy due to the autonomous generation, identification and realization of insight during SMM stating that:

"It's only you, so it's you to judge your feelings, you to analyze them. It's better because it's your choice, no one is pressuring you to do anything. It's gonna benefit you in the end, so it's like you do it for yourself and it's really good."

Self-reflection was also seen as beneficial for one of the participants, as it helped her plan her daily activities and hence allowed her to gain a sense of reassurance. She described:

"I actually feel more organized now…when I organize things in my head, cuz earlier I was like "I gotta print this for…all those people". And then now…I kind of like grouped it and then like put it away."

Similarly, another participant described self-reflection as a valuable tool fostering autonomy and self-care, which allowed her to prioritize her own needs in contrast to conforming to other people's expectations. This positive effect of self-reflection can be seen in the following passage:

"This [SMM] really helped me calm down and made me think about myself and how I need to prioritize myself first, instead of everything else…. I have to make myself happy first and make sure I have everything that I need cuz I'm always putting other people first and other people's needs and everything. So it's nice to just have something for myself."

Insight. Eight participants reported developing insight during and following the SMM practice. This experience was defined as a realization of a previously unknown idea, emotion, thought or perception, which was helpful in facilitating symptom relief and self-growth, contributed to greater self-understanding, led to better accountability of actions and enhanced coping strategies. Examples of insight, which participants discussed, included realizations with respect to thought processes surrounding stress and anxiety, concentration abilities, self-accountability, trust in relationships, and personal needs such as a need of recognition of accomplishments and prioritization of school and family affairs.

Although only 2 participants reported insight during the initial exposure to SMM, most experienced it through continuously practicing it at home. For a few participants with anxiety and stress, insight was significant in discovering how cognitive ruminations exacerbate their distress. For one participant, this insight was reached when she realized the futility of her ruminative thinking patterns. She highlighted this experience by the following quote:

> *"I learned about a lot of my thoughts and I learned what are useless thoughts, what are good, what helps me or like what brings me down or what helps me with my day or stop[s] me from being like happy, just keeps me stressed. So, I learned how to analyze those thoughts…It was a really big stress reliever."*

For 3 participants, insight was linked to an increased ability to concentrate during SMM. This was reportedly surprising for these individuals who voiced a sense of hopefulness at the idea of managing their overactive thought processes. For example, one participant stated that his new ability to concentrate and manage his thinking would decrease his insomnia, depression and anxiety. He shared:

I: I feel calm and it helped...clear my mind which is the big thing…something that doesn't happen often….So being able to have an almost guaranteed shot of not being depressed or anxious for even half an hour or 45 minutes after practicing, it's a very positive thing… So if this is something that I can, through the process of regular practice bring into my life more regularly and bring into my life for a longer periods of time than just half an hour, it could honestly be life-changing to me, quite frankly.

R: In what way would you see it as possibly life-changing?

I: Well…I guess I wouldn't worry so much, I wouldn't be so critical on myself, and I wouldn't…have a tendency to dwell on the past, which I do quite frequently, so..I have even higher hopes because I feel very, very calm.

For 4 participants insight was experienced as promoting a greater need for accountability of actions as summarized by one participant who explained that during SMM, she realized the need to discontinue blaming her friend for her own lack of taking initiative. She described:

"I decided it's not mainly her fault. I could have woken up when her alarm went off at 6:30… I could have gotten myself up, but I chose not to. So it's not really all her fault. It's partly my fault too, so I just decided 'I'm not gonna put the blame on you'… I'm just gonna let it go and what's done is done."

One participant described gaining realization of needing praise from his parents especially after an argument he had with his father as illustrated in this quote:

"When I thought outside the box with that argument, it's like 'Wow. You guys aren't praising me. You guys keep on looking at the negative'."

Overall, for 7 participants, there was a general feeling of surprise and joy at gaining insight during SMM. This experience was described as discovering something long sought, with one participant summarizing the positive impact by stating that he now has greater confidence that he can engage in healthy decision-making. He illustrated this beneficial aspect in this next quote:

> *"I put my life out on a platter in front of me and re-arranged things…I realized what was going on with myself and how I need to start changing myself too…I expect myself to do better with my life now, stop making so many bad choices as I do."*

Acceptance. Participants defined acceptance as a process of recognizing and acknowledging mental stimuli without the need to dismiss, change or manipulate them. This theme was experienced by all of the participants in some capacity. Although for 3 participants acceptance was intertwined with periods of self-critical views with regards to meeting personal expectations, it was described as an openness and receptivity to thoughts and feelings that entered consciousness, without engaging in problem-solving. Acceptance was experienced in the area of distraction, feelings toward self and others, as well as bodily discomfort.

Accepting distractions was conceptualized as integrating surrounding sounds into the silence of one's SMM practice for one participant. This allowed a greater sense of control over distractibility and hence improved concentration for him who described:

> *"The first time I could always listen to my cat like scratching or my dad talking loud on the phone or my sister just yelling random things. And then later on…I know they're there, but it's not going to bother me. It's just part of my listening to everything and nothing at the same time…I just took it as 'It's part of the*

background noise'. I know it's gonna be there, so I don't really have to pay attention to it, but paying attention to it at the same time."

With respect to accepting the presence of unwanted feelings, one participant explained that it relieved her of her usual distress caused by her emotions and thoughts and contributed to a sense of relaxation as described by the image of a "still lake" as seen below:

"And when everything is all settled…you're not trying to make them settle or anything. Everything is just calm and the lake is perfectly still…the emotions and…the thoughts were the dirt in the lake and it just kind of settled. And it's nice."

Lastly, another participant reported accepting the urge to re-adjust his body to due physical discomfort. This experience allowed him to gain greater self-control of his pain and refocused him on the processes of SMM as illustrated by the following quote:

"My back was starting to hurt near the end, but I just didn't bother thinking about that. I was like, 'Whatever. I can't avoid that. That's just gonna happen. Period.… I can't do anything about it really'. Kind of just came into my mind and that's it. It's kind of like the sounds. It came back a couple of times but you just don't pay attention to that….And then I just went back to thinking about my breath."

For 2 participants, adopting an accepting attitude was challenging, and was associated with self- judgment, the urge to analyze thought processes, and the need to meet self-expectations with respect to concentration and relaxation. A participant described this struggle as getting frustrated with herself not being able to control her bodily movements during SMM, as seen in the following passage:

"I was actually getting really pissed off at my thumbs. I was like 'No. Stop twiddling. I'm always twiddling' (laughs). I was moving… never still and then I was like 'Okay. Well, if I'm going to twiddle, then I'll twiddle. But still I'd rather not (laughs)'."

On the other hand, 3 participants experienced acceptance as a rare, novel and valuable experience, contributing to stress-management and clarity of mind in a positive manner. One participant stated that the positive aspects of acceptance were helpful in that they relieved anxiety, and led to relaxation and temporary clarity of mind. He explained:

"It was a lot easier than I thought it was gonna be. I figured it was gonna be harder to accept everything. But when it was that easy, it's just like 'Wow. I should have done that a lot sooner'."

Reframing. Three participants reported engaging in reframing during SMM, a process that was defined as the creation of a new perspective with regard to an event or a situation. Reframing was seen as lowering distress and contributing to a perception of being more in control of one's reactions. Participants described gaining different perspectives about school-related anxiety, preventing them from engaging in catastrophizing and feeling overwhelmed. This was illustrated in the following quote describing one participant's experiences after the interview:

"And then after [SMM and the interview], I was like walking cuz then usually I would run to get where I need to go to do it faster. So then I walked out, I'm just like 'Oh, it's fine. I have all this time'. And then I went into Bio and it was fine. So I wasn't stressed-out cuz usually I'm cramming stuff last-minute, but I'm like,

'I know this stuff, so why are you jumpy like this?' So I changed my mood… from being like frantic to calm."

Reframing also resulted in shifting away from blaming others and regaining a sense of control over one's life events. As one participant explained:

"But it's my fault that I didn't study so…why would it be her fault if she didn't study, cuz I didn't either. I can't really rely on her, so I kind of let it go. It's like 'Oh well. I accept it'. But before I would be like 'Oh no, she didn't study and I didn't study. I hope she's in there right now making up for the both of us'."

One participant described coping with daily stressors including relationship problems and academic pressure:

I: It was better to accept the stresses I'm having and not push it away to make it worse. So just stand and face it and then [you] don't have too much problems with it.

R: Okay, so you noticed that when you accepted it, what happened?

I: The problems didn't seem that much hard to face and seemed kind of miniscule to what I've been thinking.

Processing Loss. During the SMM practice, 2 participants engaged in processing experiences of loss, which they defined as recognizing and confronting thoughts related to the passing of a significant other. These participants created meaning out of the experience of loss by getting in touch with the positive and negative memories associated with these significant others, reflecting and acknowledging the rich contributions they have had in their lives. For one

participant, the experiences during SMM reminded him of the impermanence of life as captured in the following quote:

> *"People have to die and it's just calmer to think like that instead of 'No, they got taken away'."*

Although processing loss was generally experienced as being difficult, one participant was reportedly surprised at his ability to let go of grief during SMM, which contributed to a sense of relief. He shared:

> *"He died a couple years ago, and I haven't really been able to put that away. And then it kind of happened today. Just now, I was able to release. He may be dead, but he can still be with me somehow, somewhere."*

Getting in Touch with Feelings

While practicing SMM, half of participants reported that they had an opportunity to get in touch with their emotions. They defined this experience as recognition of the role of their feelings and emotional reactions during SMM. That is, participants described experiencing feelings of frustration, an ability to "let go" of feelings as well as an absence of feeling. Only one participant disclosed experiencing boredom, which stemmed from a loss of concentration and motivation after having reached her goal of relief of distress.

The Presence of Frustration. Feelings of frustration were mostly discussed in relation to participants' reactions to the practice of SMM itself. Specifically, they disclosed difficulties in counter-acting distractions and attaining a sense of relaxation. Their feelings of frustration were exacerbated by self-critical and self-hostile views as well as self-expectations of needing to

attain a state of concentration and relaxation. One participant described frustration with her inability to attain a state of relaxation by counter-acting distractions. She shared:

> *"I wanted to be able to focus but I couldn't… And it was just kind of irritating because it didn't go the way I planned it to."*

Two participants also reported that they experienced a dissipation of frustration and impatience with continuous SMM practice at home. The management of frustration and impatience was seen as a success, contributing to a greater sense of control and accomplishment. As one participant explained:

> *"I feel less impatient…since the beginning. I felt some impatience with when the tape or when the meditation [were on] but I didn't really care. I just did it. [I] enjoyed it."*

On the other hand, one participant reported experiencing a period of frustration during self-reflection due to dissatisfaction with current life events and stressors, especially in relation to the loss of significant others and his health issues. He explained:

> *"My attitude was I'm kind of pissed off that it's gotta be like this, but I had to let them go. I was more angry about letting some things go."*

Letting Go. Letting go of feelings was experienced by half of the participants, which they defined by as a process by which they did not react to negative emotions that arose during SMM, as they openly acknowledged and intentionally acted to releasing these feelings. Other participants did not report the need to let go of feelings. While this theme resembles that of acceptance, it differs due to the intentionality of releasing emotions, rather than merely recognizing and accepting the presence of feelings.

Letting go of feelings was discussed with respect to two different areas, namely letting go of negative emotions that arose following self-reflection on life circumstances (including, frustration, anger, anxiety, stress, blame, self-critical views) as well as letting go of negative emotions that arose as a result of engaging in SMM (including, frustration due to an inability to attain a certain level of concentration, feelings of hesitancy to engage in meditation and feelings of impatience). For example, one participant reported letting go of his usual anxiety as well as negative mood and outlook through the practice of SMM. He explained:

> *"I'm not worrying…I can experience things without the negative cuz usually when I go into experiences, I have a negative feeling towards them…So for that half an hour or 45 minutes… I don't have that negative light following me into new experiences. I enjoy it more… even watching a television show after is more pleasurable because…I'm not all focused on my emotions. I'm more just seeing the world on opposed to seeing inside of my usually very dark self."*

Three participants described feeling cautious prior to beginning SMM, as they did not know what to expect from the practice, a feeling which interfered with their ability to fully engage in the process. One participant described that by letting go of her initial hesitancy, she was able to experience greater concentration and relaxation, which is captured in this quote:

> *"At the beginning, I was wondering what's gonna happen and I was kinda like 'Okay, should I do this?' I was not scared, but I was kind of precautious… And then during, I was like, 'Okay. Well, I'll just go along with it'. And then as soon as I went along with it, I just let go and didn't think at all and just listened."*

Participants shared two types of experiences with respect to the theme of letting go of feelings. That is, in some cases, letting go was reportedly difficult, as participants were unable to disengage from their focus on anxiety provoking thoughts. On the other hand, 3 participants, who experienced relief from anxiety during SMM, were surprised at how simple it was for them to let go. These individuals who engaged in letting go experienced consequent levels of relaxation and feelings of reassurance, which in turn facilitated greater concentration. In addition, letting go also occurred during periods of clarity of mind, allowing participants to reflect on the content of their consciousness from a more relaxed and attentive state. For one participant, letting go was perceived as an ability to "move forward" from strong emotions of grief and guilt. He stated:

> *I: It's just weird being able to do that [letting go]. Some of the things were difficult to accept than others that I just did. I moved forward.*
>
> *R: And how do you know you moved forward?*
>
> *I: Oh, because I'm able to talk about it...without crying or feeling bad. I'm able to talk about it and say 'You know what? Screw it. Whatever is said, is said.'*

The Absence of Feelings. Six participants reported an absence of emotions while experiencing clarity of mind during SMM. This state was described as a neutrality of feelings and conceptualized as part of the experience of relaxation. Furthermore, 2 participants experienced the absence of feelings as a stabilization of otherwise intense emotions, contributed to clarity of mind. For one participant this experience was discussed as a relief from normal confusion between two opposing emotions, sadness and happiness. She described:

> *"I could be feeling nothing, but I know I have feelings and I don't know why they're not there or in my face or anything. It's just kind of numbing myself. I'm not feeling happy or sad or anything. I'm just kind of …there. Emotions are there. They're just not doing anything. They're not all up in my face. They are just…resting (laughs) or something."*

For one participant, the absence of emotion was qualified as "indifference." However, others shared "surprise" due to the contrasted with their usual state of rumination and emotional distress. For 2 participants, the temporary suspension of emotions was significant, as it resulted in relief from confusion, depression, anxiety and stress. This experience gave rise to feelings of self-efficacy, hopefulness and optimism in their ability to continuously cope with such distress, which was captured in this quote:

> "*I no longer have that extreme range of emotion that I usually do. I'm no longer so upset or depressed or anxious, whatever it may be at the given time. I'm more calm. I guess you could say I just don't worry about it….It is a good thing for me to have a clear mind and lack of negative emotion for a while because quite often, I am more involved with…the negative approach of my emotions because they're a lot more present*."

Beneficial Effects

All participants experienced beneficial effects during and after SMM. These favorable experiences were defined as pleasurable and desired outcomes of the practice, leading to positive feelings and sensations, such as a sense of relaxation, a relief of distress, and a sensation of wakefulness. Participants also experienced an increase in optimism and coping, decrease in self-

critical views, improvement in problem-solving and decision-making, and regulation of anger. All of these beneficial effects are outlined below.

Relaxation. All participants reported SMM to be relaxing; an experience that was defined as a desired state of cognitive and physical restfulness and relief of distress. Participants discussed two types of relaxation: cognitive and physical. More specifically, they described cognitive relaxation in terms of slowing thought processes and relief from stress and anxiety, and physical relaxation with respect to a release of bodily muscle tension. Participants also voiced surprised at the depth and duration of their experiences of relaxation during SMM.

For 3 participants, cognitive relaxation was paralleled to feelings of restfulness which are experienced after sleeping. The differentiation between regular resting and the relaxation experienced in SMM was marked by a relief of anxiety and stressful thinking, which is highlighted by one participant who stated:

> *"Even when you're going to bed, there's just things in your head like 'Oh what's due tomorrow'."*

The experiences of cognitive relaxation were further highlighted by one participant who shared stabilization of her usual distress of emotional and cognitive complexity. According to this individual:

> *"It was quite nice …not feeling anything just because most of the time, I don't know how I'm feeling, what I'm supposed to be thinking, what I'm supposed to be feeling. I just don't know. And then I'll think about that. And when I'm feeling like that, all mixed and confused, I always wish or hope that I'll just feel nothing because for me it's better and I'll feel better when I'm not feeling anything."*

Echoing these experiences, one participant who described himself as suffering from anxiety was surprised that he gained temporary relief of his symptoms during SMM. He explained:

> *"I've suffered from anxiety and depression for quite a while, since grade six I believe, and it's something that follows me quite a bit. But after practicing it [SMM] at least for half an hour or so…I don't have that range of emotion. I'm more neutral and I'm more just where I am…. So for that half an hour or 45 minutes of clarity…I don't have that negative light following me into new experiences."*

The experiences of physical relaxation were reportedly significant for one of the participants who described being usually unaware of her shoulder tension. She stated:

> *"I don't realize that I'm tense or [that] my muscles are kind of flexed…but then I realized it because I wasn't thinking about anything except for my breathing. And then towards the end, I just noticed that I was relaxed."*

For another participant, SMM led to tension release in his lower back as well as a relief from fatigue. More specifically, he described:

> *"I have knots in my backs released…just from relaxing…. The tension just let loose and went away and my body calmed down and so did I. And it was just like 'That was nice. I needed that'. Meditation is very helpful. It's a great stress relief."*

For three participants, the rare depth of relaxation experienced was so highly valued and sought after, that they wished to remain in the interviewing room and avoid re-engaging in their

daily activities in order to preserve their calm state. This intensity of relaxation was illustrated by one of the participants who reported:

> *"I feel exceedingly calm, perhaps calmer than I have ever felt."*

Furthermore, 3 participants voiced surprise at the duration of relaxation they experienced even once they had completed their SMM practice. They also expressed an overall sense of happiness due to the relaxing effects of SMM.

This state of relaxation was attributed to the processes of concentration on the breath, self-reflection and visualizations. Furthermore, absence of goals and instructions in SMM allowed one participant with high perfectionist tendencies to experience relaxation. She described:

> *"I wasn't thinking about, 'Oh, I have to do a certain task and get it finished'. And I wasn't thinking about, 'Oh, I'm gonna do it wrong', cuz in the beginning I was kind of cautious."*

Wakefulness. Seven participants experienced wakefulness, which they defined as a change in their level of alertness and energy. This change in state was described by one participant as a sudden surge of energy, which led to a desire to engage in activities. He described his experience in the following manner:

> *"I get really high energy after I do the meditation for some reason…. Well, for example, the other day I did meditation right after school. I went home, I did it. And then I went out to get my glasses fixed with my mom and I was just bouncing off the walls…which is weird because I'm not usually like that and it was like surge of energy that I got all of a sudden which is nice."*

Three participants reported that wakefulness contributed to sharpening their awareness of their surroundings and thought processes, generating novel and creative ideas as well as improving the clarity of their thinking. One of the participants described wakefulness as feeling refreshed, not being affected by prior pre-conceived expectations, and essentially having a "new mind." She stated:

> "*When you just focus on your thoughts and just start breathing again, you realize, it's like a dumpster, you just throw out all the garbage [thoughts] and you're just like fresh new mind. Then you just go into things more calm."*

This was echoed by another participant who described that experiencing wakefulness during SMM energized him and made him less inhibited which in turn left him feeling more open in engaging in social interactions. He described:

> *"I'm thinking faster. I'm talking faster. I'm not so moody... Usually I'm just kind of like 'Grrr.. don't talk to me. I don't care". But usually when I'm higher energy, I'm just more happy or more encouraged to talk to other people."*

Increases in Optimism and Sense of Coping. Three participants disclosed experiencing higher levels of optimism as a result of SMM. They defined this increase as feeling hopeful about being able to gain relief from future distress and improve their ability to cope. This was described as an ability to be less reactive when faced with stressful situations and was attributed to relief of distress. One participant expressed greater self-efficacy in managing his symptoms of depression and anxiety, including insomnia, self-hostility and rumination on past events. He also described experiencing a more positive outlook, an ability to experience joy, and a capacity to attend to external stimuli rather than his internal cues of distress and ruminative thought processes. He stated:

"I don't really have that extreme range of emotion as I usually do. I'm not as negative as I usually am and I'm not saying that I am necessarily happy after practicing, but to me that's a positive thing because I'm used to just being down, you know, 75% of the time. So being able to have an almost guaranteed shot of not being depressed or anxious for even half an hour or 45 minutes after practicing, then it's a very positive thing… it could honestly be life-changing to me, quite frankly."

Another participant described an increase of optimism as a sense of being unaffected by stress during SMM and an ability to face challenges related to balancing school and extracurricular activities as seen below:

"I'm usually so busy and it's nice to have this [SMM] cuz it just makes me feel so much better and I can go out…and finish my day even though I don't really want to, but I can do it. And…it just… calms me down and I'm not so 'Oh, I gotta do everything. I gotta like to do this, do that'. And now I can just calm myself down and be like 'Okay, I can do this. Just pace myself'."

For one participant, coping was strengthened during SMM when she realized that her thought processes were contributing to her stress, leading her to replace unproductive cognitions with more productive ones. The improvement in coping and stress-management was captured by the following quote:

"And when I'm stressed out, I kind of don't realize it. And then… I get mad or I just wanna sleep…I don't even sometimes know if I'm stressed or if I'm mad cuz those thoughts I don't really recognize cuz I never really look over them, so I

never really got to like realize like what I'm feeling. But…as I'm breathing or as I'm relaxing, I finally realized my feelings."

Decreases in Self-Critical Views. A decrease in self-critical views was experienced by 4 participants and was defined as recognizing and minimizing the tendency to engage in negative self-judgment and self-derision. Most of participants' self-critical views stemmed from feeling like they were unable to counter-act distraction. One participant described feeling surprised at the extent to which he was not engaging in his usual tendency toward self-hostility, which according to him was the source of psychological distress in his life. This experience is portrayed in this quote:

"This kind of calmness and absence of the self-hostility is usually not achieved without some sort of intoxication."

Another participant reported an elimination of self-critical views and self-judgment, which he described a decrease in his tendency to ridicule himself. He described becoming aware of and discontinuing self-critical thinking by changing his thought patterns and adopting a receptive and observing attitude. He reported lowering self-critical thinking as highly desirable and valuable, and conceptualized SMM as potentially helpful in complete eradication of his self-critical views as he explained:

I: I evaluate myself too much.

R: So in your everyday life, it's -

I: Evaluation. Evaluation. Judge. Judge. Judge.

R: And then having a break from that -

I: Is amazing.

R: And then during this meditation?

I: It's not there at all…I love it. I have to keep doing that more often and get rid of it.

Improvement in Problem-Solving. Four participants reported that one of the beneficial effects of SMM was being able to problem-solve, which they defined as thinking and generating solutions in order to more efficiently deal with a challenging situation. Problem-solving during SMM was described as organizing and prioritizing the completion of tasks, and was seen as helpful in terms of increasing efficiency and contributing to feelings of reassurance.

For one participant this involved processing school-related thoughts until a sense of organization was felt, at which point she discontinued attending to such thoughts. This experience is portrayed in the following quote:

"I was only frantic up to a point until I started thinking about it. I wasn't really freaking out about it anymore like during my problem-solving time. So then after, I was like 'Oh, you've solved [it]' … I guess it's like math. It's like you have a word problem, you're like 'Oh no, I don't know how to do this' and then you figure out the steps and then you're like 'Yay, I did it' (laughs)… I thought about it through and put away mentally."

Another participant described generating novel methods of completing homework assignments in order to improve his grades. He stated:

"I was thinking about homework that I have to do over the weekend… thinking about ways that I can complete it faster and more thorough, and ways that I can

do extracurricular work to… to increase my marks. And more and more ways just floated into my head. It was…opening."

The improvement in problem-solving was attributed to relief of usual distress through reframing during self-reflection as well as relaxation. That is, through a relief of usual anxiety and stress, attentive resources were freed, leading to improvements in problem-solving. For example, SMM reportedly helped one participant minimize his over-analytical thinking during the completion of his school work. He described his ability to make decisions and complete his homework properly in the following quote:

I: [It's] been easier…thinking about doing like homework and not having to think about it. Just doing it. And then I've been getting it more correct often than before.

R: So in what way has it helped you?

I: Cuz … I used to overanalyze everything and I overthink a lot of questions. But this [SMM] take[s] it at base and then I can think of the questions out easier.

Furthermore, he contrasted his improved ability to in completing his school work with his usual tendency to dismiss his problems rather than attempting to problem-solve.

Another participant echoed this improvement by stating that she experienced a renewed outlook (free from prior pre-conceived expectations, anxiety and stress) that was due to a greater clarity of mind and allowed her make better decisions with more confidence. She explained:

"I learned how to differentiate one thought from another like…what causes what, what feeling causes what. And that really helped me cuz now I get to see if I'm gonna make a decision, am I making this decision from the past or…am I just

making it like right now?... So that really helped me…so now it's like 'Oh, that's in the past, so make a fresh new decision'."

Improved Self-Regulation. Three participants reported experiencing greater levels of self-regulation as a result of SMM. Self-regulation was defined as an ability to contain the urge to react to feelings such as anger. One participant experienced anger during SMM, as he was reacting to his life circumstances; however, he was able to contain this emotion through self-talk, acceptance, relaxation and tolerance of differing points of views. He described:

"I was able to push it [anger] to the end of the line and tell it to take a number… I got my anger to actually throw in the towel and walk away. So it was cool. I really appreciated it."

He also explained that SMM gave him a method to contain anger as well as impulses of wanting to disrupt the classroom:

R: What do you think you're gonna take away from having these experiences?

I: Being able to calm my breathing down and stop and look…and being able to stop myself before I may get heated or may wanna be foolish…because while I was in that three-day program, I also was the joker and Mr. playful. So at times… instead of the staff coming over and talking to me, I managed to pull myself in before. And then like not many people can actually do that. So it's cool. And I think the meditation did help me, because it's like 'Well, look. You're being stupid... and now it's time to do work, so you better pull yourself back and tell a few jokes and then move on with it'."

Two participants also reported that SMM was a helpful tool after having a verbal argument with a family member, as it allowed them to reflect and take on responsibility for their

part in the argument. Additionally, one participant described a similar experience, where he temporarily eliminated the source of his anger by concentration on breathing, and eventually apologized and resolved the argument through discussion. This experience is illustrated in this quote:

> *"I had just gotten into a fight with my stepdad…and so I got riled up, and I left the room. Then I did the meditation and it calmed me right down….it brought my mind off that [anger] and it made it focus on the breathing…and so it calmed me down because my mind wasn't on it. And I wasn't thinking about it and so the cause goes away. And then I went out and apologized...and we had a discussion. It's all smoothed over."*

Conceptualization of Sitting Mindfulness Meditation

Conceptualization was defined as participants' personal understanding and perceptions related to their experiences of SMM. Participants described their conceptualizations of SMM in terms of its application and usefulness. Furthermore, participants' conceptualization also included reactions towards SMM, particularly emphasizing the impact of its non-goal orientation.

Application and Usefulness of Sitting Mindfulness Meditation. Participants defined the application and usefulness of SMM as a secular practice which represents a tool for relaxation and stress-management as well as a process involving self-reflection useful in a variety of contexts including school performance, relational stress, planning and prioritizing school and extracurricular activities, and anger-management. For example, one participant referred to SMM as "great for anger management and stress relief" stating:

"I can feel anger…it builds up in you. You know when you're angry, it gets really like 'Urrrggh'. And then when you calm down, and it's just (sighs) and it goes away and your body relaxes and it's like 'this is the life' kind of feeling."

In addition, 3 participants emphasized the significance of insight, greater understanding of their cognitive and emotional processes, and change of perspective that was generated during self-reflection, shifting their perception of SMM as simply a relaxation and stress-management tool. For example, one participant disclosed that SMM facilitated a change in outlook and simplified his thought processes. More specifically, he shared:

"I thought it [SMM] was gonna be like a normal meditation. Just clear your mind for like 30 minutes and that's it. You just go along about your day instead of [it] just staying with you throughout the week, the day, like, it is doing now…. [making] your life more simple, but not like trying to reconstruct it, not to take away the complex parts, but just to make them more easily understandable so you can think about it more clearly and calmly."

Similarly, one participant described her view of SMM as a tool promoting self-reflection and contributing to changes in her way of managing stress as seen in this quote:

"I was getting stressed over such stupid things… I learned so much. I was surprised about how I react to things. Sometimes I react really stupid and I never realized that until I actually got to think 'Why do I do this? Why do I do that?' And then I realized 'Oh, it's really stupid'."

Reactions to Sitting Mindfulness Meditation. Eight participants described the practice of SMM as helpful, valuable, insightful and pleasant. The experiences of insight, reframing,

relaxation, temporary slowing of thought processes, and reduction of distress were seen as significant and beneficial for participants with a few individuals expressing motivation to continue meditating beyond the requirements of this study. Eight participants also described SMM as enjoyable and pleasant, with 4 participants expressing gratitude for having learned such a technique. Three participants voiced a sense of surprise at the extent and depth of relaxation, insight and self-reflection that was experienced during SMM. This experience was highlighted by one of the participants who discussed how much she changed as a result of SMM:

> *"So I started to change, and that's what made it better and less stressful. And how I react and how I think…affected a lot of my life, how you go into certain situations, your mindset and everything. So, that really helped me. And I guess the whole experience surprised me because like I never expected all this to happen with just breathing. It's kind of weird."*

For 4 participants the value and benefit of SMM was associated with its non goal-orientation, which they experienced as relieving and freeing, and which allowed them to reflect on a number of issues of importance to them. The freedom and autonomy of not having to attain a goal or expectation was both exciting and liberating, as there was no need to conform to rules or requirements. This was especially freeing for one individual who expressed that not having a goal allowed him to openly explore his thoughts and feelings during SMM. His experience can be seen in the following quote:

> *R: So in this exercise we were asked to practice without having a goal in mind. What was that like for you?*

I: That was what shot my mind off many different directions to think of all the things that I thought of…. cuz if you have a goal, you're focused on that one thing and…you'll branch off …and it just becomes unrelated.

R: But by having no goal -

I: Everything is related to nothing. Basically, I thought about everything…You're free to do whatever you want to do….It's exciting….cuz with teenagers, lots of the stuff they have to go through is rules, rules, rules. And then that's why we all act out. That's what I react to.

On the other hand, 2 participants stated that if there had been a specific goal in SMM, it would have possibly contributed to greater levels of anxiety and distraction due to a need to meet self-expectations. This concern is illustrated in the following quote:

"It just felt like there was no expectations…there can't be any disappointment, so…I wasn't thinking about that."

However, one participant reported a slightly different experience. He disclosed feeling tension between the non goal-orientation of the meditation practice and his need to set goals of self-improvement for himself. He stated:

"*It feels good but awkward at the same time cuz I'm just sitting there relaxing, not thinking of a goal, which actually feels kind of awkward, but then good….I guess it feels uncomfortable because I want to… I just think I should make goals to improve my life to reach to a standard point of where I want to be.*"

Despite the non goal-orientation of SMM, 4 participants conceptualized the practice as involving a "proper way of doing it" and hence needing to attain a certain level of concentration

by being able to counter-act distraction. This conceptualization of SMM is captured in the following two quotes:

> *"I had more practice doing it, so then it made me more confident in myself that I could, do it properly."*
>
> *"My goal was to basically achieve what I feel right now, which is not thinking."*

One participant disclosed that she felt like she had failed the SMM practice, as she was unable to maintaining her concentration, attain clarity of mind and relax. Her frustration is expressed in the next quote:

> *"I was just very distracted… and then I couldn't even sit still. I sat here and I was twiddling. And…I just…couldn't focus today, I guess (sighs). Kind of sucks… I fell short (sighs). I fail (laughs)."*

Journal Entries

This study required participants to listen to the SMM CD every second day for a week at home and to write a journal entry upon completion of each session. This contributed to a total of 3 journal entries with the aim of solidifying and contextualizing participants' ongoing experiences of SMM beyond the research setting. The analysis of the journal entries of participants' experiences of SMM at home were compared with the structures and themes that emerged from the interviews.

Out of 10 participants, 6 completed their journals. These journal entries echoed the results presented above, specifically with regard to physical and psychological processes involved in SMM. For example, participants documented the following experiences: a) concentration on their breath; b) visualizations of colours; c) presence and counter-action of distraction; d) awareness of bodily sensations such as weightlessness and fatigue; e) decreasing thought

processes; f) acceptance; as well as g) absence of feelings. For example, the following journal entry describes one participant's experience with respect to his concentration on the breath and an improvement in counter-acting distraction:

> *"Paid more attention to my breathing this time. Again, although I could still hear the distractions around me, but it's not as prevalent and got easier to ease into the silence of my room."*

Furthermore, participants' journal entries confirmed the beneficial effects of SMM, including a) mental and physical relaxation; b) wakefulness; c) regulation of anger; d) stabilization of mood; e) presence of joy; f) patience; g) more efficient thought processing; as well as h) improved coping. For example, one participant described SMM as being helpful in lowering her rumination about her performance on a test that she had completed, which is illustrated in this journal entry:

> *"I just finished a test so it [SMM] helped me from worrying about my mark. I forgot about everything. I felt so relaxed. It was awesome. My mind was free which was what I needed because I was so stressed."*

Development of Experiences Through Time

Although the development of experiences of SMM through time was not the focus of this study, 9 participants reported changes due to greater exposure to experiences of SMM. These changes occurred throughout the SMM sessions during the interview and as a consequence of continuous home practice. It is important to note that half of the participants completed all 3 meditation sessions before the second interview, while 4 participants completed two sessions, with one reporting only completing one. Nonetheless, changes were reported with regards to

their experiences of concentration, improved ability to counter-act distraction, a deepening of self-reflection, and greater experiences of beneficial effects of relaxation and coping.

Eight participants experienced an improvement in attention and concentration and ability to counter-act distraction. For example, one participant described a greater ability to counter-act distractive thoughts and a consequent improvement on concentration on the breath through continuously practicing SMM at home. She stated:

> *"At the beginning, there was a lot of thoughts in my head that I thought about, but then, as it went away I just kept going like 'Oh, those are useless' so I kind of just pushed them aside. So as I kept going, it was really easy for me to just breathe and focus on my breath, and no thoughts were in my head distracting me. It's just kind of like 'Oh, I'm just focusing on my breath now'. So it was way easier."*

The greater ease of concentration was also reflected by other participants in terms of experiencing greater levels of patience during SMM. For example, one participant stated in his journal entry that he *"felt less impatient compared to the start of these sessions"*, while another reported greater patience during SMM after one session. He stated:

> *"Well, at first I found it frustrating….to sit down and not do anything for 10 minutes, but…even after one individual meditation session it wasn't that big of a deal at all actually."*

Moreover, another participant reported realizing that all distractions can be conceptualized as internal and mental phenomenon rather than physical, which according to him was helpful in strengthening concentration and counter-acting distraction caused by his lower back discomfort.

For 3 participants the dissipation of initial feelings of caution and apprehensions due to unfamiliarity with SMM also contributed to greater levels of concentration. As one participant described after practicing SMM at home:

> *"Because the first time, I was like…'I don't know what…am I supposed to do'…and I was thinking about other things. And then right now as I listen to this, the only thing I was focusing on was my breath. My mind wasn't going other places like 'Oh, should I be thinking about this or what should I do?' It was just like 'Oh, I already know what I'm going to do' so I was just concentrated on my breath, so it was easier, and more relaxing when it's like that."*

A deepening of the self-reflective process was also evident among 3 participants, which was described by them as greater ease of initiating the process as well as greater depth of analysis of thought processes due to improved ability to counter-acting distraction. One participant experienced a shift in viewing SMM as involving a process of self-reflection instead of attaining singular concentration. He stated:

> *"I think there are positive things coming out of this like more energized. And the meditation is called mindfulness. I'm thinking more, which is good, because out of our modern-day lives, it's more of a do than to think, so it creates an environment of thinking, and think about anything like yourselves…. Our life, like everybody's life is so busy, so only during the meditation I could really think and focus about it."*

The change in the self-reflective process is echoed by another participant who shifted his perceptions from the need to reflect on past events to greater focus on his awareness of his thoughts, feelings and sensation in the present moment. He described:

"I know it says to just whatever comes into the playing field, just think of it and let it go or whatever, and I tried to think of things that… happened in my day, but when I tried to, it just doesn't seem relevant and I just feel happy with what I'm doing right now."

This participant also experienced a change of conceptualizing SMM as being non-goal-oriented as illustrated in this quote:

"I remember the first time I was all like 'Yeah, goals! Goals! This is my goal. This is my other goal'. It's kind of like I'm going to do this for cuz I wanna not think about this anymore or I wanna do this because I can't sleep. But it's not really about that….you don't really need a goal. It's probably even better, if you don't have a goal."

Furthermore, one participant reported a deepening of self-reflection in terms of analyzing her thought processes which started emerging with greater exposure to SMM as illustrated in this passage:

R: So, I guess what you're saying is through just…the simple act of breathing, you learned about how you react, what your thoughts are, how your thoughts influence situations -

I: Yeah. One step led to another. First of all my breathing, then thoughts started to bombard me, so I'm like 'Okay, why are [there] these thoughts?" And it got deeper and deeper, until I realized so much and it was good.

Half of the participants also reported experiencing a deepening of relaxation levels. One participant described that the more he practiced SMM, the higher levels of relaxation he experienced as illustrated in the following quote:

"I already felt calm from this morning's listening to it [SMM CD] and then that just made it feel like it's lasting longer and made me feel a lot calmer than I already was."

Furthermore, in his journal he described that through practicing SMM at home before school, he experienced cognitive relaxation and a consequent greater efficiency in completing his school work. He wrote:

"I listened [to SMM] before school and started to notice that my mind was clearer in my thinking and that I was working more efficiently with little to no stress."

Another participant described a greater sense of control of her reactions due to relaxation. She shared:

"I noticed that throughout the day, I was more relaxed. As things came my way, I wasn't that surprised and I kind of was neutral and more calm about everything. And, I just got more better at it."

This experience is echoed in another participant's description of deepening his level of acceptance during SMM. He described:

"I'm accepting more and more stuff every time I go through it though."

Only for one participant, there was variability in her experiences of relaxation, distraction, feelings of irritation, as well as changes in motivation levels and self-critical views. She stated that this was influenced by her mood and reaction to her friend not being present for a meeting as illustrated in this quote:

"I couldn't stop thinking, wondering why he left and… it just pissed me off that he just left and he didn't contact me whatsoever (sighs)…I was just very distracted by that and then I couldn't even sit still."

Summary of Findings

Results indicate that the 10 adolescents who participated in this study discussed the following experiences with respect to the phenomenon of interest: a) expectations of SMM; b) attention and concentration; c) distraction; d) awareness; e) self-reflection; f) getting in touch with feelings; g) beneficial effects; as well as h) conceptualization of SMM. An analysis of the participants' journal entries further validated these experiences during their home sessions.

The findings of this study showed that participants expected SMM to involve an element of relaxation. This expectation may have been influenced by prior exposure to mindfulness-based practices of participants' family members. Furthermore, individual expectations were related the hope that SMM would address specific needs such as symptom reduction or improvement with school work. Participants also revealed initial feelings of apprehension due to unfamiliarity with the expectations that are involved with this mindfulness-based practice.

An essential part of the participants' experiences of SMM included a point of focus on which participants focus their attention. This point of focus was varied and involved concentration on their breath, on the verbal instructions of the CD, on their thought processes and self-reflections, on visualizations, and on silence. Participants experienced variability in their abilities of attaining a state of attention and concentration.

Distraction was also reported as a part of the experience of SMM and was a consequence of not being able to focus attention. Although there was variability in counter-acting distraction, this process was common for all participants. While some were able to use a more accepting

approach in managing distraction and found it an easy task, others felt challenged and reacted with self-criticism and irritation.

The experience of SMM also included an element of awareness of the present moment in terms of thought processes, bodily sensations, and the passage of time. Participants experienced a slowing of the stream of thoughts and an absence or stillness of their bodily movements. Sensations of bodily discomfort were reported by participants mostly in terms of reaction to pain.

Participants also experienced SMM as involving a self-reflective process which included analyzing thoughts pertaining to the state of distraction, the impact of cognitions and emotions on stress and anxiety, and general life events and circumstances. This analysis led to insights into the need for greater accountability, prioritization of needs, and realization of the ability of concentration and ease of managing distraction. Analysis of thinking also contributed to reframing of situations and processing loss, allowing participants to feel lower levels of stress and anxiety as a result. As a result of self-reflection, participants reported gaining greater levels of self-understanding, growth and inner resources for coping with stress.

During SMM, participants also experienced getting in touch with their emotions. Prevalent emotions arising during SMM included frustration due to challenges in maintaining concentration and a sense of letting go of negative emotions of anger, stress, apprehension and rumination. The act of letting go combined with the process of concentration contributed to the experience of clarity of mind and absence of feelings. Participants experienced this absence of feelings as relaxing and contributing to symptom reduction and stress relieve.

SMM was experienced as having many beneficial effects by the participants. Reported experiences of cognitive and physical relaxation were seen as highly desirable and valuable. Furthermore, relaxation during SMM was experienced as reducing the presence of distress such

as anxiety, depression, anger and self-hostility. The state of relaxation also contributed to feeling greater levels of wakefulness, which in turn led to increasing participants' abilities to generate creative problem-solving strategies. The experiences during SMM were seen as facilitating a containment of feeling overwhelmed by stress, and contributing to a general increase in coping resources and strategies. This renewed sense of coping combined with the state of relaxation and clarity of mind, resulted in greater feelings of optimism among participants. Participants who reported difficulties managing their anger, successfully applied the skills learned during SMM in their everyday lives to strengthen their abilities to self-regulate such tendencies.

Although participants' prior expectations seemed to guide their experiences, some participants reported a shift at that level. That is, SMM was experienced and conceptualized by the participants not only as a tool for relaxation and stress-management, but also as a pleasant and beneficial method of self-reflection and analysis of cognitions and emotions, leading to the generation of insight and increasing self-understanding. Furthermore, SMM was seen as applicable and relevant to participants' lives, with most of them being able to transfer their beneficial experiences to areas including school performance and extracurricular activities, relationships, and anger-management. The applicability of the benefits of SMM was further outlined by participants' home experiences of SMM in their journal entries. SMM was also experienced as task-oriented and goal-driven, with most participants desiring to attain certain states of concentration and relaxation.

The experiences of SMM were developed through time with greater amounts of exposure to the SMM CD. Through practice of SMM, participants experienced a strengthening in concentration and a consequent increase in the ability to counter-act distraction. Furthermore, participants reported a deepening of the self-reflective process, changes in their

conceptualizations of SMM, and greater levels of relaxation, especially due to beneficial effects of reframing and insight that emerged after continuous SMM sessions.

These meaningful structures reflect a certain sequence to the physical and psychological processes of SMM, as reported by the participants in this study. Moreover, these structures were discussed in an interrelated manner. For example, expectations and conceptualizations of SMM that participants held guided their experiences of SMM. Due to flexibility of such expectations and a sense of openness, participants were able to experience a shift in their understanding of SMM through time. This openness allowed for variability in foci of attention and concentrating. Thus, while some participants emphasized the importance of attaining clarity of mind and absence of thought, others emphasized self-reflection. Although not a common occurrence, rigid self-expectations limited the experiences of acceptance and non-judgmental observation during SMM.

Despite the non-goal directedness of SMM, participants desired attaining a state of concentration and beneficial effects, such as relaxation, relief of anxiety and decreases in thought processes. It seemed that the more participants expected to meet these goals, the more they struggled with their SMM practice. Those who were able to let go of the need to meet these expectations were paradoxically able to experience the desired outcomes. Exceptionally, some participants were able to experience acceptance and be non-judgmental.

Attention and concentration were perceived to be the consequence of an ability to counter-act distraction and to contribute to a reduction in thought processes. This decrease in processing (reduction in overanalyzing and rumination) was also associated with an absence of feeling, which was further associated with cognitive relaxation as well as relief of anxiety and stress. This cognitive relaxation was experienced as a novel phenomenon and relief from usual

thought processes, and was contrasted to usual physical states of relaxation. Cognitive relaxation also opened up attentive resources allowing participants to engage in creative problem-solving. The beneficial experiences of cognitive relaxation led to a realization of its value and benefit in participants' lives, which for some participants reminded them of their need to prioritize self-care. The sense of being able to "create" a sense of cognitive relaxation with the practice of SMM was associated with feelings of hopefulness and mastery contributing to a greater sense of coping.

The process of self-reflection involved participants facing their thoughts, feelings, attitudes and sensations in the present moment in specific domains that were most relevant to their individual needs during SMM. That is, while some focused on school-related tasks, others reflected on the state of distraction, relationship issues, childhood memories, as well as the processing of loss of significant others. This self-reflective process was associated with gaining insight into the role and impact of thoughts and emotions that increase stress and anxiety, leading to reframing, acceptance, and letting go, disrupting the cycle of stressful responses and leading to an increase in sense of coping. Furthermore, since SMM involves an autonomous and self-driven process, any beneficial effects resulting from self-reflection were seen by participants as result of their own efforts.

Chapter V: Discussion

Conclusions

The aim of this study was to explore the experiences of adolescents with the mindfulness-based practice of Sitting Mindfulness Meditation (SMM). This study investigated the research question, "What are the initial experiences of adolescents with SMM?" By analyzing participants' interviews and journal entries using the psychological phenomenological method outlined by Giorgi (1997, 2003, 2006, 2008), the findings revealed eight major structures constituting adolescents' experiences of SMM, namely a) expectations of SMM; b) attention and concentration; c) distraction; d) awareness; e) self-reflection; f) getting in touch with feelings; g) beneficial experiences; and h) conceptualization of SMM.

In this discussion section, the research findings will be briefly summarized and compared with the research literature on mindfulness outlining thematic commonalities as well as original contributions. The strengths and limitations of this study will then be outlined. This will be followed by implications of the findings for the administration of mindfulness-based programs and counselling interventions for an adolescent population. Lastly, suggestions will be made for future research.

Expectations of Sitting Mindfulness Meditation. This particular theme involved the pre-conceived ideas and expectations of SMM prior to practicing it, revealing that participants expected an experience of stress reduction and management, clarity of mind, relaxation, self-reflection and alleviation of psychological distress. The variety of expectations is echoed in one qualitative study with adults ranging from a desire to find a cure of psychological distress to having minimal expectations prior to a Mindfulness-based Cognitive Therapy (MBCT) program (Mason & Hargreaves, 2001). Stress-reduction and alleviation of distress was also a common

expectation prior to mindfulness-based programs (Cohen-Katz, Wiley, Capuano et al., 2005; Finucane & Mercer, 2006).

The results of this particular study indicated that exposure to SMM confirmed participants' expectations and solidified their preconceived notions in terms of the duration and intensity of its beneficial effects. Furthermore, the findings revealed some feelings of apprehension due to unfamiliarity, failing to meet self-expectations, and potential negative effects prior to listening to the CD which has not been mentioned in the research literature. This seems to indicate that although participants' prior skepticism of SMM impacted their initial conceptualization of this mindfulness-based practice, with time participants experienced greater beneficial effects (e.g., relaxation) and a consequent dissipation of such feelings. This finding also highlights the importance of being aware of the impact of such negative expectations and skepticism potentially interfering with the experiences of mindfulness and participation in mindfulness-based programs especially early on. Mindfulness instructors are thus recommended to reassure participants of the beneficial effects that are reported after letting go of one's expectations during mindfulness-based practices.

Attention and Concentration. The theme of attention and concentration revealed the importance of a point of focus during SMM which involved concentration on the breath, the verbal instructions, thought processes during self-reflection, and visualizations. Concentration was described as helpful in buffering against distractions, decreasing thought processes, contributing to relaxation, and allowing for self-reflection of thoughts, feelings and sensations. Verbal instructions were both seen as facilitating and initially disrupting the process of concentration during SMM which abated with continuous practice consistent with the findings of Dellbrigde and Lubbe (2009). The process of concentration was seen both as a struggle, due to

wanting to meet self-expectations of attaining a certain level of concentration, and as surprisingly easy, contributing to a sense of accomplishment in managing distractions which has also been reflected in the literature (Griffiths, Camic & Hutton, 2009). The experience of struggle in maintaining a sense of concentration and motivation in managing distraction during mindfulness-based practices have been echoed in the adolescent and adult mindfulness literature (Allen, Bromley, Kuyken & Sonnenberg, 2009; Cohen-Katz et al., 2005; Dellbridge & Lubbe, 2009; Finucane & Mercer, 2006; Kerr, Josyula & Littenberg, 2011; Kerrigan, Johnson, Stewart et al. 2010; Mason & Hargreaves, 2001; Stelter, 2009). Furthermore, concentration on thinking as well as visualizations has also been mentioned in the adult literature (Griffiths et al., 2009; Kerr et al., 2011).

It seems that the act of concentration is necessary in order to experience the beneficial effects of SMM. The act of concentration in itself may contribute to reduction of distress and give participants greater sense of control as seen in the findings of this study, especially regarding the slowing or termination of ruminative patterns of thinking and negative self-absorption. Thus, it seems that SMM provides participants with a tool of becoming aware of the processes involved in maintaining their attention, which may allow them to gain insight and further strengthen their abilities to concentrate. As seen in the findings, the experience of being able to maintain one's attention may especially be empowering for students who have been labeled as having difficulties with attention at school, potentially providing them with a different perspective of their capabilities.

Distraction. The theme of distraction revealed the various experiences of participants related to disruptions to concentration during SMM. Findings elucidated the sources of distraction as well as the process of re-focusing. Consistent with the literature, sources of

distraction involved bodily discomfort including lower back pain, outside noise, sleepiness, emotional distress and an overactive thought process (Dellbrigde & Lubbe, 2009; Kerr, et al., 2011; Kerrigan et al., 2010). There was variability in the perception of difficulty in managing distraction which is echoed in the literature of adult participants in mindfulness-based programs with some having greater challenges than others especially early into the program (Finucane & Mercer, 2006; Mason & Hargreaves, 2001; Stelter, 2009).

The greater ease of concentration with practice that was reported in this study is consistent with quantitative research findings (Bogels, Hoogstad, van Dun, Schutter & Restifo, 2008; Napoli, Krech & Holley, 2005; Semple, Lee, Rosa, & Miller; 2010; Semple, Reid, & Miller, 2005; Zylowska, Ackerman, Yan et al., 2007) and was also highlighted by Kerr et al. (2011). Their investigation of journal entries during an eight-week Mindfulness-based Stress Reduction (MBSR) program suggested that greater manageability of distraction may be explained by the process of reperceiving as proposed by Shapiro et al. (2006). Reperceiving involves the detachment from identification of one's experiences through non-judgmental and non-reactive observation. Although in this study, distraction was mostly seen as undesirable and needing to be managed consistent with Dellbrigde and Lubbe's (2009) findings, a few participants reported managing distraction through accepting and observing it as transitory passing events.

The findings of this particular study furthermore shed light onto the processes of counter-acting distraction through highlighting the process of concentration, the use of self-talk and conscious discontinuation and dismissal of ruminative thinking also found by Stelter (2009). By understanding this process, mindfulness instructors can encourage participants to use similar strategies in counter-acting distractions as well as introduce and emphasize greater use of acceptance of distraction. The use of visualization techniques as well as verbal instructions may

also address initial challenges and strengthen motivation to continue engaging in concentration during mindfulness-based practices. Furthermore, as the findings show, the analysis of distractive thinking that was experienced by participants facilitated greater self-understanding and insight into the connection of thinking and stress. This type of insight may be helpful and complementary to cognitive-behaviroual treatment approaches.

Awareness. The findings of this study also revealed a sense of self-awareness of thoughts, attitudes, feelings, and sensations with participants reporting decreasing thought processes, a sense of self-absorption to the extent of losing awareness of bodily sensations, a heightened of awareness of surroundings, and an awareness of the impact of attention on the breath related to the beneficial effects of SMM. Similar to this study, participants' descriptions of decreasing and temporary suspension of thought processes mentioned in the literature include "a sense of being elsewhere" (Fitzpatrick, Simpson & Smith; 2010, p. 188) and a sense of relief of rumination (Allen et al., 2009; Mendelson, Greenberg, Dariotis et al., 2010; Stelter, 2009). The heightened awareness of sounds is also found in an adolescent's tendency to focus more on external rather than internal phenomenon during mindfulness-based practices (Dellbridge and Lubbe, 2009).

This study explored further the connection of awareness of slowing down of breathing with the beneficial aspects of mindfulness with regard to concentration, stress-management and relaxation. Furthermore, the findings also showed an in-depth description of how clarity of mind is experienced during SMM as well as differences in awareness of the passage of time as related to levels of relaxation and engagement. These findings are significant in that they contribute to insight into the importance of the state of clarity of mind as well as its association with concentration on inhalation and exhalation of the breath. This association may be an important factor in producing greater states of relaxation. As the findings suggest, it may be possible that

concentration can be developed to the point of slowing down or even ceasing thought processes. The beneficial experiences associated with a temporary and willful discontinuation of thinking may contribute to greater functioning, sense of mastery and control of one's reactions, and greater creativity and joy through freeing up additional attentive resources that may remain dormant otherwise. Moreover, the experience of clarity of mind seems to be highly valued by participants, which may increase their motivation to continue engaging in mindfulness-based practices and programs. If such findings are found with initial exposure to SMM as seen in this study, the continuous cultivation of mindfulness may hold even greater potential for self-growth for an adolescent population.

Self-Reflection. In this study, self-reflection was seen as helpful in the analysis of cognitions and emotions which contributed to greater feelings of anxiety and stress management. The self-reflective process promoted insight, acceptance, reframing of situations, and processing loss experienced by some participants. Similar to such findings, the research literature mentions that the experiences of mindfulness involve a process of analyzing thoughts leading to insight and deeper understanding of the connection and role of cognitions, emotions and behaviours contributing to stress, anxiety, and depression (Allen et al., 2009; Cohen-Katz et al., 2005; Griffiths et al., 2009; Mason & Hargreaves, 2001; Mackenzie, Carlson, Munoz & Speca, 2007; Stelter, 2009). These findings further showed that this renewed understanding resulted in greater levels of coping and self-efficacy of control over psychological distress such as anxiety, depression and stress as also outlined in this study. Similarly to this study, Kerrigan et al. (2010) reported a self-reflective process during mindfulness with adolescents who reported experiences of becoming more acquainted with oneself especially with regard to awareness of stress, clarification of the role of cognitions and emotions, as well as meaning and self-identity for one

participant. Furthermore, as found in this study, mindfulness-based programs contributed to insight of the need to prioritize self-care for adults (Allen et al., 2009; Cohen-Katz et al., 2005) and greater self-care attitudes among adolescents (Kerrigan et al., 2010; Sibinga, Stewart, Magyari et al., 2008).

Acceptance was experienced as helpful in concentration, and the management of distractions, emotional distress and bodily discomfort consistent with the mindfulness literature with adults (Allen et al, 2009; Mason & Hargreaves, 2001). Although acceptance was reported as part of the adolescents' experiences of SMM, it was not consistent with the conceptualization of mindfulness according to Bishop et al. (2004) due to a desire of attaining concentration, relaxation and clarity of mind as well as the presence of self-critical views. This is consistent with mindfulness research with an adolescent who emphasized task-oriented attention rather than acceptance and passive observation (Dellbrige & Lubbe, 2009). Furthermore, the struggle of acceptance is not unique to adolescents. Adults participating in MBCT programs for the management of depressive symptoms also struggled with the notion of acceptance while desiring change (Allen et al., 2009; Mason & Hargreaves, 2001). It is quite possible participants in this particular study did not have sufficient time and exposure to mindfulness to develop acceptance.

The process of reframing was also outlined in the research literature on mindfulness-based groups in terms of changing one's way of thinking for participants with Parkinson's disease (Fitzpatrick et al., 2010), relief of catastrophic thinking among participants experiencing cardiac rehabilitation (Griffiths et al., 2009), and improving the ability to "view things from a different angle" in preventing relapse of depression (Allen et al., 2009, p. 419). Although for adolescents in the study by Kerrigan et al. (2010) it was hard to explain experiences of reframing, they

reported a change in perspectives related to positive shifts in personal well-being and improvements in relationships at school.

Lastly, the processing of grief during MBCT was also outlined in a study by Mason and Hargreaves (2001). It is interesting to note that experiences of "honouring" the deceased seem to parallel the findings of this study. This may suggest commonalities in how mindfulness is experienced regarding the grieving process.

This study elucidated the above mentioned aspects of the experience of mindfulness in relation specifically to an adolescent population. Furthermore, shifting blame and taking on ownership of actions also seem to be emerging themes unique to this study. This finding supports the use of mindfulness-based practices in educational settings in promoting social-emotional learning. Moreover, the findings regarding a greater ability of organization and prioritization of tasks that emerged through self-reflection during the practice of SMM may have yielded new beneficial effects of mindfulness-based practices that have not yet been explored in the research literature. The results also emphasize the potential of the self-reflective process. Thus, as mindfulness instructors and counsellors using mindfulness-based interventions, it may be important to keep in mind the significant contributions of the self-reflective process during SMM in encouraging greater self-awareness and strengthening coping strategies for participants and clients.

Getting in Touch with Feelings. Participants experienced getting in touch with their initial emotions of frustration and impatience due to challenges in maintaining concentration and due to facing difficult emotions of loss, sadness, and self-critical views. The recognition of challenging emotions was contrasted by experiencing a temporary absence of emotions, seen as a

relief from ruminative thinking. The reduction of frustration, irritation and difficult emotions seem to suggest that such emotions may become more manageable during SMM with practice through time.

The presence of frustration in the process of concentration has been echoed in the qualitative adult literature (Finucane & Mercer, 2006; Kerr et al., 2011; Stelter, 2009). Furthermore, participants in previous mindfulness-based groups have also reported initial challenges in confronting difficult emotions such as sadness and anxiety related to flashbacks of childhood abuse (Cohen-Katz et al., 2005), irritation due to memories of conflict at the workplace and emerging feelings of sadness in response to somatic complaints (Kerr et al, 2011), as well as feelings of self-loathing due to dissatisfaction with body appearance (Proulx, 2008).

In contrast to such emotional distress, the absence of feeling that was reported in this study parallels the experiences of clarity of mind and relief of rumination (Allen et al., 2009; Fitzpatrick et al., 2010; Stelter, 2009). Unique contributions of this study included a clarification and outline of the experiences of temporary relief of ruminations on cognitive and emotional processes as well as its impact on participants. The powerful impact of disengaging from rumination may empower individuals to gain greater control of distressing emotions prevalent in symptoms of anxiety and depression. Thus, the use of mindfulness-based interventions such as SMM may be a valuable method of symptom and distress reduction in adolescent psychotherapy and counselling settings, especially given that adolescents conceptualize them as simple and quick interventions that they can practice by themselves at any given time. Furthermore, this study provided detailed descriptions of the process of disengaging from negative emotions such as anger, hesitancy, frustration and irritation through letting go. As mentioned above, these findings highlight the importance of addressing and encouraging participants to let go of such

negative feelings early on during mindfulness-based practices by reminding participants that such feelings have been shown to dissipate easily with time. Moreover, learning the act of letting go and disengaging from negative emotions through mindfulness-based practices may provide participants with an additional coping tool which can be applied to other situations and contexts.

Beneficial Effects. The theme of beneficial effects outlined the positive and desired outcomes of experiencing SMM including cognitive and physical relaxation, wakefulness, increases in optimism, improvement in coping, lowering self-critical views, improvement in problem-solving and greater ability of self-regulation. These benefits were attributed to concentration on the breath and verbal instructions of the SMM CD, visualizations, and the self-reflective process. At times, participants measured their "success" of SMM in terms of experiencing such benefits.

The experience of relaxation is present in all of the qualitative mindfulness studies mentioned above for both adults and adolescents especially in terms of reduction of stress and anxiety suggesting an overarching common theme in mindfulness research. Adolescents in previous studies also mentioned becoming more aware of their stress levels as a result of mindfulness-based practices (Kerrigan et al., 2011), which may explain improvements in cognitive and physiological stress responses (Mendelson et al., 2010). Studies have confirmed experiences of wakefulness and feeling energized (Allen et al., 2009; Stelter, 2009), increases in optimism and coping with distress (Allen et al., 2009; Biegel, Brown, Shapiro & Schubert, 2009; Britton, Bootzin, Cousins et al. 2010; Broderick & Metz, 2009; Finucane & Mercer, 2006; Fitzpatrick et al., 2010; Mason and Hargreaves, 2001; Schonert-Reichl and Lawlor, 2010; Sibinga et al., 2008), reductions of symptoms of anxiety, depression, and attention-deficit

hyperactive disorder (Biegel et al., 2009; Bootzin & Stevens, 2005; Joyce et al., 2010; Lee et al, 2008; Semple et al., 2005; Zylowska et al., 2007), lowering self-critical views (Dellbridge & Lubbe, 2009; Proulx, 2008), improvements in self-regulation of behaviours and emotions among adolescents (Bogels et al., 2008; Broderick & Metz, 2009; Joyce, Etty-Lea, Zazryn et al., 2010; Kerrigan et al., 2010; Lee, Semple, Rose & Miller, 2008; Napoli et al., 2005; Mendelson et al., 2010; Semple et al., 2010; Sibinga et al., 2008) and adults (Cohen-Katz et al., 2005; Fincuane & Mercer, 2006; Griffiths, 2007; Proulx, 2008), as well as improvement in school performance (Bogels et al., 2008; Kerrigan et al., 2010) possibly due to lowering of performance anxiety (Napoli et al, 2005).

However, this study highlighted more in-depth the experiences of improved problem-solving abilities and grounded the notion of self-regulation of anger in participants experiences of relational conflict. Furthermore, the experiences of ownership of actions were reported to contribute to resolution of such conflict, suggesting additional beneficial effects of mindfulness beyond self-regulation. It seems that giving participants the opportunity to reflect on their actions in a relaxed state free from the restraints of distress during SMM initiates greater capability to generate creative and novel solutions to problems. Moreover, such self-reflection enables an exploration and insight of the impact of behaviours, which may foster a greater sense of responsibility rather than blame. The discovery of such previously unknown beneficial effects provides evidence for the wide applicability and potential of mindfulness in improving relationships and school performances, as well as in strengthening problem-solving and decision-making abilities, which are all important areas needing to be developed during adolescence.

Conceptualization of Sitting Mindfulness Meditation. As the findings show, participants conceptualized SMM as a tool for relaxation, stress and anger management as well as

contributing to changes in one's perspective and outlook. The research literature confirms that adolescent participants view mindfulness-based practices as pleasant, enjoyable and useful (Broderick & Metz, 2009; Dellbridge & Lubbe, 2009; Huppert & Johnson, 2010; Mendelson et al., 2010; Kerrigan et al. 2010; Lee et al., 2008; Sibinga et al. 2008). Furthermore, some participants described being surprised at the extent of beneficial experiences they had through exposure to SMM, which is also reflected in the literature (Allen et al., 2009; Kerrigan et al, 2010; Stelter, 2009).

Although participants reported viewing mindfulness as non-goal orientated, a few mentioned desiring to attain concentration, relaxation, and clarity of mind consistent with the theme of task-orientation according to the findings of Dellbridge and Lubbe (2009). These researchers stated that striving to meet expectations and goals is inconsistent with and actually interfering with the process of mindfulness. This was also evident in a few participants who reported views of "proper" ways of doing SMM. A small minority of participants experienced frustration, boredom, self-criticism and disappointment when self-expectations were not met, which for some lowered levels of motivation and resulted in momentary periods of disengagement of SMM. The disruption of the process of mindfulness due to unmet expectations has also been found in mindfulness studies involving adults with depression and anxiety (Fincuane & Mercer, 2006; Mason & Hargreaves, 2001).

Unique findings of this study involved the usefulness of SMM in various areas including academic work performance, relationships, symptom relief for anxiety and depression, problem-solving, and decision-making. Furthermore, through the use of multiple interviews, shifts in conceptualizations of mindfulness as well as the process of development of mindfulness with practice have also been found which echo the beneficial effects associated with practicing

mindfulness-based interventions (Biegel et al, 2009; Broderick & Metz, 2009; Huppert & Johnson, 2010). The completion of homework practices, journals and lack of attrition further provide evidence for the feasibility and applicability for mindfulness-based interventions for adolescents which is echoed in the self-compliance rates for home meditation practice (Barnes et al., 2004; Black et al., 2009; Broderick & Metz, 2009; Huppert & Johnson, 2010; Lee et al., 2008). These findings suggest that although mindfulness-based programs are popular and feasible for adolescents, mindfulness instructors need to keep in mind the importance of continuously engaging their participants by highlighting the various practical and applicable benefits of continuously practicing mindfulness. The results seem to indicate that participants and quite possibly some working professionals may underestimate the potential of mindfulness in contributing to positive changes, which is something that can be addressed by highlighting testimonies of past participants.

Strengths of the Study

As the literature review points out, there is a lack of both quantitative and especially qualitative research on adolescents and mindfulness, particularly about their initial experiences of SMM. By exploring the experiences of adolescents, this study attempted to address this important gap in the literature. To the best of the researcher's knowledge, this study was the first to attempt to investigate adolescent experiences of SMM using a phenomenological approach with several participants. It was also one of the rare studies focusing on the SMM component as separate from the structure of the MBSR and Mindfulness-Based Cognitive Therapy program. It is hoped that the results of this study contributed to a specific and in-depth investigation of this essential program component. Since mindfulness meditation with this population is an emerging

area of research, the design of the study and the specific focus on SMM seemed appropriate and suitable, as opposed to a qualitative study on an entire mindfulness program.

Another major strength of this study is the appropriate fit of the research question with the qualitative research design. Using a psychological phenomenological approach allowed an in-depth investigation of a phenomenon that is internal, personal and difficult to quantify, lending itself well to the way SMM presents itself to each individual. Also, more comprehensive and accurate representations of the phenomenon emerged because of data-analytical methods that involved comparing both within and between participants' accounts of their experiences. Open-coding allowed for the emergence of the data directly from the participants' descriptions of the phenomenon and resulted in original and unique contributions to the research literature on mindfulness. Among such unique findings included a description of initial and novel experiences related to mindfulness over time. The use of two interviews (the first after the very first exposure to SMM and the second after having practiced it) as well as journal accounts of such home-based experiences, contributed and elaborated on the unfolding of meaning and practicality of SMM for the participants, thereby creating a richer account of the experience. The data elucidated experiences of growth, learning, challenges and struggles throughout the exposure process. Furthermore, the use of journal entries also outlined the long lasting beneficial effects of SMM as well as its applicability and relevancy for various areas of participants' lives beyond the research setting. These journal entries also acted as a form of triangulation, grounding and strengthening the structures that emerged during the interviews.

The heterogeneous sample and recruitment of participants from similar age group of various ethnic backgrounds using two different school settings also contributed to the strength of the transferability of the findings. This sample may characterize participants enrolling in a

community or school-oriented mindfulness-based programs thereby informing future applications of such programs especially with regards to adaptations to MBSR or MBCT program structures. The research findings may also promote further research not only in enhancing quality assurance of such programs through integration of adolescent experiences of mindfulness, but also in opening investigation of the unique factors found in this study that were previously unknown.

Delimitations and Limitations

While this study has many strengths, it is not without limitations. This study most likely attracted adolescents or their parents/guardians that were already interested in mindfulness meditation, thus the sample might inherently have had higher levels of motivation and self-discipline, and potentially had been already informed about other meditative practices and its benefits. The purpose of this study was to investigate initial experiences and exposure to SMM as a component of mindfulness-based programs by using CD instructions. Although this method may not have reflected the more in-depth cultivation of mindfulness along with the intricacies found in complete mindfulness-based programs that use group support, weekly meetings, encouragement of homework, and a variation of mindfulness practices, past research confirms the successful administration and clinical effectiveness of a mindfulness-based intervention using solely MBSR audiotape instructions (Kabat-Zinn, et al., 1998).

Mindfulness meditation is an internal experience, thus it will not be known whether the participants were actually following through with the CD instructions during the study, or practicing meditation at home. Participants who did not follow through with all of the study's requirements may have been unable to express the depth of their experiences of mindfulness due to a lack of sufficient exposure. Another shortcoming of the study was that the researcher was

not trained or experienced to be a teacher of mindfulness meditative practices. Therefore, the researcher was not able to assure the participants the same level of intervention that has been advocated in the literature (Burke, 2009; Kabat-Zinn, 2003). It is important to note that the purpose of this study was to explore the initial experiences of exposure to SMM, which is to be distinguished from intervention-based approaches. Furthermore, due to the use of Kabat-Zinn's MBSR CD instructions that have not only been used in past research (see Barnes et al., 2004; Biegel et al., 2009), but are currently being used by the MBSR program (Kabat-Zinn, 2002), training and experience may not have been as crucial for this purpose. As a matter of fact, training and extensive experience could have resulted in difficulties in bracketing these events and confounding the researcher's perspective in data collection and analysis.

Participants also expressed difficulty recalling and explaining the content of their thoughts during SMM and although a rare occurrence, some noted inconsistencies were found in the data for a minority of participants. A potential lack of insight especially given the novelty of the process of self-reflection may have contributed to difficulties in explaining experiences and may explain instances of inconsistencies in the account of the experiences apparent for a few participants. Despite the use of empathic reflections and attempts to develop working relationships, social desirability may have also influenced the interview process especially for participants who expressed being sensitive towards meeting expectations of others and feeling cautious about the content of the CD. These factors may have led to a desire to want to present as being able to be successful in following the instructions and experiencing beneficial effects. Furthermore, two participants initially believed that the CD belonged to the researcher, thereby increasing the likelihood of presenting their experiences in a positive way.

Implications of Findings for Mindfulness-Based Programs

As seen in the literature review section, most of the mindfulness-based programs have been adapted and modified from its original MBSR and MBCT formats to cater to the needs of a child and adolescent population. These changes have been made without consulting the participants themselves. These adaptations are not derived from the experiences of the very participants that will be served. The findings of this study revealed the importance of catering to the specific needs of adolescents with SMM namely with regard to the potential distractibility of using verbal instructions, the potential benefits of visualization interventions, the normalization of distraction, as well as the importance of clearly clarifying, emphasizing and reinforcing notions such as acceptance, non-judgmental and evaluative observation and non-goal orientation. The use of continuous discussion groups may be helpful in addressing such topics prior and during the administration of mindfulness-based interventions. The value of discussions on mindfulness was apparent during the interviewing process in this study which facilitated insight into different ways of conceptualizing mindfulness for some participants. Furthermore, discussion groups may also address ongoing expectations and feelings of apprehension, caution and disappointment that may emerge. Lastly, it is important to note that mindfulness interventions may not be suitable for all participants and the need to check-in with each participant is recommended.

Implications of Findings for Counselling with Children and Adolescents

The results of this study indicate that SMM may be a feasible counselling intervention for adolescents. As the findings suggest, SMM was perceived by participants as a simple, safe and helpful tool that they could use autonomously. The reported benefits found in this study echo desired outcomes for the process of counselling and therapy including fostering relaxation,

relieving distress caused by ruminative thinking, processing and letting go of intense and undesired emotions, increasing wakefulness and energy, facilitating insight and change of perspectives, increasing optimism, facilitating a sense of coping, decreasing self-critical views, improving problem-solving and decision-making processes, creating a sense of responsibility for one's actions, and regulating anger.

The perceived usefulness and varied applicability of SMM in different domains of participants' lives further increases its potential therapeutic value. It may be useful for the counsellor to adapt the intervention according to specific needs and ways of conceptualization of SMM particular to each client. Based on the results of this study, the counsellor is informed about the difficulties in managing distraction and consequent feelings of frustration, initial feelings of skepticism and apprehension of not being able to meet self-expectations, and the potential presence of self-critical views. The counsellor can use these findings as a starting point to probe and assess for individual differences in counter-acting distraction (i.e., through self-talk, through acceptance, through visualizations, etc.), sources of distraction (i.e., verbal instructions, internal versus external distractions), reactions to distractions, as well as the use of acceptance, non-judgmental and non-evaluative self-observation during SMM. In order to personalize the practice of SMM, the counsellor, in collaboration with the client will identify strategies that maximize the benefit of maintaining concentration and awareness in the present moment. This type of modification may include addressing areas such as the importance of adopting a non-critical and non-evaluative self-reflective process, normalizing distraction, and exploring the impact of self-expectations and perceptions of the process and role of SMM as it relates to reasons for seeking counselling.

The counsellor could use the SMM CD as a relaxation technique in counselling with adolescents. The sense of relaxation experienced during SMM may strengthen alleviation of stress and anxiety, while allowing for systematic desensitization to fearful phenomenon in exposure-based therapies. The non-goal orientation and self-driven nature of the practice of SMM may provide adolescents with a relaxation technique that is non-threatening and self-driven, which may be particularly suitable for clients valuing autonomy. Furthermore, in accordance with the findings of this research, the experiences related to the practice of SMM may initiate exploration and discussion of the relationship between cognitive and physical relaxation, and the role of acceptance and letting go of stressful thinking, emotions and attitudes. As seen in the results, SMM may also generate insight into the importance of prioritization of self-care, which could be processed in the counselling session. The insight that could arise out of such discussions may broaden the client's awareness and skills of more effective coping methods.

The counsellor could also explore the experiences of the client with regard to individual structures that were found in this study. The act of processing the experiences that arise out of the practice of SMM may shed light onto the potential therapeutic effects of concentration. If a client is struggling with the whole 10 minute practice, the counsellor can suggest methods of concentration consistent with the thematic structures found in this study, such as concentrating on the breath, on the verbal instructions, on visualization techniques, and/or on silence. By slowly building on the client's ability to strengthen his concentration and deepening his or her beneficial experiences of SMM, he or she may gain a sense of accomplishment consistent with the findings of this study, which may in turn positively influence the client's self-efficacy of concentration, counter-acting distraction and creating a relaxed and stress-free state of being. It is

important to encourage the client to continue practicing, as the results of this study yielded that the struggles that adolescents reported in this study dissipated with time and practice.

SMM may also be used to strengthen cognitive-behavioural interventions in highlighting the connection between thinking, feeling and behaviours, while allowing for reframing of perspectives and a reduction of catastrophizing. As the findings of this study suggest, the experiences of self-reflection during SMM may generate insight into one's own cognitive and emotional processes. The combination of psycho-education and direct experiences gained from SMM may increase the likelihood of clients identifying negative thought patterns while allowing for the creation of alternative modes of thinking and perceiving. SMM may thus be helpful in disrupting cyclical patterns of rumination and over-analytical thinking that may lead to psychological distress including anxiety and depression.

SMM may useful for insight-oriented, existential and affective counselling approaches as well in that it may foster creativity and insight, aid in emotional processing of grief, guilt and self-critical views, and facilitate reflections on the impact of life events in relation to the quest for meaning and self-identity. The experiences of self-reflection may transform implicit processing of life events into a more explicit nature through self-realization, gaining a deeper understanding and awareness, and through dialogue with the counsellor. SMM may also promote and strengthen clients' decision-making processes for clients, enabling them to discover alternative perspectives.

The sense of relaxation that accompanies the practice of SMM may contribute to greater focus in the here-and-now experience during counselling. Thus, it is recommended to use SMM as a grounding technique especially in the beginning of the counselling session, which may

contribute to a greater capacity of insight and self-reflection throughout the session. By leaving behind the daily stressors and usual emotional and cognitive processing, the client may become more open in receiving the benefits of counselling. Furthermore, SMM may serve as a simple tool for coping that clients are able to take away from the counselling session, thereby extending the therapeutic gains from the counselling session to everyday life. The practice of SMM can also be assigned as homework for clients, reinforcing the importance of the use of continuous coping strategies and the cultivation of SMM's beneficial effects in various different settings. The ability of clients to use SMM as a coping mechanism may increase their engagement and sense of control in the therapeutic process and contribute to a sense of empowerment for client-directed change. Moreover, it may enhance clients' responsibility for their own well-being and change detrimental negative self-views by fostering accepting and non-judgmental self-attitudes. Early symptom reduction and an increasing hopefulness of positive change that may ensue from the practice of SMM may further facilitate trust in the therapeutic process and lead to a stronger therapeutic alliance with the counsellor.

SMM may also be a valuable tool for adolescent therapy groups. SMM may be introduced as an additional coping method as well as a way of starting the group counselling sessions and clearing the daily stressors experienced by group members to allow for greater focus on group processes. Furthermore, by allowing discussion of the experiences of SMM in a group-based setting, group members may be able to relate to each other in a non-threatening and safe manner. This may also prompt valuable discussion on general stressors as well as ways of coping. By introducing the concepts of acceptance, non-evaluation and non-judgment of self through SMM, group members may learn a technique of coping, self-reflection, self-regulation and relaxation and may be able to see themselves in a more positive way.

Implications of Findings for Future Research

The integration of mindfulness-based interventions in individual counselling sessions needs to be investigated empirically (Dimidjian & Linehan, 2003). Furthermore, the variability in acceptance, non-striving, non-judgmental and non-evaluative observation suggests that SMM may be experienced differently by different people. Consistent with suggestions made by Dimidjian and Linehan (2003), it is important to investigate the fit of specific mindfulness-based practices for specific individuals with specific presenting problems. This may be especially significant in light of developmental needs specific to an adolescent population. Thompson and Gauntlett-Gilbert (2008) outline the need for empirical support to identify an appropriate range of age for participants to benefit from mindfulness-based programs.

Future research also needs to address the role of instructor training and personal engagement in mindfulness practices which is recommended by Kabat-Zinn (2003). Although this study used only verbal CD instructions, it was not seen as sufficient in explaining and clarifying concepts relevant to mindfulness. Although discussion groups are recommended for that purpose, future research needs to disentangle aspects related to particular mindfulness-based interventions apart from therapeutic group factors (Dimidjian & Linehan, 2003). It may also be beneficial to contrast the process of self-reflection with concentration during SMM to outline potential differences. Lastly, there may be an important, yet unknown association between expectations and motivation, and their impact on therapeutic benefits of SMM. That is, it may be possible that the investigation of motivational levels and initial reasons for engaging in SMM may uncover strong influences explaining individual variances in the experiences of beneficial effects.

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Appendices

Appendix A: Posting for Participation

Interested in learning Mindfulness?

Are you in grade 11 or 12 with no prior experience in sitting mindfulness practices? Want to enter a draw for a $30 gift certificate to the mall?

We want your point of view on your first experiences of mindfulness. Participate in this study to get the chance to learn a sitting mindfulness technique, and tell us what it is like for you.

Who can join?

You may be eligible for this study if you are:

- In grade 11 or 12 and fluent in English
- Have never experienced a sitting mindfulness practice
- Are interested in learning about being mindful

What will I be asked to do?

- Visit at a private room at your school to complete a short demographics form, listen to 10-minute CD instructions on how to be mindful followed by a 45-60 minute interview about your experiences
- Practice mindfulness at home using the CD every second day for a week (3 home-sessions over a week lasting 10 minutes each)
- Keep a written record of your experiences
- After a week, attend one final meeting with same procedures as first meeting
- The total estimated time requirement for this study is about 3.5 hours

Who do I contact?

For more information or to participate, please email or call Babak Farzaneh.

Appendix B: Informed Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

The University of British Columbia
Department of Educational and Counselling Psychology, and Special Education
UBC Faculty of Education

Title of Study: **Adolescents' Initial Experiences of SMM**

(Parental or Guardian Consent Form)

Principal Investigator: Visiting Assistant Professor, Ph.D., Department of Counselling Psychology of the Faculty of Education at the University of British Columbia (UBC).

Co-Investigator: Babak Farzaneh, M.A. (Candidate), Department of Counselling Psychology of the Faculty of Education at UBC. This research is part of Babak's thesis requirement for completing a Master's of Arts (M.A.) in the Counselling Psychology Program. Upon completion, the thesis will be a public document that can be viewed through the UBC library.

Purpose: The purpose of this study is to explore the experiences that adolescents have of a type of meditation called SMM. Research has shown that mindfulness meditation has many benefits for adults and adolescents. This research aims to increase our understanding of what this brief practice of meditation is like for adolescents through their own eyes.

Procedures: If you are interested in having your son/daughter participate in this study, he/she will be invited to complete a brief demographics form and listen to a CD of a practice of sitting meditation for 10 minutes based on the Mindfulness-based Stress Reduction Program by the founder of the program, Dr. Jon Kabat-Zinn. Your son/daughter is invited to sit comfortably and simply follow the instructions on the CD. After the meditation, he/she will be interviewed about the experience for approximately 45-60 minutes by the co-investigator, Babak Farzaneh. The CD will be given to your son/daughter for practicing this meditation at home for 10 minutes every second day for a week, while keeping journal notes on his/her experiences of meditation. After a week, there will be a

second interview with identical procedures which will take approximately 45-60 minutes. During this meeting your son/daughter is encouraged to bring in his/her journal notes. The interviews will be audio-taped. Both the interviews and the journal and notes will be transcribed and analyzed for themes. The estimated total time commitment for this study will be 3.5 hours.

Potential Risks: There are no direct risks associated with participating in this study. Since this study involves sitting still and meditating for 10 minutes, your son/daughter might feel physical discomfort or slight irritation because of the nature of the procedure. If during the interview, your son/daughter reveals difficulties coping in general, he/she will be supported by a school counsellor who will check-in and may provide a list of local counselling support services to ensure his/her well-being.

Potential Benefits: The potential benefit of this study is that it will provide your son/daughter with an evidence-based practice to strengthen coping and dealing with stress in life. It is hoped that the results of the study will further inform research on mindfulness meditation and its uses for an adolescent population. It also gives a voice to adolescents within the field of counselling psychology.

Confidentiality: All information gathered throughout the study pertaining to the identity of your son/daughter will adhere to strict standards of confidentiality and will not be disclosed to anyone without your permission. Furthermore, any material gathered throughout this study will be locked in a confidential drawer at the UBC Department of Educational and Counselling Psychology, and Special Education. The identity of your son/daughter will remain anonymous and will not be identified by name on any documents. The transcribed interview will be stored on a computer that is protected by a password known only to the principal and co-investigator. In line with UBC policy, any data will be destroyed after five years. There are exceptional cases in which confidentiality cannot be maintained, namely when there is sufficient grounds to suspect physical, mental or sexual child abuse, when there is a serious risk of suicide and/or self-harm, and/or when the participant presents a clear and imminent threat to someone else or society at large. If at any point the researcher assesses the participant's self-disclosures to indicate any of the three cases stated above, the researchers will do everything they can to intervene and ensure the well-being of the participants. Consequent actions by the researchers might include contacting the parents/guardians, emergency services, if the threat is serious and imminent, the Ministry of Children and Family Development, and counselling support services.

Remuneration/Compensation: As a compensation of participation, your son/daughter will be entered into a draw for a $30 gift certificate to the Mall.

Contact for information about the study: If you have any further questions or would like to receive further information about any part of the research, please feel free to contact the principal investigator or the co-investigator, Babak Farzaneh.

Contact for concerns about the rights of research participants: If you have any concerns regarding your treatment or rights as a participant, feel free to contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Consent: Your son/daughter's participation is completely voluntary and you may withdraw him or her at any time without any consequences. He or she also has the right to refuse to answer any questions during the interview. The investigator may choose to withdraw your son/daughter from the study if circumstances warrant such a decision. If withdrawal from the study is done on a voluntary basis prior to the completion of the study, any information gathered from or pertaining to your son/daughter will be destroyed.

Signature of parent/guardian: I understand the information provided for the study *Adolescents' Initial Experiences of SMM* as described in this consent form.

Your signature below indicates that you have received a copy of this consent form for your own records.

"I consent/I do not consent (circle one) to my child's participation in this study."

_____ _____

Parent/Guardian Signature Date

_____

Printed Name of Parent/Guardian

❑ *Check box if you are interested in receiving a summary of the research findings.*

*Please provide e-mail or phone number for research summary and/or to be notified in case your son/daughter should win the draw:*_____

Signature of Investigator: These are the terms under which I will conduct research.

_____ _____

Signature of Investigator Date

Appendix C: Assent Form for Participants

ASSENT TO PARTICIPATE IN RESEARCH

The University of British Columbia
Department of Educational and Counselling Psychology, and Special Education
UBC Faculty of Education

Title of Study: **Adolescents' Initial Experiences of SMM**

(Adolescent Assent Form)

Principal Investigator: Visiting Assistant Professor, Ph.D., Department of Counselling Psychology of the Faculty of Education at the University of British Columbia (UBC).

Co-Investigator: Babak Farzaneh, M.A. (Candidate), Department of Counselling Psychology of the Faculty of Education at UBC. This research is part of Babak's thesis requirement for completing a Master's of Arts (M.A.) in the Counselling Psychology Program. Upon completion, the thesis will be a public document that can be viewed through the UBC library.

Purpose: The purpose of this study is to explore experiences that adolescents have of a type of meditation called SMM. Research has shown that mindfulness meditation has many benefits for adults and adolescents. This research aims to increase our understanding of what this brief practice of meditation is like for adolescents through their own eyes.

Procedures: If you are interested in participating in this study, you will be invited to complete a brief demographics form and listen a CD of a practice of sitting meditation for 10 minutes based on the Mindfulness-based Stress Reduction Program by the founder of the program, Dr. Jon Kabat-Zinn. You are invited to sit comfortably and simply follow the instructions on the CD. After the meditation, you will be interviewed about the experience for approximately 45-60 minutes by the co-investigator, Babak Farzaneh. The CD will be given to you to take home and practice this meditation for 10 minutes every second day for a week, while keeping a journal on your experiences of meditation. After a week, a

second interview will take place with the identical procedure which will take approximately 45-60 minutes. During this meeting you are encouraged to bring in your journal notes. The interviews will be audio-taped. Both interviews and journal notes will be transcribed and analyzed for themes. The estimated total time commitment for this study will be 3.5 hours.

Potential Risks: There are no direct risks associated with participating in this study. Since this study involves sitting still and meditating for 10 minutes, you might feel physical discomfort or slight irritation because of the nature of the procedure. If during the interview, you reveal difficulties coping in general, you will be supported by your school counsellor who will check-in with you and may provide you a list of local counselling support services to ensure your well-being.

Potential Benefits: The potential benefit of this study is that it will provide you with an evidence-based practice to strengthen coping and dealing with stress in life. It is hoped that the results of the study will further inform research on mindfulness meditation and its uses for an adolescent population. It also gives a voice to adolescents within the field of counselling psychology.

Confidentiality: All information gathered throughout the study pertaining to your identity will adhere to strict standards of confidentiality and will not be disclosed to anyone without your and your parent or guardians' permission. Furthermore, any material gathered throughout this study will be locked in a confidential drawer at the UBC Department of Educational and Counselling Psychology, and Special Education. Your identity will remain anonymous and will not be identified by name on any documents. The transcribed interview will be stored on a computer that is protected by a password known only to the principal and co-investigator. In line with UBC policy, any data will be destroyed after five years. There are exceptional cases in which confidentiality cannot be maintained, namely when there is sufficient grounds to suspect physical, mental or sexual child abuse, when there is a serious risk of suicide and/or self-harm, and/or when the participant presents a clear and imminent threat to someone else or society at large. If at any point the researcher assesses the participant's self-disclosures to indicate any of the three cases stated above, the researchers will do everything they can to intervene and ensure the well-being of the participants. Consequent actions by the researchers might include contacting the parents/guardians, emergency services, if the threat is serious and imminent, the Ministry of Children and Family Development, and counselling support services.

Remuneration/Compensation: As a compensation of participation, you will be entered into a draw for a $30 gift certificate to the Mall.

Contact for information about the study: If you have any further questions or would like to receive further information about any part of the research, please feel free to contact the principal investigator or the co-investigator, Babak Farzaneh.

Contact for concerns about the rights of research participants: If you have any concerns regarding your treatment or rights as a participant, feel free to contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Assent: Your participation is completely voluntary and you may withdraw at any time without any consequences. You also have the right to refuse to answer any questions during the interview. The investigator may choose to withdraw you from the study if circumstances warrant such a decision. If withdrawal from the study is done on a voluntary basis prior to the completion of the study, any information gathered from or pertaining to you will be destroyed.

Signature of participant: I understand the information provided for the study *Adolescents' Initial Experiences of SMM* as described in this assent form.

Your signature below indicates that you have received a copy of this assent form for your own records.

"I assent/I do not assent (circle one) to my participation in this study."

_____ _____

Participant Signature Date

_____

Printed Name of Participant

❑ *Check box if you are interested in receiving a summary of the research findings*

*Please provide e-mail or phone number for research summary and/or to be notified in case you should win the draw:*_____

Signature of Investigator: These are the terms under which I will conduct research.

_____ _____

Signature of Investigator Date

Appendix D: Demographics Form

Please answer all of the following questions by circling the appropriate response(s) and filling in any additional information where necessary. All information will be kept under strict confidentiality.

Background Information

1. Date of birth: _____

2. Age: _____

3. Sex:

a) Male b) Female

4. Highest school grade finished: _____

5. Ethnicity: _____

6. What interests you in participating in this study?_____

_____

_____

7. What do you know about meditation? _____

_____

8. Have you ever meditated before?

a) Yes b) No

9. If yes,

a) What kind of meditation? _____

b) How old were you when you meditated?_____

c) What were the reasons you meditated?_____

_____

_____

10. Has anyone in your family ever meditated before?

a) Yes b) No

11. What are your expectations of meditation? _____

_____

_____

_____

12. Are there any physical limitations making it hard to sit for a period of 10 minutes at a time?

a) Yes b) No

13. If yes, please explain: _____

_____

14. Can you give a brief description of what are you hoping to get out of participating in this study?_____

_____

_____

Appendix E: Research Procedures for Participants

Explain the purpose and rationale for the study:

Thank you for participating in this study. The purpose of this study is to understand how youth experience a 10 minute practice of sitting mindfulness which I will explain to you shortly. Through doing this study, we are hoping to help youth tell their own experiences of this practice and give people who want to run mindfulness groups in the future some information that might help them learn about how some youth might experience such a practice.

Explain and remind the participant of voluntary nature of the research and his or her rights concerning withdrawal from the study:

I want to remind you again that this study is voluntary, meaning that it is completely your choice to be here. If at any time you do not want to answer any questions, or want to leave and not participate in this study anymore, you have the right to do so without any consequences whatsoever. I will completely respect your decision.

Explain confidentiality:

Although I will be recording the interview, any information that you give me during our time together will be kept private and confidential, meaning that I will not share who you are or your name or what you said with anyone except for my research supervisor. I will take off any information that could give away who you are. But I want to remind you that there are certain situations in which I cannot keep information "confidential" or private. If you tell me that you are planning to hurt yourself, hurt someone else, or if you are being abused or hurt by someone, than I will have to let either your parents or

guardians know, and I will also have to make sure that you are safe by contacting the right people and agencies. It's really important to me that this has been understood by you so do you think you can you put in your own words what I have said? (Allow for clarification and/or repeat things that are unclear or missing)**. Do you have any other questions?**

Clarify the procedures of the study:

So this study involves the following steps:

1) **We both go over the consent form and sign it when it is fully understood by you and if all your questions regarding the study have been answered.**
2) **I will give you a brief Demographics Form to fill out.**
3) **I explain mindfulness and sitting mindfulness practices.**
4) **We start the sitting mindfulness practice CD and you listen and follow the instructions.**
5) **We start the interview.**
6) **I give you the CD for you to practice at home every second day for one week.**
7) **You will write down your experiences on a form called Home-Based Experiences with SMM**
8) **We meet again, do the same meditation using the CD again, followed by another interview.**

Read and explain the informed consent form:

Ok, let's read the informed consent form.

Introduce definition of mindfulness and SMM:

Mindfulness is a way of paying attention purposefully to what is going on right now within you without judging it, without labeling it, without evaluating it. You just observe attentively to what is going on inside of you, noticing and accepting it, and letting it go.

SMM is a meditation practice whereby you a) sit in a comfortable position, b) intentionally bring your attention to the physical sensation of breathing in and out through your nostrils or abdomen, and c) you observe and notice thoughts, feelings, perceptions, physical sensations, or any other things inside of you as passing events, accepting them non-judgmentally without reaction

Introduce the MBSR SMM CD (Kabat-Zinn, 2002):

Ok, now sit as comfortably as you can, listen to the 10 minute CD, and follow the instructions which will be similar to the ones we just discussed. If at any time you feel like you need to stop, press the stop button on the CD Player. When you hear a short period of silence on the CD, continue practicing the SMM as suggested. Do you have any questions about this or anything else that I can answer? (Answer any questions and then allow the participant to listen and follow instructions on the CD).

Start the interviewing process (Go to Appendix F)

Appendix F: Interview Protocol

Research Question: "What are the initial experiences of adolescents of SMM?"

Topic A: Open question at the start of the interview

Key concepts: Generating a great deal of information about adolescents' overall experiences during SMM

1) **I am really interested in knowing everything about your experience of this mindfulness meditation exercise you just did. Can you tell me in as much detail as possible about your experiences?**

I will use minimal prompts sparingly, and only if it will deepen further reflection and elaboration on the experience. Such prompts may include clarification or clarifying questions (such as "Can you tell me more about….?", "What do you mean when you say….?", "Can you explain further about……?", "Can you give me an example?"), reflection, paraphrasing, active and empathic listening.

If the participant ends the reflective processes and no longer elaborates, I will ask: "Anything else?" If at this point no more elaborations are made, I will ask the following probing questions using Allen et al.'s (2009) conceptualization that "the target of mindfulness training is a person's experience of their thoughts, feelings, and bodily sensations" (p. 414):

(p) Can you tell me more about what you were feeling during the meditation?

(p) What kind of thoughts did you have during the meditation?

(p) What kind of body sensations did you have during the mediation?

In order to provide each participant with the same opportunity to address certain topic areas, I will also probe about the following domains of mindfulness, as guided by Bishop et al.'s (2004) conceptualization of the construct of mindfulness and the qualitative research findings:

Topic B: Attention and awareness

Key concepts: Adolescents' processes of attention and awareness during SMM

2) **Can you tell me about your attention during SMM?**

   (p) What was on your mind during the meditation?

   (p) What were you aware of during the meditation?

   (p) How was it like to pay attention to what was going on in the present moment?

   (p) If you got distracted, how was that like for you?

   (p) What did you do when you got distracted?

Topic C: Acceptance and attitude

Key concepts: Adolescents' attitudes during SMM

3) **Can you describe your attitude during the meditation?**

   (p) What was your attitude toward the meditation?

   (p) What was your attitude toward yourself?

   (p) In SMM, we are asked to practice without having a goal, what was it like for you?

   (p) In SMM, we are asked to refrain from judging or evaluating our experiences, what was it like for you?

   (p) In SMM, we are asked to accept our experiences, what was it like for you?

Topic D: Struggles

Key concepts: Adolescents' struggles and challenges during SMM

4) **Was there anything you found difficult about the meditation?**

(p) Did you have any negative experiences during the meditation?

(p) Was there anything that you disliked about the meditation?

(p) Were there any aspects of the mindfulness exercise that you may not view as useful to you?

(p) Were there moments when you felt you struggled more than others?

Topic E: Expectations

Key concepts: Adolescents' expectations and beliefs about SMM

5) **What were you expecting about this meditation?**

(p) Was there anything that surprised you?

(p) Was there anything in your practice that changed the expectations you had before doing this meditation?

(p) Was there anything new that you discovered as a result of the meditation?

(p) Were there any aspects of your experiences with meditation that you view as being helpful to you?

Thank you for your explanations. Is there anything else you want to say about your experiences that you haven't mentioned yet?

If the answer is no, then I will thank them for their participation and give them instructions about practicing mindfulness at home using the CD.

I would really like to thank you for coming in today. For the next part of the study, I would encourage you to take this CD home and listen to it every second day for one week. I would really like it if you could write down any experiences that you have in a journal or a piece of paper. Next time you come in I would like you to bring in the journal and notes as well. At our second meeting, we will listen to this CD again, and do another interview, like this one. I will contact you to set up the next appointment within a week.

Appendix G: Home-Based Experiences with SMM Form

Session	**EXPERIENCES** (Thoughts, Feelings, Sensations, What is going on for you, etc.)
1	
2	
3	

Appendix H: Follow-up Interview Protocol

Topic A: Open question at the start of the interview

Key concepts: Generating a great deal of information about adolescents' overall experiences during SMM

1) **Now that you have been practicing SMM at home and have just listened to the CD again, I would like to know in as much detail as possible of your experiences. Most questions will be the same ones I asked you in our first meeting.**

(p) Can you tell me more about what you were feeling during the meditation?

(p) What kind of thoughts did you have during the meditation?

(p) What kind of body sensations did you have during the mediation?

Topic B: Attention and awareness

Key concepts: Adolescents' processes of attention and awareness during SMM

2) **Can you tell me about your attention during SMM?**

(p) What was on your mind during the meditation?

(p) What were you aware of during the meditation?

(p) How was it like to pay attention to what was going on in the present moment?

(p) If you got distracted, how was that like for you?

(p) What did you do when you got distracted?

Topic C: Acceptance and attitude

Key concepts: Adolescents' attitudes during SMM

3) **Can you describe your attitude during the meditation?**

(p) What was your attitude toward the meditation?

(p) What was your attitude toward yourself?

(p) In SMM, we are asked to practice without having a goal, what was it like for you?

(p) In SMM, we are asked to refrain from judging or evaluating our experiences, what was it like for you?

(p) In SMM, we are asked to accept our experiences, what was it like for you?

(p) How would you describe your attitude toward commitment in practicing meditation?

Topic D: Struggles

Key concepts: Adolescents' struggles and challenges during SMM

4) **Was there anything you found difficult about the meditation?**

(p) Did you have any negative experiences during the meditation?

(p) Was there anything that you disliked about the meditation?

(p) Were there any aspects of the mindfulness exercise that you may not view as useful to you?

(p) Were there moments when you felt you struggled more than others?

Topic E: Expectations

Key concepts: Adolescents' expectations and beliefs about SMM

5) **What were you expecting about this meditation?**

(p) Was there anything that surprised you?

(p) Was there anything in your practice that changed the expectations you had before doing this meditation?

(p) Was there anything new that you discovered as a result of the meditation?

(p) Were there any aspects of your experiences with meditation that you view as being helpful to you?

Thank you for your explanations. Is there anything else that we missed and that you want to say about your experiences? Thank you for participating.