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Examining the Moderating Effects of Adolescent Self-Compassion on the Relationship Between Social Rank and Depression

by

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Abstract

Depression among today's youth is associated with detrimental risk factors, including suicide. The social rank theory of depression suggests that humans naturally engage in social competition to achieve status and when perceptions of inferiority arise, depression may be triggered. The current study examined self-compassion as a resiliency mechanism against depression among adolescents with perceptions of low social rank. It was proposed that low social rank and decreased self-compassion would predict depression, and that selfcompassion would moderate the relationship between rank and depression. A sample of 126 adolescents completed questionnaires measuring depression, social rank (defined by social comparison and submissive behaviour), and selfcompassion. Results indicated that negative social comparison, increased submissive behaviour, and decreased self-compassion predicted depression. Furthermore, high levels of self-compassion weakened the relationship between rank and depression, while low levels of self-compassion strengthened the relationship. These findings may have important implications for counselling psychologists working with depression in adolescence.

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CHAPTER ONE

Introduction

Major Depressive Disorder is one of the most commonly occurring mental health disorders among adolescents, affecting approximately 6% of youth (Costello, Erkanli, & Angold, 2006; Oldehinkel, Wittchen, & Schuster, 1999). The potentially disabling symptoms associated with this disorder affect emotional, physical, behavioural, and cognitive functioning. Adolescents struggling with depression may present with angry outbursts, irritability, and expressive inhibition; somatic complaints, weight changes, and psychomotor difficulties; erratic, impulsive, and withdrawn behaviours; negative thoughts, concentration problems, and suicidal ideation (Prager, 2009). Adolescent depression can be detrimental to successful life functioning, as it is often associated with impairments in academic, familial, and social domains (Hammen, 2009). Unfortunately, this disorder is often persistent and recurring; approximately 40% of adolescents who recover from an episode of depression relapse within 2 years, and this rate increases to 70% after 5 years (Birmaher et al., 1996).

Given the high prevalence, impairment, and risk of recurrence of adolescent depression, efforts to prevent this disorder among youth are warranted, as are efforts to identify effective intervention strategies (Cheung et al., 2007; Gladstone, Beardslee, & O'Connor, 2011). Prager (2009) suggested viewing depressive disorders among children and youth through a developmental lens. It is important to identify losses and defeat through the eyes of a child or adolescent so the relative power of such stressors is not underestimated (Prager, 2009). Thus,

understanding the nature of adolescence and how depression is relevant to this transitional period may help researchers and clinicians shed light on new models through which adolescent depression can be conceptualized.

Adolescence is not only marked by significant biological changes, but also by deviation from one's parents and gravitation towards one's peers. For the typically developing adolescent, schoolmates form the central reference group by which self-identities are influenced (Erikson, 1968). Adolescents become preoccupied with the evaluations others make of them and such perceptions are powerful enough to predict an individual's well-being (Rosenberg, 1979). Adolescents consistently gauge their positions in their social hierarchy through evaluating the comparative success of their peers (Brown & Lohr, 1987), which may in turn, lead to disappointment with one's ranking position, vulnerability to social ostracism, and fear of rejection (Gilbert & Irons, 2008). In addition to heightened sensitivity to social standing positions, adolescence is also characterized by exposure to novel experiences of shame and humiliation that may hinder advances in the social hierarchy. Feeling shame or fearing shame may stimulate the desire to socially isolate oneself and avoid exposing oneself to others (Allan & Gilbert, 1995). The typical adolescent, vulnerable to feelings of inferiority and social isolation, may be at risk for developing depression.

Understanding the developmental period of adolescence may encourage researchers and clinicians to turn to theories of depression that are especially relevant to this population, which may result in more effective prevention and intervention strategies. Although the social rank theory of depression (Price,

Sloman, Gardner, Gilbert, & Rohde, 1994) seems to be relevant to adolescent development, few studies have investigated this theory among youth. This theory postulates that humans naturally compete for resources that reflect social status and attractiveness in the eyes of others, such as worthiness, desirability, and popularity. Through engaging in socially comparative behaviours, humans are able to determine where they stand in relation to others. When feelings of defeat or inferiority arise with regard to social competitions, a natural inclination to withdraw or submit is activated to prevent further feelings of inferiority and hopelessness. This self-protection strategy of submission has an adaptive function, not only preventing further loss and defeat, but also encouraging self-reflection and change. However, if it is difficult to move forward from such defeat and submission is prolonged, depression may be triggered (Gilbert & Allan, 1998; Price et al., 1994; Sloman, 2000).

Interventions targeting adolescent depression have tended to focus on selfesteem (Neff, 2009), as this construct has been found to be a strong predictor of depression (Orth, Robins, & Roberts, 2008). However, recent literature investigating self-compassion (Neff, 2003), a construct similar to self-esteem, has shown that self-compassion contributes greater variance to psychological wellbeing than self-esteem (Neff, 2011). Self-compassion, defined by self-kindness, mindfulness, and a common humanity perspective, enhances inner positivity and emotional resiliency through practices that are inherently independent from socially comparative behaviours (Neff, 2003; 2009). Self-esteem on the other hand, has been shown to be associated with unstable self-worth, as it is often

contingent on social comparisons (Neff & Vonk, 2009). Given the emotional difficulties that stem from unfavorable social comparisons and self-evaluations during adolescence (Neff & McGehee, 2009), targeting self-compassion as a resiliency mechanism against depression may prove to be advantageous for the adolescent population.

Investigating the social rank theory of depression and self-compassion among youth might encourage researchers and clinicians to identify with a new etiological perspective of adolescent depression and to focus on developing more effective intervention strategies. There is currently no research available that has investigated the constructs of social rank, depression, and self-compassion among adolescents in the same study.

The purpose of the current study was to explore the relationships between social rank, depression, and self-compassion among youth. The following central research questions guided the present research: (1) How does social rank influence depression? (2) How does self-compassion influence depression? (3) How does self-compassion influence the relationship between social rank and depression? The hypotheses of the current study were threefold: First, it was proposed that social rank, defined in terms of social comparison and submissive behaviour, would predict depression, such that negative social comparisons and high submissive behaviour would predict increased depressive symptomology. Second, it was proposed that self-compassion would also predict depression, such that high levels of self-compassion would predict low levels of depressive symptomology. Last, it was proposed that self-compassion would moderate the

relationship between social rank and depression; high self-compassion would predict a weaker relationship between social rank and depression, while low selfcompassion would predict a stronger relationship between social rank and depression.

This thesis is organized into four main sections. The first section reviews the literature on adolescent depression, social rank theory, adolescent development, and self-compassion. The second section outlines the methodology of the current study and includes information on participants, procedures, and measures. The third section presents analyses, results, and conclusions, while the last section discusses interpretation of results, limitations, future directions, and implications.

CHAPTER TWO

Literature Review

Depressive Disorders Terminology and Diagnosis

Unipolar Depression and Depressive Disorders are umbrella terms used to describe a category of mood disorders that includes Major Depressive Disorder (MDD), Dysthymic Disorder, and Depressive Disorder Not Otherwise Specified (NOS), such as Minor Depression. These disorders are distinguished from other types of mood disorders by the criterion that there is no history of having had manic (elevated mood) episodes (American Psychiatric Association, 2000). Given its higher prevalence (Seeley & Lewinsohn, 2008), MDD is the focus of the current study; however, Dysthymia and Depression NOS, including Minor Depression, are briefly outlined.

Major Depressive Disorder. Major Depressive Disorder is characterized by one or more Major Depressive Episodes (MDE). For the diagnosis of a Major Depressive Episode, as outlined in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2000), an individual must meet five criteria. The first criterion states that a minimum of five of nine symptoms must exist during the same two week period. Symptoms must persist for most of the day, nearly every day, and represent a change from previous functioning. Symptoms include depressed mood; loss of interest in day-to-day activities; significant weight loss or weight gain; insomnia or hypersomnia; psychomotor agitation or retardation; feelings of fatigue or loss of energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making

decisions; and recurrent thoughts of death, suicidal ideation, plans, or attempts. At least one of the symptoms must be depressed mood or loss of interest or pleasure. It should be noted that it is common for adolescents to present with irritable mood rather than depressed mood, which is characterized by persistent anger, emotional outbursts, and an exaggerated sense of frustration over insignificant matters. The remaining four criteria of a Major Depressive Episode state that the above mentioned symptoms should not be part of a Mixed Episode; should cause significant distress in social, occupational, and other important areas of life functioning; should not be caused by the effects of a substance or a medical condition; and should not be better accounted for by bereavement. In addition to meeting the five criteria of a Major Depressive Episode, a diagnosis of MDD also states that the depressive episode cannot be better accounted for by other diagnosed disorders (American Psychiatric Association, 2000).

Dysthymic Disorder and Depressive Disorder Not Otherwise

Specified. Dysthymic Disorder is differentiated from MDD according to severity, chronicity, and persistence, although such differentiations are not always easy to evaluate. Dysthymia and MDD share similar symptoms; however, those associated with Dysthymia are more chronic and less severe than those associated with MDD. Dysthymic Disorder is characterized by two or more years of depressed mood (one year of depressed or irritable mood for children and adolescents) and additional, less debilitating symptoms that do not meet criteria for a Major Depressive Episode (a minimum of two symptoms must be present). For example, depressive symptoms such as generalized disinterest, feelings of

ineffectiveness, and preoccupation with past events are more commonly presented among Dysthymic individuals than are symptoms such as sleep disturbances, weight changes, and psychomotor difficulties. Conversely, a Major Depressive Episode represents an evident change in an individual's functioning over a twoweek period rather than two-year period and requires a greater number of symptoms which tend to be more severe (American Psychiatric Association, 2000).

Depressive Disorder Not Otherwise Specified includes disorders with depressive features that do not meet criteria for Major Depressive Disorder and Dysthymic Disorder. Thus, an individual presents with mood symptoms and impairment but does not meet criteria for a specific mood disorder. Included in this domain is Minor Depression, which is characterized by a two-week period of depressive symptoms, but with fewer than the five symptoms required for a Major Depressive Episode (one core symptom and one to three associated symptoms) (American Psychiatric Association, 2000).

Minor Depression: Depression as a continuum. Minor Depression, also referred to as *subthreshold*, *subsyndromal*, *subclinical*, and *mild* in the literature, has received much attention by researchers in recent years (Lewinsohn, Shankman, Gau, & Klein, 2004; Seeley & Lewinsohn, 2009). Specifically, there has been considerable interest targeting the dimensionality of depression; that is, researchers have begun to identify depression as a continuous rather than categorical construct, varying in degree of symptomology (Gotlib, Lewinsohn, & Seeley, 1995; Hankin, Fraley, Lahey, & Waldman, 2005; Lewinsohn, Solomon,

Seeley, & Zeiss, 2000; Pine, Cohen, Cohen, & Brook, 1999). Research has shown that symptoms below the threshold for a clinical diagnosis are associated with significant psychosocial dysfunction. More specifically, the degree of psychosocial impairment experienced by adolescents who meet true diagnostic criteria does not differ significantly from the degree of impairment among those with subthreshold symptoms (Fergusson, Horwood, Ridder, & Beautrais, 2005; González-Tejera et al., 2005; Gotlib et al., 1995; Lewinsohn et al., 2000). In addition to psychosocial dysfunction, subthreshold depressive symptoms during adolescence significantly predict risk for full-syndrome diagnosis during adulthood. In a longitudinal study conducted by Klein, Shankman, Lewinsohn, and Seeley (2009), the risk for full-syndrome depressive disorders among a community sample of adolescents with subthreshold depression was estimated to be 67% by adulthood (approximately 30 years of age). Similarly, Pine et al. (1999) found a predictive relationship between subthreshold depressive symptoms in adolescence and Major Depression in adulthood. Taken together, research suggests that subthreshold depression represents a degree of psychopathology that warrants intervention in and of itself, while increasing the probability of fullsyndrome diagnosis (Fergusson et al., 2005; Seeley & Lewinsohn, 2009).

Adolescent Depression

Functional impact. Depression is one of the most common psychological disorders experienced among children and adolescents, affecting mood, behaviour, cognition, body, and social functioning (Hammen, 2009; Hauenstein, 2003; Rey & Hazell, 2009). Consequences or maladaptive behaviours often

associated with adolescent depression include impaired academic performance and interpersonal relationships, alcohol and drug abuse, promiscuity and teen pregnancy, delinquent and illegal behaviours, anxiety and eating disorders, problematic familial relations, intimate partner violence, and poor physical health (Hammen, 2009; Haunstein, 2003; Katon et al., 2003). Most importantly, depression is a major risk factor for suicide, which is a leading cause of adolescent death worldwide (Blum & Nelson-Mmari, 2004) and a significant concern among young Canadians; in 2009, the most recent year for which statistics are available, there was a reported 202 suicides among Canadians between the ages of 15 and 19 years. This number translates to 9 suicides per 100,000 individuals in the target age group (Statistics Canada, 2012). Suicide rates for both males and females peek during late adolescence, or between 15 to 19 years of age (Public Health Agency of Canada, 2002). The consequences of adolescent depression cannot be minimized. In addition to potentially fatal outcomes, this disorder detrimentally impacts quality of life and ability to function competently, while also taking a toll on family systems and surrounding loved ones (Cicchetti & Toth, 1998).

Epidemiology. Depressive disorders occur across the lifespan and are found among child, adolescent, and adult populations. However, the most alarming aspect concerning the epidemiology of depression is the magnitude of incidence rates during adolescence (Lewinsohn, Rohde, & Seeley, 1998). Costello et al. (2006) conducted a meta-analysis of epidemiological studies investigating the point prevalence of unipolar depressive disorders among community samples

of adolescents up to the age of 18 years. This meta-analysis included studies that reported prevalence estimates of depression for individuals born between 1965 and 1996, totalling nearly 60,000 observations of children born over a 30 year period. To be included in the analysis, it was required that study participants be formally diagnosed with a depressive disorder using both a standard classification system and a reliable psychiatric interview. Overall point prevalence estimates (i.e. percent of individuals currently in an episode of disorder) averaged 5.6% for adolescents between 13 and 18 years of age. Further analysis revealed 5.9% prevalence among adolescent females and 4.6% prevalence among males. Costello et al. (2006) noted that a separate analysis was conducted for MDD only and very similar results were obtained.

When looking at individual studies investigating Major Depressive Disorder, point prevalence rates range from 3%-4% (e.g. Doi, Roberts, Takeuchi, & Suzuki, 2001; Lewinsohn et al., 1998) to 6%-8% (Doi et al., 2001; Fleming & Offord, 1990; Oldehinkel et al., 1999). Lifetime prevalence rates of adolescent depression (i.e. percent of individuals having suffered from a depressive episode by the age of 18 years) are comparable to those of adults, ranging between 14% (Kessler et al., 1994) and 24% (Lewinsohn et al., 1998). These rates suggest that depression in adults may have its onset in adolescence (Birmaher et al., 1996; Lewinsohn et al., 1998; Pine et al., 1999). Point prevalence and lifetime prevalence rates are also comparable to those documented among adolescents with subthreshold levels of depression; 12-month prevalence rates range from 3% to 7% (Fergusson et al., 2005; González-Tejera et al., 2005; Oldehinkel et al.,

1999), while lifetime prevalence reaches up to 26% (Kessler, Zhao, Blazer, & Swartz, 1997; Lewinsohn et al., 2004).

Gender differences. Research investigating adolescent depression demonstrates a well-established difference between the rates of male and female depression, with females being up to twice as likely to have the disorder (Galambos, Leadbeater, & Barker, 2004; Hankin, 2006; Kessler et al., 1994; Nolen-Hoeksema, 1990, 2001; Wichstrøm, 1999). The approximate age range of 13 to14 years is consistently targeted as the point at which gender differences emerge, with females experiencing dramatic increases in both diagnosable depression and subclinical levels of depressive symptomology (Ge, Lorenz, Conger, Elder, & Simons, 1994; Hankin et al., 1998; Lewinsohn et al., 1994; Peterson, Sarigiani, & Kennedy, 1991; Wade, Cairney, & Pevalin, 2002; Wichstrøm, 1999). Researchers exploring the preponderance of depression among adolescent females have identified several factors that contribute to greater vulnerability to this disorder: early pubertal maturity (Graber, Seeley, Brooks-Gunn, & Lewinsohn, 2004; Petersen et al., 1991; Wichstrøm, 1999), body dissatisfaction (Wichstrøm, 1999), excessive concern about physical appearance (Nolen-Hokesema, 2001), decreased parental and peer support (Ge et al., 1994; Hammen, 2009), increased reactivity to stressful life events and environmental adversities (Ge et al., 1994; Hammen, 2009), increased interpersonal vulnerability (Nolen-Hokesema, 2001), increased dependency on others for self-esteem (Nolen-Hokesema & Girgus, 1994), and increased vulnerability to traumas, such as victimization and sexual assault (Hammen, 2009; Nolen-Hokesema, 2001). These

factors can be further understood through widely established etiological theories of depression, which are described in the following section (see Etiologies of Depression).

Onset, duration, and recurrence. Major Depressive Disorder is a chronic condition, with varying degrees of severity and spontaneous relapsing courses (Rey & Hazell, 2009). Lewinsohn, Clarke, Seeley, and Rohde (1994) conducted the largest community study to date addressing the course of MDD from childhood to early adulthood. Lewinsohn et al. (1994) estimated the age of onset for this disorder to be approximately 15 years, a finding that was replicated by Hankin et al. (1998). Regarding episode duration, Lewinsohn and colleagues (1994) found that duration periods of adolescent MDD ranged from 2 to 520 weeks, with a median of 8 weeks; 25% recovered by 3 weeks, 50% by 8 weeks, and 75% by 24 weeks. Of those who recover from an episode of MDD, approximately 40% experience recurrence of the disorder within 2 years, increasing up to 70% after 5 years (Birmaher et al., 1996). Recurrence rates are roughly comparable to those among the adult population. The likelihood of further episodes persisting into adulthood is estimated to be 60% to 70% (Birmaher et al., 1996).

Etiologies of Depression

There is no single etiological framework that can sufficiently explain the development of adolescent depression, as there are many processes and risk factors that simultaneously contribute to its etiology. A comprehensive understanding of depression can be facilitated through examining the interplay of

individual, familial, and social factors (Hankin, 2006; Pilowsky, 2009). This section will briefly outline the most commonly identified theories of depression before presenting a detailed description of social rank theory, which is the focus of the current study.

Genetic vulnerability theory. Having a parent with a history of Major Depressive Disorder is one of the strongest predictors of adolescent depression, accounting for approximately 40% of the variance in both males and females (Beardslee, Versage, & Gladstone, 1998; Pilowsky, 2009). Children of depressed parents are approximately three to four times more likely to experience a lifetime episode of MDD (Birmaher et al., 1996; Downey & Coyne, 1990; Gladstone et al., 2011; Pilowsky, 1990). Twin studies have also targeted the heritability of depressive symptoms, starting in adolescence. Rice, Harold, and Thapar (2002) showed that depressive symptoms were significantly genetically influenced among adolescents 11 through 17 years of age. Conversely, environmental factors played a greater role in the development of depressive symptoms among children younger than 11 years of age. Research has also shown the significance of geneenvironment interactions in predicting depression. For example, researchers have recently turned their attention to molecular genetics combined with environmental stressors to predict youth depressive symptoms (Eley et al., 2004). Other factors and vulnerabilities that may interact with genes to contribute to the etiology of depression are discussed below.

Cognitive vulnerability theory. Information processing mechanisms have been shown to influence the development of depression through maladaptive

schemas that negatively impact thoughts about the self and environment (Birmaher et al., 1996; Monk & Pine, 2008). As cognitive functioning shapes many mental activities such as perception, reasoning, judgement, attention, and memory, it follows that there are different cognitive vulnerability factors that may result in depressive symptomology (Hankin, 2006). Maladaptive cognitive behaviours predictive of depression include catastrophizing (having exaggerated and negative perceptions of events and self), ruminating (becoming preoccupied with the causes and implications of one's depressed mood), self-criticizing (having contingent self-worth or automatic negative views of the self), and having negative attributional styles (making stable and negative inferences following life events; Hankin, 2006; Nolen-Hoeksema, Seligman, & Girgus, 1992; Park, Goodyle, & Teasdale, 2004; Southall & Roberts, 2002). Although there is solid evidence targeting adolescent depression and its relation to cognitive factors, it is unclear whether maladaptive cognitions are predictors or consequences of depression. If maladaptive cognitions are in fact predictive of depression, it is uncertain why some children and youth are more prone to such manifestations (Pilowsky, 2009).

Personality vulnerability theory. Unique differences in personality are usually evident during the developmental transition into adolescence, when psychosocial and biological changes take place. Given that incidence and lifetime rates of depression suggest that it has its onset during adolescence (e.g. Birmaher et al., 1996; Lewinsohn et al., 1998; Nolen-Hokesema, 2002; Pine et al., 1999), researchers have investigated the roles that temperament and personality traits

play in the development of depression (Klein, Dougherty, Laptook, & Olino, 2008). Ramklint and Ekselius (2003) conducted a retrospective study and found that adults with a juvenile onset of MDD were more likely to show evidence of personality pathology during adulthood than were those with an adult onset of depression. Research has also found that adolescent negative emotionality/ neuroticism (tendency to view the world as threatening) is predictive of depressive symptomology (Caspi, 2000; Katainen, Räikkönen & Keltikangas-Järvinen, 1999; Kreuger, 1999; Lonigan, Phillips, & Hooe, 2003). Despite having been identified as a vulnerability mechanism for depression, targeting negative emotionality/neuroticism as an independent precursor to depression is problematic because of its relations with other vulnerabilities, such as stressful life events, genetic factors, and family environments (Hankin, 2006; Klein et al., 2008).

Interpersonal vulnerability theory. Perceived threats and disruptions to interpersonal relationships and social networks can have detrimental impacts on one's sense of well-being, a phenomenon likely originating from the human need for attachment (Hammen, 2009). According to Blatt and Zuroff (1992), there exists a type of personality referred to as *dependent*, which is characterized by preoccupation with and sensitivity towards interpersonal issues. For dependent individuals, the development and maintenance of well-being is heavily predicted by closeness and intimacy with others, as well as by reassurance of self-worth. Thus, depression is triggered during instances where there is social loss, abandonment, or rejection (Blatt & Zuroff, 1992). Studies have shown that a dependent personality style is significantly related to depression, and dependent

adolescents are more likely to experience depressive symptoms in the face of interpersonal distress (Adams, Abela, Auerbach, & Skitch, 2009; Fehon, Grilo, & Martino, 2000; Fichman, Koestner, & Zuroff, 1994, 1997). Similar to other vulnerabilities to depression, it is often the case that environmental stress precedes and interacts with an interpersonal vulnerability to trigger depression. Vulnerable adolescents are more likely to become depressed in the face of environmental stress than are non-vulnerable adolescents (Hammen, 2009; Hankin, 2006). The role of stressful life events, which appears to assume a critical position in the pathway to depression, is discussed below.

Stressful life events vulnerability theory. Children and adolescents experience an extensive range of stressful life events, from normative developmental stresses, such as entering new schools, forming social groups, and undergoing pubertal changes (Petersen et al., 1991), to uncontrollable stressful life events, such as parental divorce, loss of a friend, and familial abuse (Ge et al., 1994). Because depression is usually a response to stressful life events and circumstances, it follows that adolescence provides a fertile ground for the development of depressive symptoms (Hammen, 2009). A longitudinal study conducted by Ge et al. (1994) found that increasing age predisposed adolescents to stressful life events which in turn, increased the risk for developing depression. An extensive literature documents the role of chronic strains and stressful events associated with the onset of depressive episodes (Goodyer, Herbert, Tamplin, & Aktham, 2000; Petersen et al., 1991); however, the bidirectional process of stressful life events and depression warrants cautionary interpretation. It is

suggested that some individuals, because of personality characteristics and behaviours, are prone to generate stressful events for themselves, which provokes further increases in depression (Hammen, 2009; Hankin, 2006). According to Hankin (2006), stressful life events likely interact with an underlying vulnerability to trigger depression.

The Social Rank Theory of Depression

Evolutionary origins. The social rank theory of depression, commonly referred to as the *social competition hypothesis of depression*, is the etiological framework of depression upon which the current study is based. This theory provides an evolutionary perspective of depression, which views depression as an evolved and inherited psycho-biological response that serves the adaptive functions of terminating social conflict, maintaining stability of the social hierarchy, and safeguarding resources (Fournier, Moskowitz, & Zuroff, 2002; Price et al., 1994; Sloman, 2008).

Through examining ritual agonistic behaviours among monkeys (i.e. social behaviours related to conflict, such as threats, displays, aggression, and retreats), Price (1967) argued that depression, anxiety, and irritability were necessary to maintain hierarchies in social groups; these emotional and physiological states presented as the yielding or retreating component of agonistic behaviour, reducing the risk of injury or death (Price, 1967). Group living among animals means that there are day-to-day competitions for resources such as food, shelter, territory, mates, and inclusion (Sloman, 2000). During ritualized fights following competitive encounters, each animal evaluates and compares his competitor's

resource holding potential (RHP), or fighting capacity, to his own. In evaluating RHP, characteristics such as strength, skill, success rate, and allies are appraised to determine whether to activate attacking strategies (e.g. threatening, aggressive, and dominant behaviours) or de-escalation strategies (e.g. retreating, yielding, and submissive behaviours; Gilbert & Allan, 1998; Price et al., 1994). Although having high RHP is beneficial during interactions with an animal that has low RHP, it can be detrimental during encounters with another high RHP competitor. When both competitors have great fighting capacity and engage in combat, there is risk for serious injury or even death. On the contrary, if one competitor assumes a yielding position, then that competitor's survival and future reproduction are safeguarded (Price et al., 1994). In sum, there are three distinct components of social rank theory, which have been conceptualized by Fournier et al. (2002): (a) a threat appraisal component, which involves evaluating the imminence of potential competition for resources; (b) a *rank appraisal* component, which compares and determines the RHP of both competitors; and (c) a *strategy* selection component, which executes either escalation behaviours or de-escalation behaviours, depending on perceived rank standing.

Involuntary Defeat Strategy (IDS). When the strategy of de-escalation is chosen during social confrontation, meaning that the self-appointed loser withdraws and disengages from a struggle, a yielding mechanism known as the *Involuntary Subordinate Strategy* (ISS; Price et al., 1994) and more recently as the *Involuntary Defeat Strategy* (IDS; Sloman, 2000) is triggered. The IDS is a primitive mechanism that is unconsciously and automatically triggered when

losing an encounter. This strategy facilitates withdrawal behaviours in addition to acceptance of the competition outcome and a new social standing. When the IDS effectively carries out these functions, further losses are prevented and the IDS is of short duration before being terminated. However, when new positions cannot be accepted following defeat or loss, a more intense and prolonged IDS is triggered and presented as debilitating depression (Price et al., 1994; Sturman & Mongrain, 2008).

The central proposal of Price's (1967) theory is that human depression evolved from the strategic importance of having losing strategies to activate during social conflict. Such strategies reduce social confidence and inhibit challenging behaviours, while alerting those in positions of dominance to deescalate their attacks (Gilbert & Allan, 1998). In human terms, RHP can be represented as self-esteem and depression as a low self-esteem strategy (Price et al., 1994), with the adaptive function of preventing further injury. High selfesteem individuals, who are likely to experience success during instances of social comparison, tend to draw attention to their talents and abilities. Conversely, individuals with low self-esteem, who are likely to experience unfavourable social comparisons, tend to draw upon self-protection strategies (e.g. IDS), allowing for the avoidance of social attention. Likewise, a high self-esteem individual, who anticipates social loss or failure when compared with another high self-esteem individual, may assume a position of submission or withdrawal as a means of selfprotection (Allan & Gilbert, 1995). As discussed below, activation of self-

protection strategies (i.e. IDS) may be brief and adaptive or prolonged and debilitating.

Human social competition and competition by attraction. Humans, like animals, face competition in many forms on a daily basis. These competitions however, tend not to involve agonistic behaviours and reliance on physical strength and aggressiveness (Price et al 1994; Sloman, 2000). In place of competition by intimidation, the main form of human social competition is competition by attraction (Gilbert, 2009). Competition by attraction involves competing for resources (e.g. sexual mates, career advances, popularity, worthiness, and attractiveness), gaining high rank (dominance), and submitting to those of higher status (submission) – functions that ensure social coherence and stability (Gilbert, 2009). Social ranking mentality is concerned with social power and threat. Individuals fear being socially rejected and seek to be valued by others to ensure inclusion and/or power exertion over others. High ranking status in the eyes of others is important as such perceptions can lead to advances within the social hierarchy. Fearful of being rejected and feeling inferior, individuals constantly engage in socially comparative behaviours to determine where they stand in relation to others and how they are perceived compared to others (Gilbert, 2005).

Preoccupation with social ranking mentality increases vulnerability to depression through feelings of defeat, failure, subordination, and rejection (Gilbert, 2005). Humans desire to gain social approval, acceptance and support. They hope to be chosen as a friend, lover, teammate, and employee because this

means that others see within them positive attributes that are of value. Life events and situations which provoke beliefs that one is undesired by others or that one lacks valued abilities give rise to perceptions of being of low rank in esteemed domains. Such feelings of inferiority trigger one's primitive protection strategy (i.e. IDS) to withdraw so that further positions of hopelessness and defeat can be avoided (Gilbert, 2000). When triggered, the IDS stimulates submissive behaviours in regard to communication and resource acquisition. Submissive displays of communication include avoiding eye gaze, backing down when challenged, and fear grinning. Submissive displays of resource acquisition involve withdrawal of behaviour towards high-risk social investments and avoidance of advertising oneself or one's resources (Allen & Knight, 2005; Gilbert 2000).

Activation of the IDS is usually brief and presented as short-term mild depression. In addition to the adaptive function of self-protection, mild depression may also serve the useful purpose of provoking self-reflection and change (Gilbert, 2009). Effective functioning of the IDS is generally associated with a secure attachment style, good social skills, high self-esteem, and the ability to respond to new challenges. For those who are sensitive to the IDS or who are unable to reconcile their new positions of defeat, the IDS is persistent, rigid, and intense (Sloman, 2000). In such cases, individuals experience more severe depression accompanied by rumination, social disconnect, loneliness, and selfblame (Gilbert, 2009). Ineffective functioning of the IDS is associated with an insecure attachment style, low self-esteem, and rejection sensitivity. Additionally, individuals may overcompensate by involvement in unproductive power struggles

or overly submissive behaviours (Sloman, 2000). Ineffective functioning of the IDS often traps individuals in a negative spiral where they have trouble working out their difficulties and escaping positions of defeat (Gilbert, 2009).

Social rank research and adolescence. Empirical research has shown that many components of the IDS are related to the experience of depression (Fournier, 2009). Depression is significantly related to submissive behaviours and feelings of inferiority (Cheung, Gilbert, & Irons, 2004; Gilbert, 2000), selfcriticism (Sturman & Mongrain, 2008), entrapment and defeat (Gilbert & Allan, 1998), striving to avoid inferiority, and perceptions that others negatively evaluate the self (Gilbert, McEwan, Bellew, Mills, & Gale, 2009). Given that adolescence is a time when reputation, likability, and social competition are of particular importance, understanding adolescent depression within the framework of social rank theory is a worthwhile pursuit (Fournier, 2009).

Fournier (2009) tested social rank theory using a round-robin procedural design where adolescents completed self-reports on their own feelings and behaviours and also evaluated all other individuals within their social ecology. This study was conducted with a sample of 121 boys in grades 7 through 11. Results showed that adolescents acknowledged hierarchy in their social ecology, agreed on where others ranked in this hierarchy, and knew their own social standing positions. Most importantly, peer ratings of reputation (social determinations of one's place in the hierarchy) significantly predicted depression, contributing variance beyond that of other predictors, such as attachment security, social support, and likability.

Öngen (2006) investigated self-criticism, submissive behaviour, and depression with a sample of 235 Turkish adolescents in grades 9 and 10. Selfcriticism was defined in terms of comparative self-criticism (i.e. viewing the self unfavorably or negatively compared to others) and internalized self-criticism (i.e. viewing the self unfavorably or negatively compared with one's personal standards). Comparative self-criticism and submissive behaviour significantly predicted depression. Interestingly, internalized self-criticism did not predict depression, which suggests that adolescents are more vulnerable to social standards and being evaluated or exposed to others.

Irons and Gilbert (2005) investigated social rank theory with a sample of 140 adolescents that included both males and females in grade 10 (mean age of 14.63 years). Irons and Gilbert defined social rank in terms of perceptions of self in relation to others (social comparison) and the tendency to engage in submissive behaviours. Participants completed a series of self-report questionnaires and results showed a significant negative relationship between social comparison and depression; the more inferior students felt in relation to others, the higher the reported depressive symptoms. Additionally, there was a significant positive relationship between the degree of submissive choice in conflict situations and depressive symptoms.

Pinna-Puissant, Gauthier, and Van Oirbeek (2011) conducted a partial replication of Irons and Gilbert's (2005) study through an integrated model that investigated the relative contributions of social rank variables, among others, as predictors of adolescent depression. Pinna-Puissant et al. (2011) had their sample

of 225 French-speaking adolescents between the ages of 13 and 18 years (median age of 15.67 years) complete a series of self-report questionnaires. Consistent with Irons and Gilbert's (2005) study, social rank was defined in terms of social comparison and submissive behaviour, and these variables were measured using the same questionnaires administered by Irons and Gilbert (2005). Pinna-Puissant et al. (2011) further supported the social rank theory of depression among youth, as their results indicated that negative social comparison and high submissive behaviour were predictive of adolescent depressive symptomology. To better understand how social rank theory is relevant to adolescent depression, the nature of adolescent development is briefly described below.

Adolescent Development

Erikson (1968) posited that identity formation is the central psychosocial task of adolescence, to which individuals ask themselves, "Who am I?" Identity development is strongly influenced by social reference groups. It is during this period that the influence of parents decreases, while reliance on peers for acceptance, support, and well-being takes center stage (Erikson, 1968; Gilbert & Irons, 2008). Adolescents pay close attention to reactions and appraisals from others, to the extent that perceptions of others' opinions about the self more strongly predict well-being than do actual opinions (Rosenberg, 1979). Preoccupied with their positions in the social hierarchy, adolescents constantly engage in socially comparative behaviours to see where they rank and they are reminded of their positions on a daily basis (Brown & Lohr, 1987). Persistent fixation on social inclusion and acceptance increases vulnerability to self-

consciousness, rejection, and disappointment with one's ranking (Gilbert & Irons, 2008).

In addition to the stresses associated with sensitivity to peers' opinions, the transition into adolescence increases the probability of experiencing shame and submissive behaviours (Gilbert & Irons, 2008). This developmental period exposes youth to various situations, transformations, feelings, and interpersonal contexts for the first time. For example, bodily changes, sexuality, bullying, deviancy, and failure are often first presented during adolescence. Adolescents may feel shame resulting from the comparative success of their peers or they may fear shameful attacks from others. A sense of shame or humiliation may trigger one to socially withdraw so that attention and exposure can be avoided as much as possible (Allan & Gilbert, 1995; Gilbert & Irons, 2005).

An adolescent's internal perception of social rank is reflected in selfesteem (Allen & Knight, 2005; Pinna-Puissant et al., 2011), thus making social comparison a self-esteem modulator (Allan & Gilbert, 1995). Self-esteem, contingent on an adolescent's level of social inclusion, fluctuates according to feedback from interpersonal contexts and reactions from others (Allen & Knight, 2005). Evaluations of personal inferiority or low ranking may lead to low selfesteem, preparedness to submit and avoid, and subsequent depression (Allan & Gilbert, 1995). In response to high rates of adolescent depression, parents and teachers have been encouraged to promote self-esteem among children and youth (Neff, 2009), as research has shown that low self-esteem does in fact predict depression (Baumeister, Campbell, Krueger, & Vohs, 2003; Orth et al., 2008).

However, because self-esteem is associated with socially comparative behaviours and unstable evaluations of self-worth (Allen & Knight, 2005; Neff, 2009), the concept of self-compassion has been proposed as an alternative way of relating to the self (Neff, 2003). Self-compassion is independent of social comparisons and provides greater emotional resilience than self-esteem (Neff, 2011). Although the research on adolescent self-compassion is modest, existing research is promising and is outlined below.

Self-Compassion

Definition. Self-compassion is a significant feature of Buddhist psychological practices and has become popularized in Western psychology within the last decade (Gilbert, 2009; Neff, 2003). Self-compassion can help guide individuals through difficult and painful experiences that are beyond their control, such as unfortunate life circumstances, as well as through experiences that are the result of personal actions, failures, and imperfections (Neff, 2009).

Self-compassion, defined by Neff (2003), encompasses three main components: self-kindness, mindfulness, and a common humanity perspective. Self-kindness involves extending warmth and understanding towards the self, rather than judgment and criticism. Instead of treating oneself in a harsh or cold manner during times of distress, self-kindness offers comfort and gentleness. Mindfulness involves holding a balanced awareness of painful thoughts and feelings rather than avoiding them or over-identifying with them. This means that thoughts and feelings that cause distress should be acknowledged, observed, and resolved in a healthy manner; avoidance results in complacency and the

continuation of unproductive behaviours, while over-identification results in preoccupation with emotional reactions and subjective experiences. Adopting a common humanity perspective involves seeing one's experiences as part of the shared human condition rather than as isolating and unique experiences. During times of suffering and failure, it is important to realize that all humans are imperfect and one should not feel alone in one's experiences because they are also common to others. Adopting this perspective can help minimize judgement and criticism directed towards the self (Neff, 2003).

Adolescent self-compassion research. Neff and McGehee (2009) conducted the first study that examined self-compassion among youth. This study also included a sample of young adults as a comparison group. Two hundred and thirty-five high school students with a mean age of 15.2 years and 257 college students with a mean age of 21.1 years completed a series of self-report questionnaires. Results indicated that there were no significant differences in selfcompassion levels between adolescents and young adults. In terms of sex differences in self-compassion, female adults reported less self-compassion than males; however, no sex differences were found among the adolescent sample. This study revealed three major findings regarding self-compassion and psychological functioning: First, self-compassion significantly predicted psychological well-being; high levels of self-compassion predicted decreased depression and anxiety and increased social connectedness. Second, selfcompassion continued to predict psychological well-being (defined as decreased depression and anxiety and increased social connectedness) when controlling for

the predictor variables of maternal support, family functioning, attachment style, and sense of uniqueness. Last, high self-compassion was associated with decreased egocentrism, meaning that those who reported high self-compassion were less likely to view their experiences as unique and not shared by others. Regarding predictors of self-compassion, maternal support and harmonious family functioning were identified as possible contributing factors.

Tanaka, Wekerle, Schmuck, and Pagila-Boak (2011) recently contributed to the literature on adolescent self-compassion with research that examined the relationship between childhood maltreatment and adolescent self-compassion. A sample of 117 child welfare youth drawn from a longitudinal research project participated in the study. Adolescents between 16 and 20 years with a mean age of 18.1 years completed a series of self-report questionnaires at two different data collection points. At the first point of data collection, participants completed a questionnaire measuring childhood trauma (physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect) and at the second point, participants completed questionnaires measuring depression, anxiety, problems with social functioning, alcohol and substance use problems, and suicide attempts. Consistent with Neff and McGehee's (2009) results, participants with low selfcompassion were more likely to have high anxiety and depression, in addition to reports of alcohol abuse and suicide attempts. Results also highlighted the detrimental impact of childhood maltreatment on adolescent self-compassion; higher childhood physical abuse, emotional abuse, and emotional neglect were significantly related to lower adolescent self-compassion (Tanaka et al., 2011).

These results further support the relationships between apathetic parenting/family environments and low self-compassion, as documented by Neff and McGehee (2009).

Adult self-compassion research. Neff, Rude, and Kirkpatrick (2007) investigated self-compassion among a sample of young adults in college. One hundred and seventy-seven undergraduate students with a mean age of 20 years completed a series of self-report questionnaires. In contrast with Neff and McGehee (2009), Neff, Rude, et al. (2007) failed to find sex differences in selfcompassion among their young adult sample. Results showed that selfcompassionate individuals experienced greater happiness, optimism, and positive mood. Furthermore, self-compassion was significantly related to reflective and affective wisdom (i.e. the ability to understand oneself and others), personal initiative (i.e. the tendency to engage in behaviours aimed at creating a productive and fulfilling life), and curiosity and exploration (i.e. the desire to pursue new and challenging experiences). Self-compassion was also related to the personality traits of openness, extraversion, and conscientiousness. These latter results suggest that self-compassionate individuals are able to easily get along with others, are less likely to be concerned with the perceptions others hold of them, and are more likely to engage in responsible and unselfish behaviours (Neff, Rude, et al., 2007)

Neff, Kirkpatrick, and Rude (2007) continued building on selfcompassionate research with young adults and further expanded the field by also including self-esteem. Neff, Kirkpatrick, et al. (2007) conducted two studies with

two different samples of undergraduate students. The first study comprised a sample of 91 participants with a mean age of 20.9 years. In groups of 10-20, students gathered in a lab where they were instructed to complete a series of self-report questionnaires measuring self-compassion, self-esteem, negative affect, and anxiety. Participants were then required to pretend they were in a mock job interview and write down their responses to two questions presented on a computer. One of these questions targeted self-evaluations by asking about personal weaknesses. After responding to the questions, participants completed post-evaluations of anxiety. Similar to Neff, Rude, et al.'s (2007) study, there were no differences in self-compassion among males and females. Results indicated that self-compassion helped buffer against anxiety in an ego-threatening condition. Conversely, self-esteem was not a significant predictor of self-evaluative anxiety (Neff, Kirkpatrick, et al., 2007).

The second study (Neff, Kirkpatrick, et al., 2007) comprised a sample of 40 participants with a mean age of 21 years. Participants again completed a series of self-report questionnaires measuring self-compassion and other variables related to self-compassion and psychological health. Approximately one week later, they participated in a therapeutic exercise aimed at increasing compassion towards the self. Three weeks later, participants completed the same set of measures previously administered. Results indicated that increased selfcompassion over a month period was related to increased social connectedness and decreased self-criticism, depression, rumination, thought suppression, and anxiety.

Neff and Vonk (2009) also included self-esteem in their research on selfcompassion and psychological health. Two studies were conducted with a large sample of 2,187 adults with a mean age of 38.6 years. Participants completed selfreport questionnaires at 12 different assessment points over a period of 8 months. The first study found that self-compassion was associated with a more stable and less reactive sense self-worth than was self-esteem. Furthermore, self-compassion predicted unique variance in decreased socially comparative behaviours, public self-consciousness, self-rumination, anger, and need for cognitive closure (rigidity in opinions) when controlling for self-esteem. Conversely, self-esteem failed to predict the same relationships when controlling for self-compassion. It was shown however, that high self-esteem was positively related to narcissism. The results of the second study continued to demonstrate the superiority of self-compassion over self-esteem in predicting well-being; self-compassion predicted significant additional variance in happiness, optimism, and positive affect after controlling for self-esteem.

Leary, Tate, Adams, Allen, and Hancock (2007) conducted five experiments with undergraduate students that provided a wealth of knowledge on self-compassion as well as conceptual differences between this construct and selfesteem. In the first experiment, Leary et al. studied self-compassion in the context of people's reactions to real life events. Over a period of 20 days, 117 participants reported on four separate occasions something bad that happened to them within the past few days. They were instructed to recall either the worst thing that happened to them that was their fault (fault condition) or the worst thing that

happened that was not their fault (no fault condition). On each occasion, participants were asked to answer a series of questions related to the event. Results showed that self-compassionate participants were more likely to be kind to themselves and less likely to be hard on themselves following negative events. Additionally, self-compassion was inversely related to egocentric thoughts, selfcritical thoughts, and negative emotions (e.g. anxiety, sadness, and selfconsciousness).

In the second study (Leary et al., 2007), 123 participants responded to standardized hypothetical scenarios. This study controlled for the possibility that high versus low self-compassionate participants in the first study had different reactions to events because they experienced or reported different events. Participants completed a set of self-report questionnaires and responded to a series of questions related to failure, loss, and humiliation (e.g. getting a poor grade on a test, being responsible for losing an athletic competition for their team, and forgetting their part while performing on stage as part of a larger group). Results showed that self-compassion predicted decreased catastrophizing and personalizing reactions, and increased equanimity. In contrast with self-esteem, self-compassion accounted for unique variance in these outcome variables.

The third study (Leary et al., 2007) investigated how high and low selfcompassionate people react to unpleasant interpersonal events. Sixty-six participants were told that the purpose of the study was to investigate one-way video interactions, where they would talk about themselves to a video camera and be observed from another room. Once video recording was complete, participants

were assigned to either a positive feedback condition or a neutral feedback condition. After reviewing their feedback, participants responded to questions related to their feedback. Results indicated that participants with low selfcompassion and high self-esteem were more likely to make defensive attributions to feedback, attributing positive feedback to themselves and neutral feedback to the observer. Participants high in self-compassion reacted more similarly to both types of feedback. In contrast with high self-esteem participants, selfcompassionate participants were more likely to assume personal responsibility for neutral feedback and still maintain lower negative affect. Self-compassion also moderated reactions to feedback among those with low self-esteem.

The fourth study (Leary et al., 2007) compared thoughts and feelings of low and high self-compassionate participants while evaluating themselves and others in a potentially awkward or embarrassing situation. One hundred and two participants were video recorded while telling a children's story. Participants were then required to either watch the video he or she had just made or watch a video made by another participant and then respond to a series of questions. Results showed that participants low in self-compassion evaluated their stories and personal characteristics less positively and felt worse when watching their performances compared to participants high in self-compassion. Second, selfcompassionate participants' ratings were similar to observers' ratings and they had more accurate perceptions of themselves. Third, self-compassion was found to be distinct from general feelings of compassion towards others, as levels of

self-compassion did not predict differences in evaluations of targets' performances or personal characteristics.

In the fifth study conducted by Leary et al. (2007), 115 participants recalled and answered questions regarding a previous failure, loss, or rejection that made them feel badly about themselves. Participants were then placed into a self-compassion condition or a self-esteem condition, in which characteristics unique to each condition were subliminally induced. Results indicated that those in the self-compassion condition reported less negative affect and greater acceptance of responsibility for their actions than those in the self-esteem condition.

Pauley and MacPherson (2010) conducted a qualitative study to gain a better understanding of personal experiences of self-compassion among individuals with either anxiety or depression. The objectives of this study were twofold, the first being to explore individuals' experiences and meanings of compassion and self-compassion and the second being to explore how individuals develop self-compassion while faced with anxiety or depression. Ten adults ages 20 through 61, with a mean age of 40 years, participated in semi-structured interviews. Participants reported feeling that self-compassion was a meaningful construct that could be practically useful in helping alleviate their psychological disorders. However, they felt it would be difficult to develop and maintain a compassionate stance, partly because of the negative impacts of their psychological disorders and partly because of perceived challenges associated with the construct itself.

In sum, research to date shows that self-compassion is strongly associated with psychological well-being. Self-compassion predicts decreased depression, anxiety, egocentrism, rumination, thought suppression, negative emotionality, and self-consciousness, as well as increased social connectedness, happiness, optimism, and positive mood. Moreover, self-compassion is associated with an increased understanding of oneself and others, the desire to create meaningful life experiences, and the personality traits of curiosity, openness, extraversion, and conscientiousness (Leary et al., 2007; Neff & McGehee, 2009; Neff, Kirkpatrick, et al., 2007; Neff, Rude, et al., 2007; Tanaka et al., 2011).

Research has also documented conceptual distinctions between selfcompassion and self-esteem. Self-compassion has been shown to contribute unique variance in predicting self-worth stability and positive affect, in addition to decreased socially comparative behaviours, public self-consciousness, selfrumination, anger, closed-mindedness, anxiety, and depression (Neff, 2003; Neff, Kirkpatrick, et al., 2007; Neff & Vonk, 2009). Furthermore, self-compassion more strongly predicts increased equanimity, decreased defensiveness, taking responsibility for one's actions, and accepting one's emotions (Leary et al., 2007). Last, a significant relationship has been documented between self-esteem and narcissism, whereas self-compassion has no association with this construct (Neff & Vonk, 2009).

Compassion-focused therapy. The last decade of research has offered insight into the nature and benefits of self-compassion (Gilbert, McEwan, Matos, & Rivis, 2011). Compassion-focused therapy (CFT; Gilbert, 2009) is a therapeutic

model that was recently developed to help those struggling with feelings of shame, self-criticism, and other related mental health difficulties (Gilbert, 2009). The main focus of this model, which draws upon cognitive behavioural therapy techniques, is to stimulate self-compassionate capacities, allowing individuals to soothe themselves in times of distress and to relate to themselves with warmth, gentleness, and understanding (Ashworth, Gracey, & Gilbert, 2011; Van Vliet & Kalnins, 2011). A sense of peace and well-being, generated through selfvalidation and contentment, may promote emotional resiliency when faced with real or potential shame, rejection, and defeat (Gilbert & Proctor, 2006).

Research on compassion-focused therapy for various mental health difficulties is becoming more prevalent in the literature. Gilbert and Proctor (2006) conducted group-based compassionate mind training with a small sample of adults struggling with shame, self-criticism, and self-devaluation. After 12 weeks of training, participants reported decreased anxiety, depression, selfcriticism, shame, feelings of inferiority, and submissive behaviour. Furthermore, participants also reported increased self-reassurance, self-soothing thoughts, and feelings of warmth (Gilbert & Proctor, 2006). Ashworth et al. (2011) presented a case study of a young female adult with a severe acquired brain injury who participated in 24 weeks of compassion-focused therapy. Struggles with anxiety, depression, low self-esteem, and anger management were present before participating in the program and significant reductions in each of these areas were reported post participation. Greater satisfaction during social situations was also reported, as well as perceived effective coping skills (Ashworth et al., 2011).

Beaumont, Galpin, and Jenkins (2012) conducted a comparative outcome study that evaluated the effects of cognitive behavioural therapy and compassionate mind training coupled with cognitive behavioural therapy among 32 participants referred to receive therapy for trauma-related symptoms. After 12 weeks, participants in both treatment programs reported significant reductions in depression, anxiety, avoidant behaviours, intrusive thoughts, and hyper-arousal. Only those participants in the combined condition reported significant increases in overall levels of self-compassion (Beaumont et al., 2012).

Although recent literature on compassion-focused interventions with adults suggests that such interventions are related to psychological well-being, there is currently no available research targeting compassion-focused interventions for adolescents. However, Neff and McGehee (2009) briefly described an intervention that they created and pilot tested for youth. This intervention was a weekend retreat for high school students that focused on selfcompassion psychoeducation and application. As part of the intervention, adolescents participated in group and individual exercises aimed at increasing compassionate feelings towards the self. Although no quantitative outcome data on the effectiveness of the intervention have been published, Neff and McGehee (2009) stated that the participants reported appreciating the concept of selfcompassion.

Summary

With high prevalence rates of diagnosable adolescent depression, there is growing recognition that action is required to promote psychological health

among our youth. There is a critical need to conduct research focused on understanding adolescent depression and to use this research to better inform prevention programs with greater likelihoods of success (Hammen, 2009; Mazza et al., 2008; Pinna-Puissant et al., 2011). In response to high rates of adolescent depression, mental health practitioners and researchers have turned their attention towards the investigation and application of self-compassionate psychological practices (Pauley & McPherson, 2010). Research targeting adolescent selfcompassion is modest, yet especially relevant for this population. Adolescence is an inherently vulnerable period, characterized by continuous processes of selfevaluations and social comparisons. Perceiving oneself as low status compared to one's peers is related to the experience of depression among youth (Fournier, 2009; Irons & Gilbert, 2005; Pinna-Puissant et al., 2011), which can be explained by the social rank theory of depression (Gilbert & Allan, 1998; Price et al., 1994; Sloman, 2000). Given the well-known difficulties associated with adolescence and the documented benefits of self-compassion, including resiliency against depression (see Neff, 2009 for a review), investigating self-compassion among youth is a worthwhile pursuit (Neff & McGehee, 2009; Tanaka et al., 2011). The current study sought to explore the relationships between self-compassion, depression, and social rank among a sample of high school adolescents.

The Present Study

The purpose of the current study was to investigate whether the psychological benefits associated with self-compassion would protect against adolescent depression when considering perceived social rank positions. Three

hypotheses were proposed: (1) social ranking predicts depression, such that low ranking (perceived low status and high submissive behaviour) predicts high levels of depression; (2) self-compassion predicts depression, such that high levels of self compassion predict low levels of depression; and (3) self-compassion moderates the relationship between social rank and depression, such that high levels of self-compassion predict a weaker relationship between social rank and depression.

CHAPTER THREE

Methods

Participants

The current study targeted high school adolescents in grades 10 and 11, which was justified by recent studies investigating adolescent depression, selfcompassion, and social rank (Lewinsohn et al, 2004; Neff & McGehee, 2009; Irons & Gilbert, 2005). The target age demographic of the sample was also aligned with previous research marking the approximate age of 15 years as the point at which depression peaks during adolescence (Hankin et al., 1998; Lewinsohn et al., 1994).

One hundred and twenty-six adolescents participated in the study (40% male, 60% female); however, seven participants had incomplete data resulting in 119 participants with complete data. Participants had a mean age of 16.3 years, with an age range of 15.1 to 18.7 years. The ethnic composition of the sample was European/European Canadian (33.3%), Middle Eastern/Middle Eastern Canadian (15.9%), African/African Canadian (12.7%), Asian/Asian Canadian (11.1%), Canadian (further qualification not provided; 5.6%), South Asian/South Asian Canadian (3.2%), Métis (2.4%), Latin American/Latin American Canadian (1.6%), French-Canadian (0.8%), and Mixed/Other (4.8%). Eleven participants, or 8.7% of the sample, did not provide ethnic information.

Procedures

Ethics approval was obtained from the Research Ethics Board at the University of Alberta. An application was then submitted to the Edmonton Public

School Board and approval was granted to contact designated schools in the district for participant recruitment. Information letters outlining the purpose of the study, the target population, and procedural methods were distributed to principals of designated schools. This letter also provided the option of having the researcher present interactive and pedagogical PowerPoint presentations on adolescent depression and self-compassion to participating classes (after data collection). If interested in having their school participate in the proposed research, principals were asked to forward the information to teachers who may be willing to have their classes take part in the study. Information letters for parents as well as parental consent forms were provided (see Appendix A), and it was requested that these documents be sent home to guardians of students eligible to participate (i.e. students in grades 10 and 11).

All participants were recruited from an inner city high school located in Edmonton, Alberta over a period of 2 days. A total of eight grades 10 and 11 Career and Life Management (CALM) and Physical Education classes participated in the study. Only students with parental consent forms were able to take part in the study, which required completing a series of self-report questionnaires. Testing took place during regular class time, and students who were not participating in the study were instructed by their teachers to work quietly amongst themselves. Before distributing questionnaires, the researcher went through the process of obtaining informed assent, outlining the purpose of the study, procedural methods, voluntary participation, benefits and risks, limits to confidentiality, protection of data, and dissemination of results (see Appendix B).

Only participants with both consent and assent were eligible to participate. Participants were provided with approximately 30 to 40 minutes to complete four questionnaires measuring depressive symptoms, self-compassionate behaviours, perceptions of oneself in relation to others, and the tendency to engage in submissive behaviours. Social rank was measured in terms of social comparison and submissive behaviour (the latter two questionnaires), two central components of social rank theory which have been investigated in previous research (Connan, Troop, Landau, Campbell, & Treasure, 2007; Gilbert, 2000; Gilbert & Allan, 1998; Irons & Gilbert, 2005; Pinna-Puissant et al., 2011).

After completing questionnaires, written debriefing forms were distributed which again outlined the purpose of the study and provided counselling resources, reading materials, and researcher contact information (see Appendix C). The researcher then presented a 40-minute PowerPoint slideshow on adolescent depression and self-compassion. After data collection was complete, participants were placed in a raffle for five draws of two movie theatre tickets as a thank-you for their participation.

Measures

Self-compassion. Participants were administered the 26-item self-report Self-Compassion Scale (SCS; Neff, 2003). The SCS has six subscales: Self-Kindness, Common Humanity, Mindfulness, Self-Judgement, Isolation, and Over-Identification. The six subscales can be examined separately or as an overall score of self-compassion. Items are based on a 5-point Likert scale, and participants are required to indicate how often they engage in a stated behaviour from *Almost*

Never (score of 1) to *Almost Always* (score of 5). For the purposes of this study, only total self-compassion scores were used; average mean scores ranging from 1 to 5 were calculated for each participant, with higher scores representing increased self-compassion.

The Self-Kindness subscale assesses the degree to which one extends warmth and understanding towards the self (5 items; e.g., "I try to be understanding and patient towards aspects of my personality that I don't like"), while the Self-Judgment subscale assesses the degree to which one extends harsh self-criticism and judgement towards the self (5 items; e.g., "I can be a bit coldhearted towards myself when I'm experiencing suffering"). The Common Humanity subscale evaluates whether one views suffering and failure in light of the shared human experience (4 items; e.g., "When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people"), whereas the Isolation subscale evaluates whether one views personal misfortunes and distresses as separate and unique experiences (4 items; e.g., "When I fail at something that's important to me, I tend to feel alone in my failure"). The Mindfulness subscale examines the ability to maintain balanced awareness of thoughts and feelings (4 items; e.g., "When I'm feeling down, I try to approach my feelings with curiosity and openness"). Conversely, the Over-Identification subscale examines tendencies to exaggerate or suppress unpleasant thoughts and feelings (4 items; e.g., "When I'm feeling down, I tend to obsess and fixate on everything that's wrong").

Research studies with adult samples have reported excellent internal consistency reliability of the Self-Compassion Scale ($\alpha = .90 - .95$; Neff, 2003; Neff, Kirkpatrick, et al., 2007; Neff & McGehee, 2009; Neff & Vonk, 2009; Neff, Rude, et al., 2007). Studies specifically investigating adolescent self-compassion have also reported excellent internal consistency reliability ($\alpha = .89$ and .90; Neff & McGehee, 2009; Tanaka et al., 2011). Regarding test-retest reliability, excellent consistency has been reported over a period of 3 to 4 weeks (Neff, 2003; Neff, Kirkpartrick, et al., 2007). The SCS has been found to have convergent validity (e.g. it is positively correlated with self-acceptance, a sense of social connectedness, and emotional intelligence, and negatively correlated with selfcriticism, egocentrism, and rumination), discriminant validity (e.g. it is not correlated with social desirability or narcissism), and concurrent validity (e.g. participants' reports of self-compassion were found to correlate with therapists' ratings of participants' self-compassion; Leary et al., 2007; Neff, 2003; Neff, Kirkpatrick, et al., 2007; Neff & McGehee, 2009; Neff & Vonk, 2009).

Depression. Participants were administered the 27-item standardized selfreport Children's Depression Inventory (CDI; Kovacs, 1992). This scale measures severity of depressive symptoms in children and adolescents ages 7 through 17 years. Five factors are represented in this scale: Negative Mood (8 items; reflects feelings of sadness, worry, upset, and uncertainty), Interpersonal Problems (4 items; reflects interpersonal difficulties, such as social avoidance, isolation, and conflict), Ineffectiveness (4 items; reflects negative evaluations of personal abilities and academic performance), Anhedonia (8 items; reflects decreased

pleasure in activities, fatigue, and sleep and appetite disturbances), and Negative Self-Esteem (5 items; reflects self-dislike, feelings of unworthiness, and thoughts of suicide). An additional factor, Total Score, provides an overall score of depressive symptomology across the five main factors.

Items on the Children's Depression Inventory quantify severity of depressive symptoms via three response choices which correspond to increasing levels of symptomology ($0 = Absence \ of \ Symptom$; $1 = Mild \ or \ Probable$ Symptom; $2 = Definite \ Symptom$). Higher scores reflect increased severity and total raw scores range from 0 to 54. Approximately half of the items start with the item choice that reflects the greatest symptom severity while the sequence of response options is reversed for remaining items. Participants are required to choose one response option for each item that best describes them during the 2-week period prior to test administration. Once calculated, Total Scores were converted from raw scores to *t*-scores, which were used during analysis.

Normative data for the Children's Depression Inventory shows good internal consistency reliability for the Total Score (α = .86; Kovacs, 1992). This scale also demonstrates acceptable test-retest reliability (α = .66 and .77) over a period of 4 weeks (Finch, Saylor, Edwards, & McIntosh, 1987; Wierzbicki, 1987), which is expected given that the CDI measures a state rather than a trait (Kovacs, 1992). The Children's Depression Inventory has been found to have discriminant validity (e.g. differentiates depressed and non-depressed children and adolescents), concurrent validity (e.g. correlates with other measures of depression, such as the Center for Epidemiological Studies Depression Scale and diagnostic interviews), and convergent validity (e.g. correlates with measures of anxiety and self-esteem; Carey, Gresham, Ruggiero, Faulstich, & Enyart, 1987; Doerfler, Felner, Rowlison, Raley, & Evans, 1988; Hodges, 1990).

Social comparison. The Adolescent Social Comparison Scale-Revised (ASCS-R; Irons & Gilbert, 2005) is designed to assess an individual's comparison of self with others. Participants are presented with 10 sets of bipolar constructs and are asked to indicate the degree to which they identify with a particular construct, in relation to their friends (e.g., "Compared to your friends, how *attractive* do you feel?"). Responses are based on a 10-point Likert scale and the total score ranges from 10 to 100. Participants are required to circle a number from 1 to 10, with high scores representing a more positive social comparison and low scores representing a less positive social comparison (e.g. 1 = Less Attractive; 10 = More Attractive).

The ASCS-R was adapted from the Adult Social Comparison Scale (Allan & Gilbert, 1995) by one of the original authors, Paul Gilbert. Irons and Gilbert (2005) reported borderline acceptable internal consistency reliability for this scale ($\alpha = .66$), while Pinna-Puissant et al. (2011) reported acceptable reliability ($\alpha = .70$). Validity estimates for the ASCS-R are not yet available due to the recent development of the scale.

Submissive behaviour. The Adolescent Submissive Behaviour Scale (ASBS; Irons & Gilbert, 2005) is designed to assess an individual's tendency to engage in avoidant or submissive behaviours during social situations with others in their school year. Participants are presented with 12 statements and are asked to indicate the frequency in which they engage in target behaviours (e.g., "I agree that I am wrong even when I know that I was not wrong"). Responses are based on a 5-point Likert scale and the total score ranges from 12 to 60. Participants are required to circle a number from 1 to 5, with high scores representing increased submissive behaviours (e.g. 1 = Never; 5 = Always).

The ASBS was adapted from the adult version of the Submissive Behaviour Scale (Allan & Gilbert, 1997) by Paul Gilbert. Irons and Gilbert (2005) and Pinna-Puissant et al. (2011) reported good internal consistency reliability coefficients for this scale ($\alpha = .77$ and .80, respectively), which indicates that individual items measure the same overall construct of submissive behaviour. Like the ASCS-R, there is not yet information available regarding ASBS validity estimates, as only few studies to date have administered the scale.

CHAPTER FOUR

Results

Missing Data

Analysis was conducted using the SPSS Statistics 18 computer software program. Prior to analyzing the data, missing values (single items) from questionnaires were calculated using two-way imputation analysis (Van Ginkel & Van der Ark, 2003a). Two-way imputation analysis estimates a participant's missing value (or values) on a questionnaire based on a formula that takes into account the average of all observed scores of that participant on the questionnaire, the average of all observed scores of the target item being imputed (across all persons in the sample), and the average of all observed scores on all items (across all persons in the sample). For scales comprised of subscales, as in the case of the Self-Compassion Scale and the Children's Depression Inventory, imputation analysis was separately applied to subscales with missing values. Participants with 60% or more of missing values on a scale or subscale were removed before analysis (i.e. seven participants), as participants with a large number of missing values do not provide useful information (Van Ginkel & Van der Ark, 2003a). Once missing values were imputed within each scale or subscale, total scores could then be calculated. Descriptive statistics for the original data set with missing items and the data set with imputed values for missing items were compared. Variance values for each of the four study measures remained consistent across both data sets, meaning that the two data sets did not differ significantly.

Descriptive Statistics

Means, standard deviations, and Cronbach's alpha levels are reported for all measures in the study (see Table 1). Internal consistency reliability coefficients for the Self-Compassion Scale, Children's Depression Inventory, Adolescent Submissive Behaviour Scale, and Adolescent Social Comparison Scale-Revised were acceptable ($\alpha = .77 - .89$). In terms of sex differences, females reported higher depressive symptomology than males (M = 53.18, SD = 12.86 for females, and M = 44.94, SD = 6.91 for males; $t_{(119)} = -4.62$, p = .000) as well as submissive behavioural tendencies (M = 29.76, SD = 8.94 for females, and M = 26.49, SD =6.69 for males; $t_{(123)} = -2.20$, p = .030). Conversely, males reported significantly higher self-compassion than females (M = 3.39, SD = 0.53 for males, and M =3.06, SD = 0.59 for females; $t_{(121)} = 3.16$, p = .002) as well as positive social comparisons (M = 70.33, SD = 14.68 for males, and M = 64.49, SD = 12.56 for females; $t_{(122)} = 2.36$, p = .020).

Table 1

	М	SD	α
Depression	50.03	11.65	.89
Self-Compassion	3.19	0.59	.88
Submissive Behaviour	28.48	8.26	.80
Social Comparison	66.80	13.70	.77

Hypotheses One and Two: Predictors of Depression

The first hypothesis proposed that low social ranking (negative social comparison and high submissive behaviour) would predict high levels of depressive symptomology, and that high social ranking (positive social comparison and low submissive behaviour) would predict low levels of depressive symptomology. The second hypothesis proposed that self-compassion would also predict depression, such that high levels of self compassion would predict low levels of depressive symptomology and low levels of self-compassion would predict high levels of depressive symptomology.

Regression analyses. Standard multiple regression analyses were conducted with social rank variables (i.e. social comparison and submissive behaviour) and self-compassion simultaneously entered as the independent (predictor) variables and depression as the dependent (criterion) variable. Two separate analyses were conducted, allowing each measure of social rank to be examined independently. This course of analysis was justified by the central goals of the study; because adolescent self-compassion had yet to be investigated within the social rank theory of depression, it logically followed that each social rank variable be separately analyzed within the proposed hypothetical model.

When investigating depression regressed upon submissive behaviour and self-compassion variables, a significant model was produced ($F_{(2, 116)} = 68.50$, p < .0005) and the results of the regression indicated that the predictors explained 53.4% of the variance ($R^2 adj = .534$). Results are presented in Table 2. When social comparison and self-compassion were entered as the predictor variables

and depression as the criterion (outcome) variable, a significant model again emerged ($F_{(2, 117)} = 71.26$, p < .0005), and the predictors explained 54.1% of the variance ($R^2 adj = .541$). Results are presented in Table 3.

Table 2

Results of Depression Regressed Upon Self-Compassion and Submissive Behaviour Variables

	Depression			
	В	$Beta(\beta)$	t	Sig.
Self-Compassion	-11.99	60	-8.75	*
Submissive Behaviour	0.35	.25	3.61	*

**p* < .0005

Table 3

Results of Depression Regressed Upon Self-Compassion and Social Comparison Variables

	Depression			
	В	$Beta(\beta)$	t	Sig.
Self-Compassion	-11.51	58	-8.20	*
Social Comparison	-0.22	.26	-3.75	*

**p* < .0005

Hypothesis Three: Self-Compassion as Moderator

Interaction analyses. To test whether different relationships between social rank and depression might be expected at different levels of selfcompassion, two steps were carried out for each interaction analysis. First, it was investigated whether there was a significant interaction between self-compassion and social rank when predicting depression. Second, the nature of this interaction was examined through testing the significance of the slopes of social rank and depression (predictor and outcome variables, respectively), at specific values of self-compassion (Frazier, Tix, and Barron, 2004; Meyers, Gamst, & Guariono, 2006).

The first interaction analysis was computed with submissive behaviour entered as the social rank variable. The data set was transformed according to recommendations by Frazier et al. (2004) when dealing with continuous variables in multiple regression moderation analysis. A product term was created to represent the interaction between submissive behaviour and self-compassion (predictor and moderator variables, respectively). Creating a product term required centering each of these variables by subtracting their sample means from their total scores. Creating centered variables reduces problems related to multicollinearity; having two highly correlated predictor variables affects the results of individual predictors (Frazier et al., 2004; Meyers et al., 2006). Next, the product term was finalized by multiplying together the two centered variables.

Submissive behaviour and self-compassion were first entered into the regression equation, followed by the product term. This structured format allows the product term to be inspected independent of the effects of the predictor and moderator variables (Frazier et al., 2004). A significant model was produced ($F_{(3, 115)} = 54.88, p < .0005, R^2 adj = .578$) and the interaction between self-compassion and submissive behaviour significantly predicted depression ($B = -0.53, t_{(118)} = -3.63, p < .0005$).

The nature of this negative interaction was explored through examining the slope of submissive behaviour under different levels of self-compassion. Total average self-compassion scores lower than the mean were coded as *Low Self-Compassion*, while those above the mean were coded as *High Self-Compassion*. This method of creating a dichotomous variable for low and high selfcompassion, split by the average value, is consistent with procedures carried out by Tanaka et al. (2011) when testing group differences in self-compassion across study variables. As can be seen in Figure 1, submissive behaviour significantly predicted depression in the *Low Self-Compassion* condition ($F_{(1,53)} = 19.92$, p <.0005); however, submissive behaviour failed to predict depression in the *High Self-Compassion* condition ($F_{(1,62)} = 0.04$, p > 0.05). Results are presented in Table 4.

Figure1. Relationship Between Submissive Behaviour and Depression Across Self-Compassion Levels

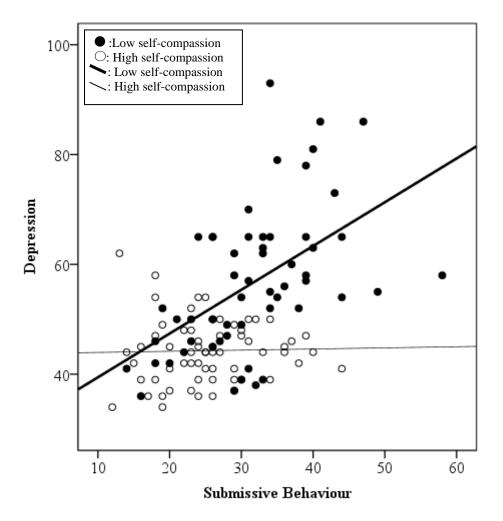


Figure 1. Graphic representation depicting levels of self-compassion influencing the relationship between submissive behaviour and depression. When self-compassion is high, the relationship between submissive behaviour and depression is insignificant, suggesting that self-compassion weakens the relationship between the two variables. Conversely, when self-compassion is low, the relationship between submissive behaviour and depression is significant, suggesting that self-compassion is significant, suggesting that self-compassion is significant, suggesting that self-compassion is significant.

Table 4

	Depression				
-		В	$Beta(\beta)$	t	Sig
-	LSC	0.80	.52	4.46	*
Submissive Behaviour	HSC	0.02	.03	0.20	ns

Moderation Results of Self-Compassion	on the Relationship Between Submissive
Behaviour and Depression	

Note: ns = non-significant; LSC = Low Self-Compassion; HSC = High Self-Compassion *p < .0005

Next, it was examined whether there was a significant interaction between social comparison and self-compassion when predicting depression. Similar to the previous interaction analysis conducted with submissive behaviour as the social rank variable, social comparison and self-compassion (predictor and moderator variables, respectively) were centered and multiplied together to create a product term. Social comparison and self-compassion were then entered into the regression equation, after which the product term was entered. A significant model was produced ($F_{(3, 116)} = 55.88 \text{ p} < .0005$) and the interaction between self-compassion and social comparison significantly predicted depression (B = 0.29, $t_{(119)} = 3.45$, p < .005).

The relationship between social comparison and depression was then examined under the conditions of *Low Self-Compassion* and *High Self-Compassion*. Results were congruent with those obtained when submissive behaviour was targeted as the social rank variable. As can be seen in Figure 2, social comparison significantly predicted depression in the *Low Self-Compassion* condition ($F_{(1,54)} = 20.20$, p < .0005). Conversely, social comparison was not a significant predictor of depression in the *High Self-Compassion* condition ($F_{(1,62)} = 0.56$, p > 0.05). Results are presented in Table 5.



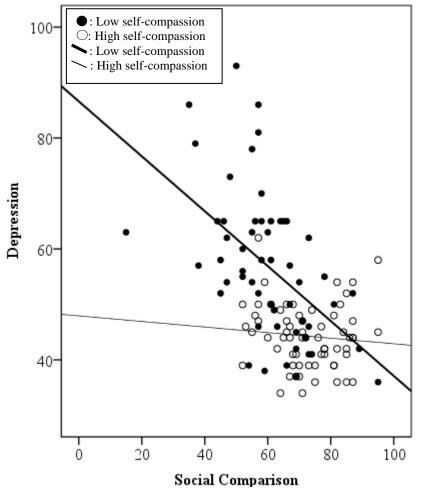


Figure 2. Graphic representation of the relationship between social comparison and depression under high and low self-compassion conditions. The relationship between social comparison and depression is insignificant when self-compassion is high. Conversely, this relationship becomes significant when self-compassion is low.

Table 5

	Depression				
-		В	$Beta(\beta)$	t	Sig
-	SCL	-0.50	52	-4.49	*
Social Comparison	SCH	-0.05	10	-0.75	ns

Moderation Results of Self-Compassion on the Relationship Between Social Comparison and Depression

Note: ns = non-significant; SCL = Self-Compassion Low; SCH = Self-Compassion High *p < .0005

Conclusions

In conclusion, the two measures of social rank, submissive behaviour and social comparison, were each found to be significant predictors of depression when accounting for the influence of self-compassion, which was also a significant predictor of depression. Second, significant interactions were found between each of the social rank variables and self-compassion when predicting depression. When examining the nature of these interactions, matching results were obtained: High levels of self-compassion weakened the relationship between social rank and depression, while low levels of self-compassion strengthened the relationship between social rank and depression.

CHAPTER FIVE

Discussion

The current study investigated self-compassion within the social rank theory of depression among a sample of high school students in grades 10 and 11. The first two hypotheses sought to determine whether the current study results would be consistent with existing literature. First, it was proposed that perceived social ranking (defined in terms of social comparison and submissive behaviour) would predict depression, such that low ranking (i.e. negative social comparisons and high submissive behavioural tendencies) would predict high levels of depression. Second, it was proposed that self-compassion would also predict depression, such that high levels of self-compassion would predict low levels of depression. The third hypothesis sought to add to the literature, proposing that self-compassion would moderate the relationship between social ranking and depression, such that high levels of self-compassion would weaken the relationship between rank and depression. This section will interpret the results of the current study in relation to existing literature, after which limitations, future directions, and implications will be discussed.

Interpretation of Results

Social rank and depression. Results confirmed the first hypothesis, as social rank was found to predict depressive symptomology among youth. Social comparison and submissive behaviour, the two measures of social rank used in the current study, were each significant predictors of depression; negative social comparisons and submissive behavioural tendencies predicted increased

depression. These results are consistent with previous studies investigating the social rank theory of depression with samples of adolescents. Fournier (2009) targeted social comparison as a measure of social rank and investigated its relation with depression. It was found that adolescents acknowledged hierarchy within their social circles, agreed on who occupied positions of prominence and influence, and correctly identified where they themselves stood in the hierarchy. Those adolescents who occupied low ranking positions, as identified by both peer- and self-ratings, were more likely to present with low levels of self-esteem and high levels of depression. Such findings are consistent with the social rank theory of depression, as this theory conceptualizes depression as an involuntary defeat strategy to low self esteem (i.e. perceived low resource holding potential; Allan & Gilbert, 1995).

Irons and Gilbert (2005) investigated both social comparison and submissive behaviour as measures of social rank with adolescents in the tenth grade and found that each of the measures predicted depression; negative social comparisons as well as high submissive behavioural tendencies predicted reports of depressive symptomology. A partial replication study (Pinna-Puissant et al., 2011) of Irons and Gilbert's (2005) research also used social comparison and submissive behaviour as measures of social rank and results were consistent with those previously obtained (Irons & Gilbert, 2005). Moreover, a significant interaction was found between the two measures of social rank, suggesting that negative social comparison triggers involuntary submission (Pinna-Puissant et al., 2011). Further support for the social rank theory of depression among youth was

documented by Öngen (2006), who showed that comparative self-criticism and submissive behaviour predicted depression.

Taken together, the research studies to date (including the current study) have identified social rank as a predictor of depression among adolescents. More specifically, social comparison and submissive behaviour have been shown to be reliable measures of social rank when predicting depression. These results are aligned with the social rank theory of depression, which states that viewing oneself as inferior compared to others triggers an involuntary self-protection strategy of withdrawal which, when prolonged, presents as debilitating depression (Price et al., 1994). Given the nature of adolescence, it seems that investigating depression with regard to social rank is a worthy pursuit that may shed new light on the development of this disorder among adolescent populations. The typical teenager, overly sensitive to perceptions of social status and exposure of shameful experiences, is likely to encounter events that trigger feelings of inferiority and the desire to avoid social attention. Withdrawn behaviours in turn, may contribute to the onset of adolescent depression. Existing research, conducted with Canadian, British, Belgian, and Turkish samples of adolescents (Fournier, 2009; Irons & Gilbert, 2005; Ongen, 2006; Pinna-Puissant et al., 2011) suggests that the social rank theory of depression may very well be applicable to diverse populations of adolescents around the world.

Self-compassion and depression. Results of the current study also confirmed the second hypothesis, as increased self-compassion was found to predict decreased depression, and continued to predict depression when

accounting for the influence of social rank. Although there is little research that has investigated self-compassion among youth, the results of the current study are consistent with those documented by Neff and McGehee (2009) and Tanaka et al. (2011). The findings of this research further support the notion that selfcompassion may serve as a resiliency mechanism among youth, enhancing psychological well-being. In addition to protecting against depression, selfcompassion has also been shown to predict decreased anxiety and increased social connectedness among adolescents (Neff & McGehee, 2009; Tanaka et al., 2011).

Understanding how self-compassion offers psychological benefits among youth can be achieved from linking the relevancy of the key components of the construct itself to the typically developing adolescent. Neff and McGehee (2009) suggested that the feelings and experiences generated from a sense of selfcompassion are highly relevant to the developmental period of adolescence. Extending acceptance and warmth towards oneself (self-kindness) may help decrease tendencies to self-criticize or self-judge when faced with rejection, failure, or humiliation, all of which are commonly encountered during adolescence. Fostering self-kindness may also help adolescents develop stable identities and self-evaluations that are independent from surrounding peers. Viewing one's experiences in light of the shared human condition (common humanity perspective) may help adolescents achieve a sense of interpersonal connectedness, decreasing the tendency to socially isolate oneself during emotional pain, and increasing the ability to cope with fears of social rejection. Mindfulness, or being able to acknowledge unpleasant thoughts and feelings

without catastrophizing or ruminating, may help prevent adolescents from obsessively fixating on perceived negativity within their lives (Neff & McGehee, 2009).

Research targeting self-compassion among youth is consistent and promising, yet still in its infancy. Interestingly, Neff and McGehee (2009) did not find differences in levels of self-compassion between their adolescent and young adult samples. This finding may suggest that the copious benefits documented by self-compassionate adults may also be experienced by self-compassionate adolescents. There is a need for more research aimed at identifying other psychological benefits associated with self-compassion among adolescents.

Self-compassion and social rank theory. The current study results supported the third hypothesis of the study, which examined whether selfcompassion moderated the relationship between social rank and depression. When self-compassion was low, the relationship between social rank and depression was significant; when self-compassion was high, this relationship then became insignificant. These findings emerged for both social comparison and submissive behaviour, suggesting that although social rank predicts depression, selfcompassion influences the strength of the relationship. That is, self-compassion may have the capacity to protect against depression, even in the presence of negative self-evaluations.

There is currently no research available that has investigated social rank, depression, and self-compassion among youth within the same study; however, Gilbert's (2005; 2009) writings connected these three constructs when he

described human emotions as being organized by three regulating systems that evolved over time. The first two systems, the *incentive and resource-seeking system* and the *threat and self-protection system*, are related to a social rank mentality. The third system, the *soothing and contentment system*, is related to self-compassion and was proposed as a means of balancing the first two systems, through extending care, support, encouragement, and peacefulness towards the self.

The incentive and resource-seeking system motivates humans, through activating feelings of pleasure and excitement, to seek out resources that are necessary to survive and prosper, such as food, mates, and status recognition. The typical individual tries to satisfy his or her desire for more resources through the pursuit of social success, which is reflected in material possessions, attractiveness, reputation, and friendships. An increased sense of social awareness stimulates thoughts about the self in relation to others, which in turn, provoke increased experiences of conflict and disappointment (Gilbert, 2009). Gilbert (2005; 2009) suggested that when wants and goals are blocked or unachieved, the threat and self-protection system is activated. The function of this system is to turn off positive emotions and trigger negative emotions, which are further reinforced through self-awareness. Focusing on negative feelings and ruminating on unpleasant self-evaluations activates social isolation as a self-protection strategy. Gilbert (2009) stated that when individuals remain in self-protection mode, depression sets in as an overwhelming mindset that is difficult to escape.

The soothing and contentment system was proposed as a means of achieving balance between the other two systems. This regulating system encourages psychological well-being and social connectedness through creating a happy and peaceful mind (Gilbert, 2005). Gilbert (2009) suggested that the three emotion regulating systems are especially relevant to children and youth. Exposure to competitive environments, both in and out of the school domain, stimulates social mentalities at an early age. Children and adolescents quickly adopt socially comparative behaviours, which then become the norm. For example, children begin to compete for grades and friends, while adolescents extend such competitions to athletic positions and social reputation. Children and youth are encouraged to have a competitive edge to ensure progress and life success, which in turn, reinforces the mentality that social competitions are required to achieve in life (Gilbert, 2009). Although there is no research to date that has investigated self-compassion within the social rank theory of depression among youth, the results of the current study are consistent with Gilbert's (2005; 2009) proposed emotion regulation systems and their relevancy to selfcompassion among children and youth.

Gender differences. Significant gender differences were found for each of the four study variables: depression, submissive behaviour, social comparison, and self-compassion. Females reported significantly higher depressive symptomology than males, which is analogous with previous reports of gender differences. It has been a consistent finding that females are twice as likely to experience depression (Galambos, et al., 2004; Hankin, 2006; Kessler et al., 1994;

Nolen-Hoeksema, 1990, 2001; Pinna-Puissant et al., 2011), and this gender difference starts to emerge at the approximate age of 13-14 years (Ge et al., 1994; Hankin et al., 1998; Lewinsohn et al., 1994; Peterson, et al., 1991; Wade et al., 2002). Similarly, females reported significantly higher submissive behavioural tendencies than their male counterparts, a finding that was also documented by Pinna-Puissant et al. (2011) who used the same scale to measure submissive behaviour among adolescents. Males reported more positive social comparisons than females, again supporting the gender difference documented by Pinna-Puissant et al. (2011). According to the theory upon which the current study is based, it would be expected that females would report increased submissive behaviours as well as negative social comparisons, given their increased reports of depressive symptomology.

Regarding self-compassion gender differences, it was found that males had higher levels of self-compassion than females, which would be expected given their decreased reports of depressive symptomology. It is interesting to note that there have been no reported gender differences in self-compassion in the studies that have investigated this construct among adolescents (Neff & McGehee, 2009; Tanaka et al., 2011). Although their adolescent and young adult samples reported similar overall levels of self-compassion, Neff and McGehee (2009) found that the females in their adult sample reported lower levels of selfcompassion than the males. This gender difference is consistent with the current study results as well as with gender differences found within undergraduate student samples (Neff, 2003; Neff, Hsieh, & Dejitterat, 2005). It was suggested by

Neff and McGehee (2009) that the similarity in overall self-compassion levels between their two samples could be explained by the fact that young adults are still trying to solidify their identities and are thus not yet fully mature. If this is the case, then it is possible that gender differences in self-compassion may be seen among both adolescents and young adults (i.e. college students). Yet, because this trend was not seen in Neff and McGehee's (2009) adolescent sample, support for this working hypothesis is inconsistent. More research is needed to determine whether young adults and adolescents do in fact present with similar levels of self-compassion, and whether gender differences in self-compassion may be expected within these populations.

Limitations

Sample characteristics. The first limitation of this study concerns the characteristics of the sample that was used. The ethnic composition of the sample was predominantly European/European Canadian which threatens the generalizability of results to adolescents of other ethnic backgrounds. Furthermore, given that this research was conducted with a relatively small sample, results should be interpreted with caution. Yet, it should be kept in mind that the study was still powerful enough to produce significant results and can serve as a preliminary indication of the relationships between social rank, depression, and self-compassion among youth. Last, the current study results may not be applicable to clinically depressed adolescents. As the hypotheses of this study were directed towards a community sample of adolescents, it remains to be seen whether social rank would predict depression among clinically depressed

youth, and whether increasing self-compassion would help decrease depressive symptomology.

Study design. The second limitation targets the overall design of the study. Given the cross-sectional nature of the study, it is unknown whether the current results would hold true over a longer period of time. For adolescents who have high levels of depression or who are clinically depressed over an extended time frame, it is uncertain whether social rank would continue to be predictive of this disorder and whether self-compassion would be able to provide protection and resiliency. Nevertheless, it is important to note that the current study provides useful information regarding predictors of heightened depressive symptomology over a short period of time. Such knowledge, in turn, can help better inform prevention practices, at the very least.

Using self-report questionnaires warrants cautionary interpretation of the research findings. Self-reports of thoughts, feelings, and behaviours can be impacted by the desire to respond in a socially desirable manner, as well as by current life stresses and fluctuating emotional states. It should also be kept in mind that the questionnaire used to measure depressive symptomology required participants to reflect on the most recent two week period. Retrospective measures, which can be influenced by memory loss, stress, and even depression itself, should be cautiously interpreted or supplemented with other measures of the same construct (e.g. therapist, parent, and/or teacher ratings). All things considered, the significance of self-report data should not be underestimated, especially among adolescents. Because adolescence is often characterized by

decreased interactions with parents as well as by limited emotional expressions, self-reports may be an ideal method of capturing internalized experiences among youth.

Due to the nature of survey research, causal results cannot be drawn from the present study. It cannot be concluded that negative social comparison, high submissive behaviour, and decreased self-compassion cause depression, but rather that these factors contribute to depression. Alternatively, it may also be the case that depressive symptomology influences vulnerability to social rank among adolescents. Moving away from the correlational nature of most self-compassion research, Leary et al. (2007) conducted a series of experimental manipulations when examining self-compassion. For example, thoughts and feelings related to humiliation, failure, and rejection were experimentally induced (through personal experiences, hypothetical scenarios, and unpleasant interpersonal events), allowing cognitive and emotional reactions to be assessed with regard to levels of self-compassion. Conversely, Leary et al. (2007) also induced self-compassion and examined how it influenced personal reactions to unpleasant events. Future research should continue examining manipulated self-compassion as well as social rank.

Although causation cannot be inferred from the current study, the findings provided valuable information and there still remains much to be investigated through non-experimental research. For example, the current study revealed that self-compassion was the strongest predictor of depression among the variables under investigation. Likewise, Neff and McGehee's (2009) study found that self-

compassion continued to predict psychological well-being when controlling for the combined impact of other significant predictors, such as maternal support, family functioning, and attachment style. Future research should continue to investigate predictors of depression alongside self-compassion to determine its contributive strength.

Study measures. The third limitation stems from the lack of reliability and validity information available for the social rank measures. The scales used to measure social comparison (ASCS-R; Irons & Gilbert, 2005) and submissive behaviour (ASBS; Irons & Gilbert, 2005) were adapted from adult scales and have been administered in only a few studies. Although more research is needed to confirm the consistency of these measures, it should be noted that the reliability coefficients obtained for the ASCS-R and the ASBS in the current study are consistent with those reported in the literature (Irons & Gilbert, 2005; Pinna-Puissant et al., 2011).

Regarding validity information, existing literature points to possible convergent validity of these scales. For example, the ASCS-R and ASBS have been shown to be related to attachment style (Irons & Gilbert, 2005; Pinna-Puissant et al., 2011), which may be theoretically expected according to the literature. It is suggested that children adapt to their social environments through assessing the safety of the environment and assuming a specific role within the environment. In threatening environments, which influence the development of insecure attachment styles, children are more likely to develop defensive behaviours and emotions. As such, they are more likely to exhibit submissive

behaviours and become concerned with inferiority and rejection (Gilbert, 1993). Irons and Gilbert (2005) and Pinna-Puissant et al. (2011) both showed that low scores on the ASCS-R (i.e. negative social comparisons) and high scores on the ASBS (i.e. increased submissive behavioural tendencies) were significantly related to avoidant and ambivalent (i.e. insecure) attachment styles.

As previously discussed, low scores on the ASCS-R and high scores on the ASBS predicted depression in the current study. According to the social rank theory of depression (e.g. Price et al., 1994; Sloman, Price, Gilbert, & Gardner, 1994), and as can be seen from the research investigating this theory among both adolescents and adults (e.g. Gilbert, 2000; Gilbert & Allan, 1998; Irons & Gilbert, 2005; Öngen, 2006; Pinna-Puissant et al., 2011), it is theoretically expected that social comparison and submissive behaviour would be related to depression. In sum, the matched results reported across the few studies that used the ASCS-R and the ASBS may very well reflect convergent validity of these scales.

Future Directions

Given such limited investigation in the current area of research, there is a critical need to further examine social rank and self-compassion with regard to adolescent depression. The above stated limitations point to directions for future research: First, accessing larger sample sizes can help researchers better understand how social rank and self-compassion relate to depression across different ethnicities and age groups (i.e. adolescents younger and older than the mean age of the current sample). Second, studying whether the current results hold true among clinically depressed adolescents may help researchers and

practitioners develop worthwhile intervention strategies for this population. Third, conducting longitudinal research would allow the trajectory of self-compassion to be monitored throughout adolescence. Researchers would then be able to examine the stability of self-compassion over time and its influence on psychological wellbeing. Fourth, experimental manipulation of self-compassion may offer insight concerning the role of this construct in protecting against maladaptive reactions to perceived social rank. For example, having adolescents who perceive themselves to be of low social rank participate in a program aimed at enhancing selfcompassion is one way of experimentally inducing self-compassion. Likewise, subliminally inducing the characteristics of self-compassion (i.e. discretely exposing participants to the key components of self-compassion to subconsciously influence thoughts and feelings, as conducted by Leary et al., 2007) among those who perceive themselves to be of low status compared to their peers is another method of investigating the effects of self-compassion. Fifth, although survey research examining self-compassion among adults is quickly expanding, much more research is needed to determine whether the benefits associated with adult self-compassion are also associated with adolescent self-compassion. Last, it is important to identify predictors of self-compassion as this construct may help prevent the onset of adolescent depression when feelings of inferiority are triggered. Neff and McGehee (2009) reported preliminary findings concerning predictors of self-compassion (e.g. maternal support, family functioning, and attachment style) and research should continue exploring this area.

Implications

The current study is the only study to date that has investigated social rank, self-compassion, and depression among youth. Results support the notion that self-compassion enhances psychological well-being among youth, even among those who perceive themselves to be of low social status compared to their peers. Such findings have significant implications for adolescent depression. Teenagers, who are preoccupied with social standing positions and vulnerable to experiences of social ostracism, may be at-risk for developing depressive symptomology during adolescence. Such information is not only critical for adolescents themselves, but also for parents, teachers, and psychologists. Through understanding how patterns of self-relating change during adolescence, more relevant and effective intervention strategies can be implemented. Encouraging adolescents to embrace self-kindness, recognize common humanity, and practice mindfulness may very well hinder any inclinations to engage in socially comparative behaviours, ruminate on feelings of inferiority, and isolate oneself from social attention. Encouraging the development of self-compassion among children may also be a worthwhile pursuit, as early exposure may counteract susceptibility to an overly active social ranking mentality.

Psychotherapeutic interventions, such as cognitive behavioural therapy (CBT) and interpersonal therapy (IPT) have shown to be effective when treating mild to moderate forms of adolescent depression (see Cheung et al., 2007 for a review). Yet, despite the documented benefits of CBT and IPT, a high risk of recurrence remains a concern among those having achieved recovery (Birmaher et

al., 2000; Gladstone et al., 2011). As previously mentioned, compassion-focused therapy (CFT), which draws upon cognitive behavioural techniques, may be an effective means of protecting against adolescent depression. Although there is a significant need for research investigating CFT among youth, Neff and McGehee (2009) suggested that in addition to encouraging the development of positive self-relations, self-compassion may also help adolescents cope with family problems and interpersonal conflict.

Research on self-compassion, both among adolescents and adults, is already stimulating new approaches to intervention strategies, encouraging a shift of focus from self-esteem to self-compassion. For decades, self-esteem has been the major focus of interventions targeting depression. Teachers and parents are usually encouraged to nurture the development of self-esteem among children and youth, while psychologists cautiously monitor changes in self-esteem during transitional periods of growth (Neff, 2009). However, given the documented advantages of self-compassion over self-esteem (Leary et al., 2007; Neff, 2003; Neff, Kirkpatrick, et al., 2007; Neff & Vonk, 2009), it has been suggested that parents, teachers, and psychologists move away from emphasizing self-esteem, and instead place greater importance on developing self-compassion (Neff & McGehee, 2009).

Through furthering our understanding of self-relating patterns during adolescence, more effective and relevant interventions may be developed. It is hoped that the present study will encourage researchers to continue investigating adolescent depression within the etiological framework of social rank theory, as

there remains much to be researched in this area. It is also hoped that researchers will continue making efforts to examine self-compassion as a resiliency mechanism against adolescent depression, as self-compassion may be a core component of future intervention strategies targeting psychological well-being among youth.

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Appendix A

Parental Information and Consent Form

Dear Parent,

I am a Master's student in the Faculty of Education (specializing in Counselling Psychology) at the University of Alberta. I am currently conducting research for my Master's thesis and I am writing to ask for your consent to have your child participate in my research.

Self-evaluations based on social judgment are particularly pronounced during the adolescent period, and unfavorable evaluations can contribute to depression. Given that 5% to 8% of adolescents struggle with depression, it is necessary to address this growing epidemic. The goal of my research is to investigate perceived social status, depression, and self-compassion. In particular, I am interested in exploring if self-compassion can help prevent depression among adolescents who perceive themselves as low status within their social circle.

If you consent to your child's participation, your child will participate in a 20 minute session, during which they will individually complete a series of self-report questionnaires measuring levels of depression, self-compassion, and perceptions of the self in comparison to others. This session will take place in your child's class, scheduled at a date and time designated by his or her teacher. With teacher approval, the researcher will provide students with an engaging and interactive pedagogical presentation on depression and self-compassion. This opportunity can allow students to join in and discuss their views on adolescent depression and resiliency. As a thank-you, those who participate will be placed in a raffle for five draws of two movie theatre tickets.

Through participating in this research, your child will be contributing to the field of research, setting the stage for future studies addressing adolescent depression and resiliency. It is unlikely that the questionnaires will cause discomfort. However, if discomfort or stress arises, your child may address these issues with the researcher. If your child reveals intentions to cause self-harm or harm to others, confidentiality will be breached and you will be notified. If your child reports serious mental health concerns warranting professional attention, you will be contacted and provided with appropriate counselling referrals. Also, if there is reason to suspect child abuse or neglect, I am required by law to notify the appropriate authorities.

This research will comply with the University of Alberta Standards for the Protection of Human Research Participants. Participation in this study is voluntary, and if at any time your child indicates that he or she wishes to discontinue, he or she may do so. Uncompleted data will be destroyed and will not be used during data analysis. All information collected regarding individual participants is strictly confidential. Files for individuals are coded by number, not name, and are stored in locked filing cabinets. Files will be destroyed five years after the completion of this project.

The findings from this research are intended to be used for publication, presentation, and dissemination into the research community. Only group results from all participants will be shared and only group results will be published. A summary of findings will be available to interested parents when the study is complete. Parents can request a copy of this summary by contacting me via email (jlwillia@ualberta.ca) or phone [telephone number].

If you consent to allow your child to participate in this study, please complete and sign the consent form. If you have any questions or concerns about the project itself or the methods used, please contact me or my supervisor, Dr. Jessica Van Vliet, via email (jvanvliet@ualberta.ca) or phone (780-492-5894) at your earliest convenience.

The plan for this study has been reviewed for its adherence to ethical guidelines and has been approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB c/o (780) 492-2614.

I thank you for sharing in the effort to promote psychological well-being among our youth.

Jennifer Williams Department of Educational Psychology University of Alberta Email: jlwillia@ualberta.ca Phone: [telephone number]

Parental Consent Form

Name of Child:		
Gender of Child:		
Ethnicity of Child (please check one):		
 European /European-Canadian Aboriginal Asian/Asian-Canadia African/African Canadian Middle Eastern/Middle Eastern 	 French-Canadian Métis South Asian/South Asian Canadian Caribbean/Caribbean Canadian Latin American/Latin American Canadian 	
Other (please specify):		
Child's Birth Date:		
Today's Date:		
I have read the enclosed information for		
	participate in the	
adolescent self-compassion/depression	study conducted by Jennifer Williams	
(University of Alberta).		
Parent or Guardian's Name (Please Pri	nt)	

Parent or Guardian's Signature

Appendix B

Informed Assent Form

Researcher Information

My name is Jennifer Williams and I am a Master's student in the Faculty of Education (specializing in Counselling Psychology) at the University of Alberta. I am currently conducting research for my Master's thesis and I am asking for your consent to participate in my research. If you have any questions or concerns regarding this study, please feel free to contact me by email (jlwillia@ualberta.ca) or phone [telephone number] or my supervisor, Dr. Jessica Van Vliet, by email (jvanvliet@ualberta.ca) or phone (780-492-5894).

Purpose

The purpose of this study is to investigate the relationships between depression, compassion towards oneself, and perceptions of oneself in relation to others.

Description

I understand that as a tenth or eleventh grade student, I can participate in this research. I understand that my participation in this research will require me to fill out a series of questionnaires. If at any point during this process I feel the need to take a break or address concerns with the researcher, I may do so. I understand that to protect my confidentiality, a three digit number will be used in place of my name on all questionnaires. This consent form and all other data from this study will be kept in a secure location for five years after this study is completed and will be destroyed thereafter. In a situation where the researcher has reason to suspect danger to myself or others, or serious mental health concerns warranting professional attention, I understand that my legal guardian may be contacted to ensure that help is made available for me. Also, if there is reason to suspect child abuse or neglect, I understand that the researcher is required by law to inform the appropriate authorities. I understand that the findings from this research are intended to be used for publication, presentation, and dissemination into the research community. Only group results from all participants will be shared and only group results will be published. I can request a copy of the final group results of the study by contacting the researcher via email (jlwillia@ualberta.ca) or phone [telephone number].

Voluntary Participation

I understand that I have the right to refuse participation or to discontinue my participation at any point in time without consequence. I also have the right to refuse to answer items on the questionnaires and to have any questions or concerns addressed by the researcher.

Benefits

Through participating in this study, I will be contributing to meaningful research, helping further understanding of adolescent depression and attitudes towards the self. This opportunity will also help me learn about the process of research.

Risks

It is highly unlikely that answering these questionnaires will cause me discomfort. However, if I should experience discomfort or stress because of my participation in this study, I may address these concerns with the researcher. I may also refer to the form distributed at the end of this study for counselling services and contact information.

Informed Voluntary Consent

I have read the above description of the study and the benefits and risks. I understand that the researcher is working on her Master's thesis and will be gathering information to investigate adolescent depression, perceptions of social status, and self-compassion. I have received a copy of this form to keep. This assent form will not be accepted without parental/guardian consent.

I, _____ (name) consent to participate in

this study and understand the benefits and risks in doing so.

Participant Name (Please Print)

Participant Signature

Date

Appendix C

Written Debriefing Form

Thank-you for participating in this study! Your time and effort are greatly appreciated as your contribution will help advance our understanding of adolescent depression. Depression is a significant problem among today's youth and is associated with many risk factors, including academic failure, substance abuse, and suicide. It is estimated that one in five teens will experience depression during their teenage years and previous research has indicated that perceiving oneself as inferior to one's peers is related to depression. Self-compassion is a relatively new area of research that has been shown to combat depression. However, most of this research has been conducted with adults; little research has investigated adolescent self-compassion.

The purpose of this study is to investigate whether self-compassion can help prevent depression among adolescents who perceive themselves as low status within their social circle. A further understanding of the factors that predict depression and those that prevent depression can guide psychologists and educators in developing programs to help those struggling with depression.

The questionnaires you completed during this session measure levels of depressive symptoms, self-compassion, perceptions of the self in relation to others, and the tendency to behave submissively. Sometimes, reflecting on personal thoughts, behaviours, and feelings can be upsetting. If your participation has led you to feel uncomfortable or distressed and you feel the need to speak with a professional, some counselling services are listed below:

Agency:	Phone Number:
University of Alberta Education Clinic	780-492-3746
Catholic Social Services	780-420-1970
The Family Center	780-423-2831

If you have questions or concerns about this research, please feel free to contact the Chair of the University of Alberta Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (780-492-2614) or the Chair of the Department of Educational Psychology, Dr. Robin Everall (780-492-5245).

If you would like a copy of the final study results, you can contact me, Jennifer Williams, via email (jlwillia@ualberta.ca) or phone [telephone number] or my supervisor, Dr. Jessica Van Vliet, via email (jvanvliet@ualberta.ca) or phone (780-492-5894).

If you are interested in this area of research, you may refer to the following references:

- Gilbert, P. (2009). *The compassionate mind*. Oakland, CA: New Harbinger Publications.
- Gilbert, P. (2005). *Compassion: Conceptualisations, research, and use in psychotherapy*. New York: NY: Taylor & Francis.