Exploring the Moderating Role of Self-Compassion on Family Achievement Guilt and Psychological Ill-being in First-Generation and Non-First-Generation University Students

by

Joshua C. Remedios

A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs in partial fulfillment of the requirements for the degree of

Master of Arts

In

Psychology

Carleton University
Ottawa, Ontario

Abstract

The study examined the relationship between family achievement guilt, psychological ill-being, and self-compassion in university students. I hypothesized that family achievement guilt would be related to psychological ill-being and that self-compassion would attenuate the relationships between family achievement guilt and psychological ill-being. Supplemental analyses examined differences in family achievement guilt and psychological ill-being in first-generation and non-first-generation students. Using a cross-sectional design, participants (N = 533) completed an online survey. Though family achievement guilt was significantly related to psychological ill-being (βs = .20 - .28), self-compassion did not attenuate the relationships between family achievement guilt and psychological ill-being, even when only first-generation students were included in the analyses. First-generation students reported significantly higher levels of family achievement guilt compared to non-first-generation students (d = .39). Researchers should investigate the possible adaptive features of family achievement guilt and alternative ways in which the maladaptive consequences of family achievement guilt may be reduced.

Keywords: First-generation student; family achievement guilt; self-compassion; psychological ill-being

Acknowledgements

First and foremost, I would like to thank my supervisor, Dr. Katie Gunnell, for the immense support, dedication, and guidance throughout my masters degree. I often tell people that I "struck gold" having Dr. Gunnell as a supervisor. I look forward to continuing our work together as I pursue my doctoral studies at Carleton. I would also like to thank Dr. Chad Danyluck for serving as my committee member and his invaluable feedback on my prospectus and final defence. Thank you to Dr. Dennis Kao for serving as my external examiner for my defence. I look forward to hearing your unique perspective to this topic. Also thank you to Dr. Nassim Tabri for serving as the Chair member for my final defence. I would also like to thank the members of our lab for helping me prepare for both of my defences and for their feedback. Finally, I would also like to thank my family for their support and for continuing to cheer me on throughout my graduate school journey.

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Exploring the Moderating Role of Self-Compassion on Family Achievement Guilt and Psychological Ill-being in First-Generation and Non-First-Generation University Students

Earning a four-year-degree has never been more important and necessary to increase social mobility or even gain middle-class status (Carnevale et al., 2010). First-generation students - students who do not have parents or guardians with a four-year degree (Ishitani, 2003) - are one group in particular that are enrolling in universities and colleges at increasing rates (Engle & Tinto, 2008; Pryor et al., 2010). Although the road towards a four-year degree is turbulent for many students, first-generation students experience a myriad of unique challenges as they navigate the novel academic and social environment of university, all while often facing institutional barriers to success (Bui, 2002). One issue that is now beginning to receive research attention is family achievement guilt, an experience of guilt for succeeding academically when other family did not and that is often unique to first-generation students. Of concern, family achievement guilt is associated with psychological difficulties (e.g., higher depressive symptoms; Covarrubias et al., 2015). One way in which family achievement guilt may be reduced is through self-compassion, a construct that emphasizes self-kindness, common humanity, and equanimity of emotions (Neff, 2011). The overall purpose of my thesis is to examine the relationship between family achievement guilt and self-compassion in first-generation and non-first-generation university students.

First-Generation University Students

Higher education researchers have extensively examined the most prevalent traits of first-generation students (Bui, 2002; Stebleton et al., 2014). For example, they have found that compared to non-first-generation students (i.e., students with at least one parent or guardian with a four-year degree), first-generation students are more likely to be from diverse and

underrepresented backgrounds (i.e., non-White) and groups that are also often minoritized (Bui, 2002; Stebleton et al., 2014). Engle and Tinto (2008) also found that first-generation students are more likely to come from low-income households and more likely to be financially independent from their parents (Bui, 2002).

Even before entering university, first-generation students are at a disadvantage compared to non-first-generation students. For example, when applying to educational institutions, first-generation students often lack help from their parents since they themselves are not familiar with the process (Choi, 2001). First-generation students are also less likely to take preparatory courses before college (Horn & Nunez, 2000) and score lower on college readiness compared to non-first-generation students (DeAngelo & Franke, 2016). Other researchers have found that first-generation students are also more likely to be employed and work more hours during university (Engle & Tinto, 2008), be more worried about finances (Bui, 2002), be less likely to participate in campus organizations and extracurricular activities (Billson & Terry, 1982) and achieve lower grades (Warburton et al., 2001; Grayson, 2011) compared to their non-first-generation counterparts. Additionally, researchers have found that first-generation students are less likely to feel a sense of belonging during university, which is defined as a need or desire to be connected through formal and informal interactions (Tovar et al., 2009; Means & Pyne, 2017). Notably, Stebleton et al. (2014) found that a low sense of belonging in first-generation students during college translated to a greater likelihood of developing symptoms of psychological distress and depression.

Combined, these disadvantages contribute to a rather low retention rate for first-generation students (Pratt et al., 2017). Retention in a college setting refers to the continuation of enrollment of a student from year to year. Over time, Ishitani (2003) found that even after

controlling for gender, race, family income, and grade point average (GPA), first-generation students were 71% more likely to leave university after their first year compared to non-first-generation students. Studies since have corroborated these findings. For instance, DeAngelo and Franke (2016) reported that an alarming 75% of attrition in the first year of college was largely represented by students of color, students from minoritized groups, and first-generation students.

First-generation students are also more likely to remain closer to home or continue to live at home during college compared to non-first-generation students, (Mattern & Wyatt, 2009; Desmond & López Turley, 2009). Factors that play a role in the decision to remain closer to home or to stay at home include the financial constraints that are often associated with being a first-generation student (Garza & Fullerton, 2017), as well as the social norm of being close to home that may be rooted in the familial values of first-generation students, who are more likely to have backgrounds that represent these cultural ideals (Desmond & Turley, 2009). Although advantageous for financial and cultural reasons, living close to or at home may not be as valuable as living independently from family or attending institutions that are farther away. In fact, Garza and Fullerton (2017) revealed that first-generation students were significantly more likely to increase their odds of attaining their degree if they enrolled in universities and lived at increased distances from their homes. Additionally, researchers have found that living far from campus may also lead to academic detachment and social disintegration from the university (Christie et al., 2005; Pike & Kuh 2005). Therefore, first-generation students may be further disenfranchised compared to students with the capacity to live closer to their university and have the means to attend institutions further from their home.

Guilt

Researchers have recently found that first-generation students may also experience guilt for pursuing an education, often leaving their family to do so, and for accessing privilege knowing that their family members were not afforded the same opportunities. This experience of guilt has been labeled family achievement guilt (Covarrubias & Fryberg, 2015). The concept of family achievement guilt has emerged from a rich literature on guilt.

Historically, the concept of guilt has been of interest to psychologists since the times of Freud. Indeed, Freud defined guilt as both an unconscious need for punishment expressed as self-torment and a conflict between the superego and the id (Freud, 1962). Psychologists have shifted from the once psychoanalytic framework of guilt and now generally define guilt as an emotional experience that focuses on the negative evaluation of a behaviour (Tracy & Robins, 2004). Guilt is considered a self-conscious emotion rather than a basic emotion (e.g., happy, sad, etc.) According to Tracy and Robins (2004), self-conscious emotions are distinct from basic emotions in that they involve self-evaluative processes, are often specific to maintaining social acceptance and approval, do not have universally recognized facial expressions, and develop later in life.

Guilt versus Shame

Researchers and non-researchers alike often use “guilt” interchangeably with “shame”. It is important to note that although both shame and guilt are self-conscious emotions, they are also conceptually distinct emotional experiences. Nonetheless, research on the similarities and differences between shame and guilt is also rife with contradictions (Miceli & Castelfranchi, 2018). For example, researchers once proposed that shame was provoked by public faults, whereas guilt was considered to emerge from private feelings (Benedict, 1946); however, researchers have found that both shame and guilt can be experienced publicly and privately

(Tangney et al., 1996). Furthermore, researchers once surmised that shame was related to proscriptive violations (i.e., doing something one should not do) and that guilt was related to prescriptive violations (i.e., not doing something one should do; Sheikh & Janoff-Bulman, 2010). However, researchers have found that shame and guilt can be produced by either proscriptive or prescriptive violations (Miceli & Castelfranchi, 2018). Therefore, the distinctions between guilt and shame continue to be obscure despite the many years of scholarly work on these emotions.

Notwithstanding the lack of consensus on the contrasting elements of guilt and shame, researchers do tend to agree on certain disparities between the two self-conscious emotions. For example, Lewis (1971) proposed that whereas shame focuses on a more global negative evaluation of the self (e.g., "*I* can't believe *I* did that thing"), guilt involves a negative evaluation of a specific behaviour (e.g., "I can't believe I did that *thing*"). Subsequent research has lent empirical support to this notion (Niedenthal et al., 1994; Tangney et al., 1996). Additionally, shame is considered to be the concern of others evaluation of the self, whereas guilt deals with the concern of one's own effect on others. Researchers also contest that shame is generally more painful than feelings of guilt since the self is at the center of the devaluation (Tangney & Dearing, 2002). Responses to shame and guilt also differ, with shame often leading to withdrawing behaviours like hiding and escaping, and guilt often leading to reparative behaviours, like confessing or apologizing (Tangney & Dearing, 2002). The research, however, is not entirely consistent. For example, Inbar et al. (2013) found that participants who recalled a guilt-inducing event were more likely to self-deliver stronger shocks compared to those who recalled a sad-inducing or a neutral event. They also found that following the shocks, participants reported lower guilt scores compared to the pretest. These results suggest that guilt may be

related to self-punitive actions to alleviate the feeling of guilt. Therefore, understanding how guilt may be mitigated in more adaptive avenues seems particularly important.

According to researchers, shame is associated with anger whereas guilt has been found to be unrelated to anger (Tangney & Tracy, 2012). Guilt is also related to perspective-taking and empathy whereas shame is not. According to Tangney and Tracy (2012), this difference between guilt and shame may be explained by the self-focus of shame and the behaviour-focus of guilt, since individuals experiencing guilt often acknowledge the consequence of their action or dis-action on others, leading to an empathic response. Moreover, research has found that guilt and shame differ regarding attribution styles. Within the realm of psychology, attribution styles convey how individuals perceive or judge the explanation of events to themselves (Abramson et al., 1978). These judgements are typically categorized pessimistically as internal, stable, and global, or optimistically, as external, unstable, and specific (Abramson et al., 1978). Researchers have found that attribution styles of shame are global, stable, and uncontrollable, whereas the attribution styles of guilt are specific, unstable, and controllable (Kim et al., 2011; Tracy & Robins, 2006). Therefore, researchers maintain the notion that guilt can be a positive emotion, and that shame is considered to be a much more insidious self-conscious emotion.

Adaptive versus Maladaptive Guilt

Some researchers hold the belief that guilt can be either adaptive or maladaptive (Tilghman-Osborne et al., 2010). Unlike that of shame, guilt can be considered adaptive as it may foster and promote prosocial behaviours (Tangney & Dearing, 2002). From an evolutionary perspective, guilt is believed to have emerged as a self-conscious emotion because it emphasizes caring, empathy, and the avoidance of harming important individuals (Crook, 1980). The formation and maintenance of close bonds with others is a significant aspect of human fitness

and sustaining innate social needs. Guilt is perhaps one mechanism through which we regulate, restore, and address issues that may damage these relationships (Kim et al., 2011). In fact, some amount of guilt is necessary for positive interpersonal functioning, as it underscores a conscious and moral act to amend wrongdoings and repair social relations (Tangney & Dearing, 2002). For example, Covert et al. (2003) found that in undergraduate students who were asked to solve common interpersonal problems via vignettes, guilt-proneness (i.e., the tendency or degree to which an individual experiences guilt) was related to better quality of the solution, self-efficacy for implementing the solutions, the expected effectiveness of the solutions, and the desire to resolve interpersonal conflict.

In contrast to the benefits of low levels of guilt, excessive levels of guilt have the potential to become pathological (Tangney, 1990). Kim et al. (2011) posit that guilt becomes maladaptive when experienced in a situation that does not justify it. For example, when an individual develops guilt from an uncontrollable traumatic experience, the individual's guilt is inappropriately attributed. According to Tangney and Dearing (2002), guilt is also most likely to become maladaptive when fused with shame because although a specific behaviour related to guilt may be altered, it is much more difficult to make amends with the self-attribution that is related to shame.

Similarly with the distinction between guilt and shame, the current literature on the relationship between guilt and psychopathology is also discrepant and inconsistent. In one regard, guilt has often been linked to psychological ill-being. In fact, the Diagnostic and Statistical Manual of Mental Disorders-DSM-5 lists excessive guilt as a criterion for major depressive disorder and traumatic stress disorders (American Psychiatric Association, 2013). Neuroimaging studies have found that the limbic and paralimbic regions of the brain that are

abnormally activated during depression, are also associated with empathy and guilt (Pagani et al., 2004). Ghatavi et al. (2002) found that compared to healthy controls and individuals with chronic cardiac conditions, individuals with major depression experienced significantly more state and trait guilt. Gil-Monte (2012) also found that guilt was associated with depression, as it mediated the relationship between burnout and depression in a group of caregiver employees. Nonetheless, the data are not entirely consistent, as researchers have also yielded mixed results regarding the relationship between guilt and ill-being. For example, Sveen and Willebrand (2018) found that in parents whose child experienced a burn, burn-specific guilt was not associated with depressive symptoms whereas general guilt was related to depressive symptoms. Additionally, Webb et al. (2007) also found that guilt was associated with depressive symptoms, but shame-free guilt was not associated with depression in college students. Findings from these researchers suggest that the excessive or irrational levels of guilt may lead to ill-being, but further research is required to examine the nature of this relationship.

In line with the school of thought regarding guilt as potentially maladaptive, O'Connor et al. (1997) have outlined three types of maladaptive interpersonal guilt that arise from an individual's fear of harming others in the pursuit of their goals: Omnipotent guilt, separation guilt, and survivor guilt. Omnipotent guilt involves an exaggerated sense of concern and responsibility for the well-being of others and can be best described as an extreme sense of guilt, that produces a disturbed mood about a legitimate wrongdoing. At the core of both survivor and separation guilt is the irrational belief that one is thriving or experiencing good things at the expense of an important person in their life. In all instances, survivor, separation, and omnipotent guilt are considered dysfunctional and problematic (O'Connor et al., 1997). In summary, guilt may be socially adaptive when warranted feelings of guilt arise due to a genuine transgression. It

is when guilt is considered irrational or extreme that it may lead to distress or psychopathology (O'Connor et al.,1999).

Family Achievement Guilt

The traditional view of survivor guilt describes guilt for surviving harm when others did not (Hutson et al., 2015). Although survivor guilt was initially applied to those who survived war-related tragedies (e.g., the Holocaust) and natural disasters (Garwood, 1996), it was later applied to guilt for surviving chronic health conditions, such as survivors of the human immunodeficiency viruses (HIV) during the acquired immunodeficiency syndrome (AIDS) epidemic (Odets, 1995). Piorkowski (1983) was the first to extend the concept of survivor guilt to first-generation college students. Based on clinical case studies, Piorkowski (1983) argued that survivor guilt could be applied to low-income African American first-generation college students whose academic achievement left them feeling like survivors because they escaped poor home conditions (e.g., alcoholism, financial difficulties). In other words, these students experienced guilt for taking the opportunity to leave home and pursue an education since other members of their close family did not have similar opportunities. Despite its emergence in the early 1980s, survivor guilt's applicability to first-generation college students was not empirically tested until decades later and even to date, very few studies have tested this phenomenon empirically.

In narrowing the concept of survivor guilt in low-income African American first-generation students, Covarrubias and Fryberg (2015) coined the term family achievement guilt, describing feelings of guilt about one's academic success compared to that of their immediate family members (i.e., parent(s) and sibling(s)). More specifically, family achievement guilt describes feeling uncomfortable sharing one's academic successes with their family, knowing that they have not had the same opportunities for pursuing higher education. This may lead to

attempts to minimize or conceal achievements in order to reduce feelings of guilt (Covarrubias & Fryberg, 2015; Covarrubias et al., 2015). Family achievement guilt is distinct from Piorkowski's (1983) work on survivor guilt in first-generation students in that it does not require extreme cases of family dysfunction (e.g., alcoholism, death). Rather, family achievement guilt focuses on exceeding academic successes of family members.

Cultural Mismatch Theory. Covarrubias and Fryberg (2015) contend that family achievement guilt is specific to first-generation students, who are also more likely to be from minoritized groups and be non-White (Bui, 2002). Part of the theoretical assumption for this phenomenon is the cultural emphasis on important others. For example, researchers have found that first-generation students and students of color are more likely to prioritize family compared to non-first-generation students and White students (Fryberg & Markus, 2007; Shim et al., 2010). Given the difference in cultural focus on families, pursuing a post-secondary education may be particularly challenging for first-generation students, whose wish for independency may clash with their interdependent family values (Covarrubias & Fryberg, 2015). In building the theory behind family achievement guilt, Covarrubias and Fryberg (2015) drew upon the cultural mismatch theory (Stephens et al., 2012). Within the cultural mismatch theory, Stephens et al. (2012) propose that an individual's well-being and success depends on whether there is a match or mismatch between their own cultural norms and those of the institutional setting. Regarding family achievement guilt, the theory states that first-generation students, whose cultural values are more likely to be highly interdependent and family oriented, are also more likely to experience guilt for forging their own path, compared to continuing-generation college students, whose cultural values are more likely to reflect independency (Covarrubias & Fryberg, 2015).

Empirical Findings on Family Achievement Guilt. In first testing this phenomenon empirically, Covarrubias and Fryberg (2015) utilized the survivor guilt subscale from the Interpersonal Guilt Questionnaire (O'Connor et al., 1997), an adapted version of that subscale to reflect family achievement guilt, and an open-ended family achievement guilt question in undergraduate students. They found that first-generation students and Latinx students reported more family achievement guilt compared to non-first-generation students and White college students. More specifically, Latinx first-generation college students reported the most family achievement guilt, suggesting that a mismatch at two levels (i.e., first-generation status and non-White ethnicity) may increase family achievement guilt. To follow up, Covarrubias and Fryberg (2015) also utilized these measures but in a more diverse sample (i.e., African Americans, Latinxs, and Native Americans) and also tested a potential strategy for reducing family achievement guilt. This strategy was tested by having students reflect on a time when they helped their family. Once again, the researchers concluded that first-generation students and non-White students experienced more family achievement guilt compared to non-first-generation students and White students and that the reflection did help alleviate guilt in first-generation students.

In the second empirical test of family achievement guilt, Covarrubias et al. (2015) found that first-generation status was not associated with higher amounts of family achievement guilt; however, family achievement guilt significantly predicted higher depressive symptoms and lower self-esteem in all students. Moreover, first-generation students reported significantly more depressive symptoms as family achievement guilt increased compared to non-first-generation students. Importantly, these results reveal that family achievement guilt is associated with decreased well-being and higher ill-being in all students but also that first-generation students

could potentially be at more risk for psychological ill-being as rates of family achievement guilt increase.

Previously, researchers (e.g., Covarrubias & Fryberg, 2015 and Covarrubias et al., 2015) made use of a modified version of the Interpersonal Guilt Questionnaire to measure family achievement guilt. More recently, researchers have created the Family Achievement Guilt Scale to assess family achievement guilt more precisely (Covarrubias et al., 2020). In developing the Family Achievement Guilt Scale, Covarrubias et al. (2020) performed semi-structured interviews in order to identify key themes from first-generation students' experiences. Four main themes emerged from the study and their findings resulted in the following subscales: Leaving family obligations behind, having more privileges, becoming different, and fear of not being successful for their family and failing to meet their expectations. Within the study, the researchers also found that family achievement guilt was positively associated with negative affect, which is consistent with their prior research linking family achievement guilt to poorer mental health (e.g., higher depressive symptoms; Covarrubias et al. 2015). However, when the researchers controlled for negative affect, family achievement guilt predicted greater engagement with family and interdependent motives for attending college. The researchers suggested that this particular finding may shed light on the possible prosocial nature of family achievement guilt. This is not entirely surprising since previous research has stated that guilt may also contain adaptive features (Tangney & Dearing, 2002; Covert et al., 2003). Interestingly in this study, family achievement guilt was not associated with depression, an outcome that is inconsistent with previous research (Covarrubias et al., 2015).

Reducing Family Achievement Guilt. Although in its infancy, researchers studying family achievement guilt suggest that it may contain both adaptive and maladaptive

consequences for first-generation students and students from historically minoritized groups (Covarrubias et al., 2015; Covarrubias et al., 2020). In particular, results from two studies (Covarrubias et al., 2015; Covarrubias et al., 2020) demonstrated equivocal links with indicators of ill-being. Few researchers have examined ways in which the maladaptive consequences of family achievement guilt could be mitigated. Greene et al. (2019) found that basic psychological need satisfaction in parental relationships negatively predicted family achievement guilt in upcoming college students. Moreover, Tate et al. (2013) outlined that logotherapy, a therapeutic technique that emphasizes finding meaning and living purposely, could be one potential way in which college counselors could address survivor guilt in first-generation students; however, this has not yet been tested empirically. One promising construct that might attenuate ill-being due to family achievement guilt in first-generation students is self-compassion.

Self-Compassion

In today's competitive society, individuals are often much harsher toward themselves compared to others they know or even do not know (Neff, 2011). Fortunately, researchers have recently highlighted the role of self-compassion as a means of redirecting negative thoughts and enhancing well-being. According to Neff (2003), self-compassion is defined as taking a kind, accepting, and non-judgmental stance towards oneself in times of failure or difficulty. Derived from Buddhist psychology, self-compassion entails acknowledging and confronting one's suffering with kindness. Self-compassion involves a non-judgmental understanding to pain, failures, and shortcomings, in the view that the experience is part of a larger common humanity (Neff, 2003).

Self-compassion is comprised of three positive pillars and three corresponding negative pillars (Neff, 2003). Self-kindness refers to treating oneself with the same kindness and

compassion that you would treat a loved one. In contrast, self-criticism involves reacting harshly to one's faults or inadequacies (Neff, 2003). Common humanity involves recognizing that one's problems are often part of a larger human experience that are shared by others. Conversely, isolation refers to feeling that you alone are experiencing this time of hardship (Neff, 2003). Mindfulness refers to taking a non-judgmental and balanced attitude to one's emotional experiences. In contrast, over-identification involves ruminating over one's negative thoughts and emotions (Neff, 2003). Engaging in self-kindness, common humanity, and mindfulness enhance one's self-compassion whereas higher levels of self-criticism, isolation, and over-identification cause detriment to one's self-compassion (Neff, 2003).

Self-Compassion and Guilt

To date, the relationship between guilt and self-compassion has not been well documented; however, researchers have found that self-compassion helps to neutralize negative emotions (Macbeth & Gumley, 2012; Körner et al., 2015). Therefore, self-compassion could be one potential mechanism to mitigate feelings of maladaptive guilt. According to Sirois et al. (2015), self-compassionate individuals tend to appraise stressors in a less negative lens since their self-regulatory processes are not overwhelmed by negative self-evaluations that normally occur in response to a stressful event. Therefore, these individuals are more likely to engage in effective behavioural responses when confronted with a stressor compared to those who are less self-compassionate.

Self-compassion also emphasizes keeping all emotions in a state of equilibrium (Neff, 2003); therefore, it is likely a self-compassionate mindset would recalibrate one's negative outlook associated with guilt. In fact, a study conducted by Leary et al. (2007) lent support to this notion. The researchers had participants describe the worst thing that happened to them during

the past four days and the degree to which either they or someone else was responsible for the event. The results concluded that high levels of self-compassion were negatively related to the self-conscious emotions of shame, embarrassment, humiliation, and guilt regarding the event. Furthermore, the researchers stated that self-compassion was associated with keeping the negative situation in perspective and self-kindness following events that participants reported were and were not their fault. Sirois et al. (2018) provided more evidence for self-compassion reducing guilt. The researchers had participants randomly assigned to recall and write down either a guilt or shame provoking parenting event. Within those conditions, half of the participants were given a self-compassionate prompt in which they were to reread what they wrote and respond using self-kindness, common humanity, and mindfulness in their response, while the other half were assigned to state facts about what they had written. The results indicated that those who were given the self-compassionate prompt reported higher levels of self-compassion and reduced feelings of guilt and shame compared to the control group. More recently, Miller and Strachan (2020) explored the role of guilt and self-compassion in health behaviours in mothers of young children and found that as levels of self-compassion increased, the reported guilt about engaging in health promoting behaviours decreased. Taken together, these studies offer promising evidence that self-compassion buffers the negative emotions that often accompany guilt.

Self-Compassion and Psychological Ill-being

Given the link between maladaptive guilt and psychological ill-being, self-compassion could be an important moderator since researchers have found that self-compassion reduces ill-being and enhances well-being (Zessin et al., 2015; Macbeth & Gumley, 2012) When considering psychological ill-being, researchers have found that self-compassion helps buffer

against anxiety and depressive symptomology. In a laboratory-based study, Neff et al. (2007) examined the relationship between self-compassion and self-evaluative anxiety using mock job interviews. Participants were told to write a response to the question "Please describe your greatest weakness". The researchers found that self-compassion was associated with significantly less anxiety after considering one's greatest weakness. Additionally, Körner et al. (2015) found that self-compassion was a protective factor against depression, particularly among those who experienced self-judgment, isolation, and over-identification. These findings are consistent with those of Macbeth and Gumley (2012), who examined the strength of the association between self-compassion and psychopathology through a meta-analysis. Their results indicated that higher levels of self-compassion were related to lower levels of mental health symptoms, specifically psychological distress, anxiety, and depression ($r = -0.54$). Importantly, these findings support the notion that self-compassion is related to psychopathological resistance and resilience.

Self-Compassion and University Students

University presents multiple stressors such as academic demands, finances, work-life balance, extra-curriculars, strains of relocating, and homesickness (Stallman & Hurst, 2016; Fong & Loi, 2016). In times of stress and failure, it is common for students to be self-critical and ruminative (Fong & Loi, 2016). Students often succumb to external and internal pressures to succeed in academics and in life, which may lead to high expectations for the self which when not met, may lead to maladaptive self-criticism. In addition to these issues, first-generation students also face educational barriers and challenges associated with their parents not receiving a university degree (Bui, 2002; Stebleton et al., 2014) as well as potentially grappling with feelings of guilt for attending university (Covarrubias & Fryberg, 2015). Thus, fostering self-

compassion is particularly important for this population and may be especially beneficial for students contending with family achievement guilt.

Researchers have found that self-compassion is beneficial for improving well-being and reducing issues that are often prevalent and problematic amongst students. For example, in university students, self-compassion has been found to reduce homesickness and depression, and increase satisfaction with attending university (Terry et al., 2013). Researchers have also found that self-compassion moderated the relationship between academic burnout and psychological well-being as well as academic burnout and depression in Korean students studying online (Woo Kyeong, 2013). Students high in self-compassion are also more likely to continue with their goal pursuit and maintenance and display less negative affect when there are fluctuations in their goal achievements compared to students low in self-compassion (Hope et al., 2014). Additionally, researchers have found that low levels of self-compassion partially mediated the relationship between maladaptive perfectionism and depressive symptoms (Mehr & Adams, 2016). Gunnell et al. (2017) also found that increases in self-compassion over the first year of university were related to increases in well-being and decrease in ill-being and that this was mediated by psychological need satisfaction.

Other researchers have found that actively promoting self-compassion in this population also heightens well-being. In implementing a randomized control trial, Dundas et al. (2017) found that students who completed a short self-compassion intervention showed in increase in personal growth self-efficacy and impulse control and a decrease in self-judgment and habitual negative thinking to the control group and scores remained high at a six month follow up. Ko et al. (2018) yielded similar results from their randomized controlled study, revealing that students who participated in a seminar on compassion showed an increase in mindfulness and self-

compassion and a reduction in stress compared to a wait-list control. Success in reducing anxiety and depression in students using self-compassion interventions has also been found. Haukaas et al. (2018) found that students who completed a three-session mindful self-compassion intervention showed reductions in anxiety and depressive symptoms and reductions were maintained at a six-month follow-up. Other intervention studies have yielded similar results (Edwards et al. 2014; Falsafi, 2016). Notably, these studies emphasize that even brief self-compassion interventions may be useful in increasing well-being as well as reducing ill-being in university students. For these reasons, self-compassion is considered an adaptive construct for students to help them succeed and thrive throughout their university experience.

Research Justification and Purpose

The overall purpose of my master's thesis is to examine the relation between family achievement guilt, self-compassion, and psychological ill-being in first-generation and non-first-generation university students. The justification for this research is fourfold. First, the novelty of family achievement guilt has given researchers little opportunity to explore this concept. More research is required to further examine the prevalence and implications of family achievement guilt in university students. In addition, this is the first study of its kind to examine levels of family achievement guilt in a Canadian student population. Therefore, findings from this study will be important for next steps in researching family achievement guilt in Canada. Second, researchers have found mixed results regarding the relationship between family achievement guilt and ill-being (i.e., negative affect and depressive symptoms; Covarrubias et al., 2015; Covarrubias et al., 2020). Thus, this discrepancy warrants further investigation. Third, exploring ways in which we can address any negative emotions associated with family achievement guilt in university students is also particularly important. It is possible that self-compassion could serve

as a protective factor against the negative emotions associated with family achievement guilt in university students. Therefore, self-compassion should be investigated as a moderator between family achievement guilt and psychological ill-being. Fourth, given that first-generation students must surmount a variety of obstacles to garner academic success and social approval in a system that is already designed to their disadvantage (Stebleton et al., 2014), there is a clear need for research to identify resources that help empower these individuals to succeed at the same rate as their non-first-generation peers. Specifically, examining university students, my research questions and hypotheses are as follows:

Research Question 1: Are higher levels of family achievement guilt associated with higher psychological ill-being?

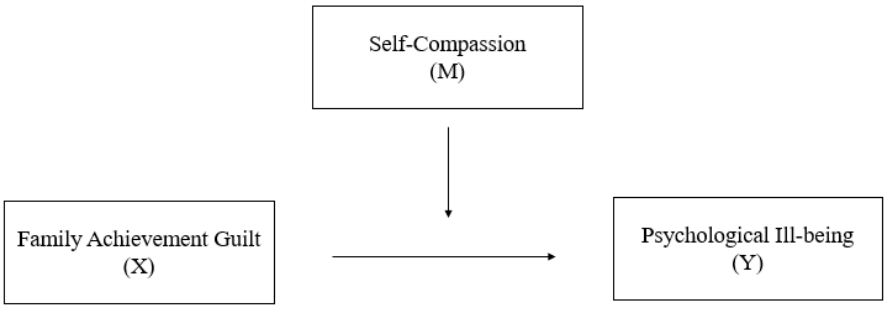
Hypothesis 1: Higher levels of family achievement guilt will be associated with higher symptoms of psychological ill-being (i.e., anxiety symptoms, depressive symptoms, and negative affect).

Research Question 2: Does self-compassion moderate the relationship between family achievement guilt and psychological ill-being?

Hypothesis 2: Higher levels of self-compassion will attenuate the relationship between family achievement guilt and psychological ill-being (see Figure 1).

Figure 1

Hypothesized Moderation Model



Supplemental Analyses

To further probe the differences between first-generation and non-first-generation students based on theory and prior literature (Covarrubias & Fryberg, 2015; Stebleton et al, 2014) supplemental analyses were performed. More specifically, mean differences were explored to examine the differences between first-generation students and non-first-generation students in terms of family achievement guilt, depressive symptoms, anxiety symptoms, and negative affect. In line with hypothesis 2, I also examined if self-compassion moderated the relationship between family achievement guilt and psychological ill-being in only first-generation students.

Method

Participants

Participants in this study were students enrolled at Carleton University who were above the age of 17. Participants completed an online survey via Qualtrics and had the capacity to read English. First-generation and non-first-generation status of students was categorized following recruitment completion.

Procedure

Participants were recruited through the Carleton Psychology SONA system. Informed consent was obtained prior to study participation. Participants were asked to complete a 20-minute online survey via Qualtrics. Participants completed a number of demographic questions concerning their age, sex, gender, parental marital status, education status, socioeconomic status (SES), ethnicity, and student status (i.e., first-generation versus non-first-generation status; See Appendices A and B). After completing the demographic questions, participants also completed measures of family achievement guilt, self-compassion, depressive symptoms, negative affect, and anxiety symptoms (see Appendices C-G). The measures were completed in random order to avoid potential order effects. Upon completion, participants were fully debriefed about the goals and purpose of the study. Students who participated via the SONA system were granted course credit and all participants were entered into seven draws for a chance to win a $50 Amazon, Starbucks, or Walmart e-gift card.

Measures

First-Generation Student Status. Two items used in past research were used to assess first-generation status. In the first item, participants were asked to read a definition of first-generation status for university students (i.e., Neither parent(s)/primary caregiver(s) has/have completed a four-year/bachelors degree) and then responded "*yes*", "*no*", or "*not sure*" to the question "*Are you a first-generation university student*?". Second, participants were asked about their parents'/ primary caregivers' highest level of completed education in order to ensure that they met the criteria for their selection on the first item. In recognition that not all people have a traditional nuclear family configuration, (e.g., same-sex parents, single parents, more than two primary caregivers.), the questions also included "guardian" as a substitute for either parent. The

options for selection for both questions included: *Less than high school, Some high school, High school diploma/General Education Development (GED), Diploma or 1-3 years of college, Bachelor's degree*, *Graduate (Master's or PHD)/professional degree, Not sure, Prefer not to answer*, and *Not applicable* (in case of single parent families). Consistent with past research (Covarrubias et al., 2020), if participants selected either of the first four options for both parents/guardians, they were considered first-generation students. Conversely, if participants selected *Bachelor's degree* or *Graduate (Master's or PHD)/professional degree* for at least one parent/guardian, they were considered non-first-generation students. These procedures adhere to previous studies assessing first-generation status (Stebleton et al., 2014; Covarrubias et al., 2020). Finally, to categorize participants as first-generation or non-first-generation students, responses to the two items were compared for consistency. If there was a discrepancy between the two items (e.g., participant indicated they were a first-generation student on item one but indicated one of their parents had a graduate/profession degree on item two), the second item was used to categorize them.

Family Achievement Guilt. To measure family achievement guilt, I used the Family Achievement Guilt Scale (Covarrubias et al., 2020). This new scale contains four subscales, developed from semi-structured interviews of first-generation students. The first subscale includes 13 items and describes leaving family obligations behind (e.g., "*I feel bad when I am not there when my family needs me*"). The second subscale includes eight items and describes having more privileges (e.g*., I feel sad that family cannot experience the opportunities I have in college*"). The third subscale also contains eight items and describes becoming different (e.g., "*I feel bad when my family thinks that college is changing me*". The fourth and final subscale contains five items and describes fear of not being successful for their family and failing to meet

their expectations (e.g., "*I worry that I won't be able to succeed in college for my family*"). The entire scale contains 34 items, answered on a six-point Likert scale from one (*strongly disagree)* to six (*strongly agree)*. Responses are then added with higher scores indicating higher levels of family achievement guilt. Scores from the Family Achievement Guilt Scale have demonstrated good internal reliability for leaving family behind, having more privileges, becoming different, and experiencing familial pressures subscales (αs = .94, .93, .88. and .86, respectively; Covarrubias et al., 2020). Pearson correlations conducted at time one and time two (four-weeks apart) ranged from r =.78 to r = .85 across the four subscales, indicating good test-retest reliability (Covarrubias et al., 2020). Covarrubias et al. (2020) also found evidence for convergent validity with cultural incongruence, parent-focused and sibling-focused family roles, empathic concern, and interdependent and independent motives for college (rs ranging from -.27 to .50) Evidence for discriminant validity with self-efficacy was also found (βs = .03 to .17, ps > .24).

Self-Compassion. Self-Compassion was assessed using the 26-item Self-Compassion Scale (SCS; Neff, 2003a). The SCS contains six subscales that assess the three main pillars of self-compassion and their negative counterparts: Self-kindness (vs. self-judgment), common humanity (vs. isolation), and mindfulness (vs. over-identification). Items on this measure reflect both positive (e.g., "*I try to be loving toward myself when I'm feeling emotional pain*") and negative (e.g., "*I'm disapproving and judgmental about my own flaws and inadequacies*") aspects of the components of self-compassion. Participants were asked to read the instructional stem "how I typically act towards myself during difficult times" and rate each item on a Likert-type scale ranging from one *(almost never*) to five (*almost always*). Scores are gathered by reverse coding the negative items and averaging the mean subscale score to get a total self-

compassion score. The SCS has previously demonstrated good convergent validity with self-criticism (r = -.65) and social connectedness (r = .41) and a non-significant correlation (r = .11) with narcissism, demonstrating discriminant validity. Scores have also demonstrated good test-retest reliability (r = .93; Neff, 2003a; Neff & Pommier, 2013). The six subscales have also demonstrated good internal consistency reliability; self-kindness (α = .78); self-criticism (α = .77); common humanity (α = .80); isolation (α = .79); mindfulness (α = .75); overidentification (α = .81; Neff, 2003a). Researchers investigating the factor structure of the SCS have shown that the six-factor model is appropriate (Cleare et al., 2018) and that a total SCS score is suitable as an overall measure of self-compassion (Neff et al., 2017).

Depressive Symptoms. To measure depressive symptoms, participants completed the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). The CES-D consisted of 20 items and asked participants to rate how often during the past week they experienced symptoms and traits of depression. Sample items include: "*I was bothered by things that usually don't bother me*" and *"I felt that everything I did was an effort*". Items are rated on a four-point scale (0 = *Rarely or none of the time or less than 1 day, 1 = Some or a little of the time or 1-2 days,* 2 = *Occasionally or a moderate amount of time or 3-4 days, and* 3 = *Most or all of the time or 5-7 days)*. The four positive items (e.g., "*I felt hopeful about the future*") are reversed scored, with a possible range of scores of zero to 60 and higher scores indicating higher levels of depression symptomology. Scores from the CES-D Scale have high internal reliability (α = .90), concurrent validity with clinical and self-report criteria, and have also demonstrated discriminant validity with positive affect, with correlations ranging from r = -.21 to r = -.55 (Radloff, 1977). Researchers studying the factor structure of CES-D scores have shown support

for its structure (Radloff, 1977). The CES-D has previously been used to assess depressive symptoms in university populations (Terry et al., 2013).

Negative Affect. Negative affect was measured using the 10-item short version of the Positive and Negative Affect Schedule (PANAS; Watson, et al., 1988; Mackinnon et al., 1999). Participants reported how often they experienced various emotions in the past week on a Likert-type scale ranging from one (*very slightly or not at all*) to five *(extremely*). Although not used in this study, the positive items included *inspired, alert, excited, enthusiastic,* and *determined*. Negative items included *afraid, upset, nervous, scared,* and *distressed*. A total negative affect score was created by adding the scores, with higher scores representing higher negative affect, and lower scores representing lower negative affect. Scores from the PANAS have yielded commendable reliability for both positive affect ($\alpha = .88$) and negative affect ($\alpha = .87$). Watson et al. (1988) reported convergent correlations above .90 for both the positive and negative subscales with other measures of mood, as well as low discriminant correlations ranging from $r = -.02$ to $r = -.18$.

Anxiety Symptoms. Anxiety symptoms were measured using Becks Anxiety Inventory (BAI; Beck et al., 1988). The BAI is a 21-item self-report scale that measures anxiety with a focus on somatic symptoms. The BAI asks respondents to indicate certain symptoms of anxiety that they experienced in the past month. Items include *numbness or tingling*, *feeling hot*, *unable to relax,* and *unsteady*. Responses range on a four-point Likert-type scale, ranging from zero (*Not at all*) to three (*Severely – it bothered me a lot*). Scoring was accomplished by summing the items, with a possible total score ranging from zero to 63. Scores ranging from zero to nine indicate normal or no anxiety, scores ranging from 10 to 18 indicate mild to moderate anxiety, scores ranging from 19 to 29 indicate moderate to severe anxiety, and scores ranging from 30 to

63 indicate severe anxiety. Scores from the BAI demonstrate good internal consistency with alphas ranging from .90 to .94 across variety of populations (i.e., psychiatric patients, college students, and community adults; Fydrich et al., 1992). Researchers have shown that scores from the BAI demonstrate good convergence with other measures of anxiety (e.g., the Hamilton Anxiety Rating scale and the State Trait Anxiety Inventory; Morin et al., 1999).

Data Analysis

Prior to analysis, all data were cleaned and then screened for statistical assumptions. To To test for heteroskedasticity, I used the Breusch-Pagan and Koenker tests in SPSS. To detect outliers, variables of interest were transformed into standardized *z*-scores and scores that were ± 3.29 standard deviations from the mean were considered outlier values (Tabachnick & Fidell, 2013). Multivariate outliers were also removed by calculating Mahalanobis Distance (Hadi & Simonoff. 1993).

To test the first hypothesis, Pearson correlations were run to determine the relationships between family achievement guilt and depressive symptoms, negative affect, and anxiety symptoms. Furthermore, a series of multiple hierarchical regression analyses controlling for sociodemographic factors (i.e., age, sex and gender, ethnicity, and SES) were estimated to examine whether higher levels of family achievement guilt (independent variable) were associated with increased levels of depressive symptoms, negative affect, and anxiety symptoms (dependent variables in separate regression models).

To test the second hypothesis, multiple moderation analyses were run using the PROCESS macro (V 3.5; Preacher & Hayes, 2008). The predictor variable for the analyses was family achievement guilt. The moderator variable evaluated for the analysis was self-compassion. The outcome variables in separate models were depressive symptoms, anxiety

symptoms, and negative affect. The interaction between family achievement guilt and self-compassion was examined for each dependent variable based on beta coefficients (*b*), confidence intervals (C.I), and *p*-values.

For the supplemental analyses, Independent samples t-tests were conducted to compare family achievement guilt, depressive symptoms, anxiety symptoms, and negative affect in first-generation and non-first-generation students. Cohen's d was calculated to estimate the effect size. Furthermore, the moderation analyses using the PROCESS macro (V 3.5; Preacher & Hayes, 2008) were run again only including first-generation students in the analyses.

Results

In total, 777 students were recruited. Of these participants, 54 were excluded for responding "no" to the question "Did you read and answer the questions honestly?". Another 141 participants were removed for failing the various attention checks within the survey (e.g., "select 1 for this response"). Additionally, another 19 duplicate responses were removed based on participant unique IDs provided by the SONA system. Finally, no univariate outliers were identified based on *z*-scores of each variable, and 29 multivariate outliers were removed based on Mahalanobis Distance values (Hadi & Simonoff, 1993). In total, 533 participants (M_{age} = 20.09 years, *SD* = 4.3 years; 81% female) were included in the final analyses. Non-significant values from the Breusch-Pagan and Koenker tests in SPSS indicated that the assumption of homoscedasticity was not violated for any independent variable.

The majority of students reported being White (61.9%) and were in their first year of university (55.6%). Additionally, the majority of students reported living at home (72.8%) and indicated that COVID-19 had not impacted their living situation (65.3%). The majority of students reported speaking only English at home (57.2%) followed by speaking half English and

half another language at home (17.4%). Regarding SES, on a scale from 1 (lowest) to 10 (highest), most students reported their SES to reflect a 7 (27.2%) followed by 5 (20.3%) and 6 (18.6%). In total, 216 participants were first-generation students, 311 were non-first-generation students. Six participants reported being "not sure" about their student status and their parents' educational status and therefore could not be categorized as either first-generation or non-first-generation students. These participants were not included in the Independent sample t-tests analyses. See Table 1 for demographic information.

Table 1
Demographic Information

	n	*%*
Gender		
Man	93	17.4
Woman	433	81.2
Other	6	0.2
Ethnicity		
White	330	61.9
Non-White	202	37.9
Academic Level		
First-year	296	55.5
Second-year	165	31.0
Third year	48	9.0
Fourth year	16	3.0
Fifth year+	7	1.3
Language at Home		
English only	305	57.2
Mostly English	76	14.3
½ English ½ Other	93	17.4
Mostly Other	32	6.0
Other	27	5.1
First-Generation Status		
First-Generation Student	216	40.5
Non-First-Generation Student	311	58.3

Bivariate Correlations and Internal Consistency

Pearson correlations were estimated to examine the bivariate relationships between the study variables (See Table 2). As expected, higher family achievement guilt was statistically significantly related to lower self-compassion ($r = -.22$, $p < .001$) and higher depressive symptoms ($r = .32$, $p < .001$), higher anxiety symptoms ($r = .30$, $p < .001$), and higher negative affect ($r = .29$, $p < .001$). Additionally, as expected, higher self-compassion was statistically significantly related to lower depressive symptoms ($r = -.56$, $p < .001$), lower anxiety symptoms ($r = -.42$, $p < .001$), and lower negative affect ($r = -.40$, $p < .001$).

Means, standard deviations, skewness and kurtosis values are presented in Table 2. On average, participants rated family achievement guilt, self-compassion, depressive symptoms, anxiety symptoms, and negative affect above the midpoint of their respective scales. There was no evidence of skewness or kurtosis. Internal consistency estimates are presented in Table 2. Scores from the family achievement guilt subscales of leaving family behind, having more privileges, becoming different, and experiencing family pressures yielded good reliability (αs = .90, .93, .87, and .88, respectively). The total family achievement guilt score also yielded good reliability (α = .94). The scores from the subscales of the SCS also yielded good reliability; self-kindness (α = .82); self-judgement (α = .83); common humanity (α = .80); isolation (α = .76); mindfulness (α = .73); over-identification (α = .77). The total SCS score also yielded good reliability (α = .91). Scores from the CES-D, BAI, and the negative affect subscale of the PANAS also demonstrated good reliability (αs = .92, .94, and .86, respectively).

Table 2
Descriptive Statistics, Estimates of Internal Consistency, Skewness and Kurtosis, and Pearson Correlations for Variables of Interest.

	M	*SD*	*α*	Skew	Kurt	1	2	3	4	5
1. Family Achievement Guilt	3.20	.88	.94	.05	-.46	-	-	-	-	-
2. Self-Compassion	2.71	.60	.91	-.01	-.27	-.22	-	-	-	-
3. Depressive Symptoms	2.22	.63	.92	.24	-.75	.32	-.56	-	-	-
4. Anxiety Symptoms	2.01	.67	.94	.46	-.71	.30	-.40	.68	-	-
5. Negative Affect	2.71	.96	.86	.32	-.68	.29	-.42	.73	.65	-

Note. All bivariate correlations are statistically significant at $p < .001$. *M* = Mean; *SD* = standard deviation; *α* = internal consistency; Skew = Skewness; Kurt = Kurtosis.

The Relationship between Family Achievement Guilt and Psychological Ill-being (Hypothesis 1)

Controlling for age, gender, ethnicity, and SES, family achievement guilt accounted for an additional 6.9% of the variation in depressive symptoms and was statistically significantly associated with depressive symptoms ($\beta = .20$, $p < .001$) such that higher family achievement guilt was associated with higher depressive symptoms. Family achievement guilt accounted for an additional 6.3 % of the variation in anxiety symptoms beyond age, gender, ethnicity, and SES, and was statistically significantly associated with anxiety symptoms ($\beta = .20$, $p < .001$) such that higher family achievement guilt was associated with higher symptoms of anxiety. Controlling for age, gender, ethnicity, and SES, family achievement guilt accounted for an additional 5.8% of the variation in negative affect and was statistically significantly associated with negative affect ($\beta = .28$, $p < .001$) such that higher family achievement guilt was associated with higher negative affect (See Table 3).

Table 3

Hierarchical Regressions for Family Achievement Guilt Predicting Psychological Ill-being

	Depressive Symptoms			Anxiety Symptoms			Negative Affect		
	B	R	Δ R^2	B	R	Δ R^2	B	R	Δ R^2
Model 1		.30			.33			.26	
Age	-.02*			-.02*			-.02*		
Gender	.36			.45*			.48*		
Ethnicity	.00			-.02*			-.001		
SES	-.04*			-.03*			-.05		
Model 2		.40	.07		.42	.06		.35	.06
Age	-.01*			-.01*			-.02		
Gender	.27**			.37*			.38		
Ethnicity	-.003			-.02*			-.006		
SES	-.03			-.02			-.03		
Family Achievement Guilt	.20*			.20**			.28**		

Note. * = $p < .05$, ** = $p < .001$; B = Beta coefficient; R = Correlation; Δ R^2 = R square change; SES = Socioeconomic status

The Moderating Effect of Self-Compassion on Family Achievement Guilt and Psychological Ill-being (Hypothesis 2)

Depressive symptoms

The interaction between family achievement guilt and self-compassion was not statistically significant, $\beta = .07$, 95% C.I, (-.02, .16), $p = .11$ (see Table 4). As such, self-compassion did not moderate the relationship between family achievement guilt and depressive symptoms.

Anxiety Symptoms

The interaction between family achievement guilt and self-compassion was not statistically significant, $\beta = .03$, 95% C.I, (-.07, .14), $p = .52$ (see Table 4). As such, self-

compassion did not moderate the relationship between family achievement guilt and anxiety symptoms.

Negative Affect

The interaction between family achievement guilt and self-compassion was not statistically significant, $\beta = .05$, 95% C.I, (-.10, .20), $p = .54$ (see Table 4). As such, self-compassion did not moderate the relationship between family achievement guilt and negative affect. Results from the moderation analyses are displayed in Table 4.

Table 4

The Moderating Effect of Self-Compassion on Family Achievement Guilt & Psychological Ill-being

	B	SE	95% CI		*p*
			LL	UL	
Depressive Symptoms					
FamAchG	.13	.03	1.84	2.56	.001
SC	-.49	.04	-.57	-.42	.001
FamAchG x SC	.07	.05	-.02	.16	.11
Anxiety Symptoms					
FamAchG	.15	.03	.09	.21	.001
SC	-.36	-.04	-.45	-.28	.001
FamAchG x SC	.03	.05	-.07	.14	.52
Negative Affect					
FamAchG	.21	.05	.12	.30	.001
SC	-.51	.07	-.64	-.38	.001
FamAchG x SC	.05	.08	-.10	.20	.54

Note. FamAchG = Family achievement guilt; SC = Self-Compassion; B = Beta coefficient; SE = Standard error; CI = Confidence Interval; LL = Lower limit; UL = Upper limit

Supplemental Analyses

To further explore my research questions, I examined the mean differences of family achievement guilt, depressive symptoms, anxiety symptoms, and negative affect between first-

generation and non-first generation students. I also re-estimated the moderation analyses outlined above including only students who identified as first-generation students.

Mean Differences

Independent samples t-tests were conducted to compare family achievement guilt, depressive symptoms, anxiety symptoms, and negative affect in first-generation and non-first-generation students. For family achievement guilt, there was a small statistically significant difference in the scores for first-generation students ($M = 3.40$, $SD = .89$) and non-first-generation students ($M = 3.06$, $SD = .85$), $t(525) = 4.37$, $p < .001$, $d = .39$. There were no statistically significant differences in the scores of first-generation students and non-first-generation students for depressive symptoms, $t(525) = .39$, $p = .70$, $d = .03$, anxiety symptoms, $t(525) = .97$, $p = .34$, $d = .09$, or negative affect, $t(525) = .94$, $p = .35$, $d = .08$. Results from the independent t-tests are displayed in Table 5.

Moderation Analyses

Examining only first-generation students, the interaction between family achievement guilt and self-compassion was not statistically significant with any of the dependent variables (depressive symptoms, $\beta = .07$, 95% C.I, (-.08, .22), $p = .37$; anxiety symptoms, $\beta = .10$, 95% C.I, (-.06, .26), $p = .20$; negative affect, $\beta = .02$, 95% C.I, (-.22, .27), $p = .84$). Results from the supplemental moderation analyses are displayed in Table 6.

Table 5

Supplemental Independent T-Tests Examining Mean differences on scores of Family Achievement Guilt, Depressive Symptoms, Anxiety Symptoms, and Negative Affect between First Generation and Non-First-Generation Students

	n	*M*	*SD*	*t*	*df*	*p*	*d*
FamAchG							
FGS	216	3.40	.89	4.37	525	.000	.39
NFGS	311	3.06	.85				
Dep							
FGS	216	2.23	.61	.39	525	.70	.03
NFGS	311	2.21	.64				
Anx							
FGS	216	2.04	.64	.97	525	.34	.09
NFGS	311	1.98	.70				
Neg Aff							
FGS	216	2.76	.88	.94	525	.35	.08
NFGS	311	2.68	1.0				

Note. FGS = First-generation students; NFGS = Non-first-generation students; FamAchG = Family achievement guilt; Dep = depressive symptoms; Anx = Anxiety symptoms; Neg Aff = Negative affect; *M* = Mean; *SD* = standard deviation; *df* = degrees of freedom;

Table 6

Supplemental Analyses Examining the Moderating Effect of Self-Compassion on Family Achievement Guilt & Psychological Ill-being in First-Generation Students

	B	SE	95% CI		*p*
			LL	UL	
Depressive Symptoms					
FamAchG	-.06	.22	-.48	.37	.80
SC	-.68	.26	-1.19	-.16	.01
FamAchG x SC	.07	.08	-.08	.22	.37
Anxiety Symptoms					
FamAchG	-.18	.23	-.63	.27	.42
SC	-.71	.27	1.25	-.17	.00
FamAchG x SC	.10	.08	-.05	.26	.20
Negative Affect					
FamAchG	.08	.35	-.60	.77	.81
SC	-.47	.42	-1.30	.36	.26
FamAchG x SC	.02	.12	-.22	.27	.84

Note. FamAchG = Family achievement guilt; SC = Self-Compassion; B = Beta coefficient; SE = Standard error; CI = Confidence Interval; LL = Lower limit; UL = Upper limit

Discussion

The purpose of my study was to examine the relationship between family achievement guilt, self-compassion, and psychological ill-being in first-generation and non-first-generation university students. Consistent with my first hypothesis, I found that family achievement guilt was statistically significantly associated with depressive symptoms, anxiety symptoms, and negative affect, after controlling for age, gender, ethnicity, and SES. More specifically, higher levels of family achievement guilt were related to higher levels of psychological ill-being in university students. Inconsistent with my second hypothesis, self-compassion did not moderate the relationships between family achievement guilt and depressive symptoms, anxiety symptoms, and negative affect. Therefore, I found that self-compassion did not buffer the unfavourable

relationship between family achievement guilt and psychological ill-being. In supplemental analyses, I found a significant difference in family achievement guilt between first-generation and non-first-generation students such that first-generation students reported significantly higher levels of family achievement guilt compared to non-first-generation students and the effect size was small. I found no significant differences of depressive symptoms, anxiety symptoms, or negative affect between first-generation and non-first-generation students. Finally, self-compassion did not buffer the relationship between family achievement guilt and psychological ill-being in first-generation students only.

The Relationship between Family Achievement Guilt and Psychological Ill-being (Hypothesis 1)

Bivariate correlations revealed that higher levels of family achievement guilt were statistically associated with higher levels of depressive symptoms, anxiety symptoms, and negative affect, as well as lower levels of self-compassion. These associations were expected as family achievement guilt has previously been found to be related to higher depressive symptoms and lower self-esteem (Covarrubias et al., 2015) and prior evidence that self-compassion is negatively related to guilt (Leary et al., 2007; Sirois et al., 2018; Miller & Strachan, 2020). My findings extend past research by showing that self-compassion is negatively associated with family achievement guilt.

Consistent with my first hypothesis, and controlling for relevant variables, I found that family achievement guilt was significantly related to psychological ill-being in all students. These findings mimic existing literature linking family achievement guilt to depressive symptoms (Covarrubias et al., 2015) and negative affect (Covarrubias et al., 2020). According to researchers, family achievement guilt is an extension of survivor guilt (Covarrubias et al., 2015),

which is known to be a maladaptive form of guilt related to poorer mental health outcomes (Hutson et al., 2015). Students who report high levels of family achievement guilt may also report guilt for believing that they have more privileges than other family members and that they abandoned their family to attend university (Covarrubias et al., 2020). Additionally, students with higher levels of family achievement guilt may feel guilty for feeling that they are becoming different people, and feel guilt related to family pressures to succeed (Covarrubias et al., 2020). These factors of family achievement guilt are thought to contribute to poorer mental health for these students.

Self-Compassion as a Moderator for Family Achievement Guilt and Psychological Ill-being (Hypothesis 2)

I hypothesized that self-compassion would moderate the relationship between family achievement guilt and psychological ill-being given the conceptual and empirical evidence framing self-compassion as a protective factor against negative mental health concerns (Macbeth & Gumley, 2012; Körner et al., 2015). In contrast to my hypothesis, I found that self-compassion did not moderate the relationship between family achievement guilt and psychological ill-being. These non-significant findings were consistent in my supplemental analyses when only including first-generation students. The finding that self-compassion did not moderate the relationship between family achievement guilt and psychological ill-being was surprising. Although researchers have found that self-compassion is related to fewer symptoms of psychological ill-being, past data are not entirely consistent. For example, researchers have found that self-compassion moderated the relationship between self-evaluative processes (e.g., perfectionism) and depressive symptoms (Abdollahi et al., 2020). In contrast, others have found that self-compassion did not moderate the relationship between life stress and depression (Ford et al,

2017; Salinger & Whisman, 2021). Additionally, Dev et al. (2020) found that self-compassion did not moderate the relationship between stress and burnout in doctors and medical students. Therefore, the role of self-compassion as a moderator remains equivocal.

Further investigation into the literature on self-compassion and family achievement guilt led to several possible explanations for the non-significant moderation findings. In brief, possible explanations include (1) the operationalization of self-compassion, (2) possible adaptive features of family achievement guilt, (3) examination of ill-being versus well-being, (4) amount of family achievement guilt, (5) role of fear of self-compassion, and (6) relationship between self-compassion and the cultural mismatch theory.

Self-compassion may not have moderated the relationship between family achievement guilt and psychological ill-being because of the use of an overall self-compassion score rather than individual subscale scores. Specifically, Salinger and Whisman (2021) contended that although a total score of self-compassion has been found to be an appropriate overall indicator of self-compassion, each subscale may not equally influence negative mental health outcomes. For example, self-kindness has been found to reduce overly critical responses to negative events (Neff, 2003a), perhaps more so than common humanity and mindfulness. Other evidence lends support to this claim. Kelley et al. (2019) examined the components of self-compassion as moderators for the relationship between moral injury (i.e., negative changes to moral emotions) and suicidality in combat-wounded veterans and found that the relationship was strengthened by over-identification but weakened by mindfulness. These results suggest that some, but not all the components for self-compassion were important for the relationship between moral injury and suicidality. Therefore, it may be worth exploring the self-compassion subscales as moderators for the relationship between family achievement guilt and psychological ill-being.

It is possible that self-compassion did not moderate the relationship between family achievement guilt and psychological ill-being in university students because family achievement guilt may be partially adaptive. Although the current research on the relationship between guilt and self-compassion is limited, evidence points to self-compassion safeguarding against negative emotions that often accompany guilt (Hollis-Walker & Colosimo, 2011; Sirois et al., 2018; Miller & Strachan, 2020); however, the research on the relationship between guilt and self-compassion is not entirely consistent. For example, Siwik et al. (2021) found that self-compassion was associated with lower levels of shame and depressive symptoms, but not related to guilt in individuals with lung cancer. My findings indicate that family achievement guilt may be a form of guilt that may not be mitigated by increased self-compassion. To this end, family achievement guilt, though found to be related to depressive symptoms and negative affect (Covarrubias et al., 2015; Covarrubias et al., 2020) has also been found to predict greater engagement with family and interdependent motives for attending college (Covarrubias et al., 2020). Given these findings, it is possible that family achievement guilt, though conceptualized from a form of maladaptive guilt (Covarrubias & Fryberg, 2015), may contain adaptive features such that self-compassion is not needed to buffer its relationship with psychological ill-being. In fact, we know that guilt is considered a prosocial emotion at appropriate levels as it is responsible for action that mends social relationships and wrong doings (Tangney & Dearing, 2002). Guilt has also frequently been found to be positively related to other positive constructs such as increased empathy (O'Connor et al., 1997). Additionally, mild guilt has been found to motivate behavior change; however intense guilt may cause resistance to change (Xu & Guo, 2018). It may be that relatively normal levels of family achievement guilt share the same adaptive qualities as low levels of guilt and do not require a self-compassionate attitude as a

buffer. Future research should continue to investigate the role of family achievement guilt in university students.

Although researchers have found that self-compassion is important for buffering psychological ill-being (Macbeth & Gumley, 2012; Körner et al., 2015), perhaps the salient role of self-compassion is to enhance well-being rather than alleviate ill-being. For example, Keng and Liew (2017) examined self-compassion as a moderator for the relationship between gender nonconformity and psychological health. They found that self-compassion did not moderate the relationship when indicators of ill-being were the outcome but did when well-being was the outcome. Therefore, self-compassion may be a more important moderator for psychological well-being rather than ill-being.

Another potential reason why a significant moderation interaction was not present in my study may be due to the levels of family achievement guilt and the levels of depressive symptoms, anxiety symptoms, and negative affect in the participants. It may be that relatively high levels of family achievement guilt would have been required in order to see a buffering effect of self-compassion. For example, researchers have found that self-compassion buffered against the relationship between perfectionism and depression in clinically depressed patients (Abdollahi et al., 2020), against moral injurious experiences and poor mental health in military veterans (Forkus et al., 2019), and against the relationship between shame memories and eating psychopathological severity in individuals with a diagnosed eating disorder (Ferreira et al., 2014). Therefore, self-compassion may be most beneficial as a buffer for populations with clinical diagnoses of mental health disorders or populations with more extreme scores on indicators of mental health. Indeed, in a study that examined self-compassion as a buffer for the relationship between self-criticism and depression in firefighters who had experienced traumatic

events, Kaurin at al. (2018) found that the buffering effect only occurred for firefighters who experienced considerable amounts of traumatic events compared to lower amounts of traumatic events. The researchers posited that the high levels of stress were necessary for self-compassion to emerge as a resiliency factor. Therefore, it is possible that self-compassion may not have buffered the relationship between family achievement guilt and psychological ill-being in my study because the students in this study did not have high levels of family achievement guilt, depressive symptoms, anxiety symptoms, and negative affect (i.e., they displayed scores slightly above the mean of the response scales). Researchers should investigate using purposive sampling if students with higher levels of family achievement guilt and psychological ill-being would benefit from self-compassion.

Additionally, these non-significant moderation results may be affected by how participants view self-compassion. Although self-compassion is related to increased health and well-being (Zessin et al., 2015), individuals may be resistant or ambivalent towards self-compassion and may not perceive self-compassion to be effective. This reluctance has been labeled fear of self-compassion (Gilbert et al., 2011). Fear of self-compassion is characterized by beliefs that one is undeserving of self-compassion, that self-compassion is tied to weakness, and that being self-compassionate may reveal one's flaws or inadequacies (Gilbert et al., 2011; Messman-Moore & Bhuptani, 2020). Unsurprisingly, fear of self-compassion is associated with depression, anxiety, and self-criticism (Gilbert et al., 2011). How individuals view self-compassion is important for the buffering effect it may have. Though one's level of self-compassion is important, if individuals do not value self-compassion, it may not be useful as a protective factor against psychological ill-being. Moreover, the perceived efficacy of self-compassion may be context specific. For example, in a mixed-methods study, some female

athletes stated that being self-compassionate during sport may not always be in their best interest and that sometimes being self-critical may be a better motivator for enhancing performance (Ferguson et al., 2014). Individuals who may not fully understand self-compassion might believe that it will undermine motivation and goal-oriented behavior by means of excessive self-coddling. It is possible that this notion may extend to first-generation student populations, in that they may not believe self-compassion to be useful for helping manage family achievement guilt. This hesitancy or fear towards self-compassion may weaken its buffering capabilities and further exacerbate mental health issues. Indeed, researchers have found that the indirect effect of self-criticism on depression through rumination and worry was enhanced by levels of fear of self-compassion in undergraduate students (Cavalcanti et al., 2021). Further research should examine whether fear of self-compassion could be a competing factor that may counteract the buffering effect of self-compassion on psychological ill-being in university students.

According to researchers, family achievement guilt is grounded in the cultural mismatch theory (Stephens et al., 2012). That is, researchers contend that first-generation students may experience family achievement guilt due to the mismatch between their own interdependent cultural norms and the independent cultural norms typically promoted in university (Covarrubias & Fryberg, 2015). In the context of experiencing a cultural mismatch, it is possible that self-compassion may not be a helpful coping strategy for students facing inequality and cultural barriers at in institutional level. Researchers have yet to examine the relationship between self-compassion and experiencing a cultural mismatch. To some extent, one may think that some components of self-compassion may be helpful in reducing negative feelings due to a cultural mismatch. For example, common humanity, the recognition that you alone are not experiencing this hardship, may be valuable for someone experiencing a cultural mismatch insofar as

recognizing that other students are in a similar situation may alleviate that discomfort. Nonetheless, it is possible that self-kindness and mindfulness may not be as useful insofar as treating oneself with kindness and ensuring equanimity of emotions may only be a temporary solution to issues stemming from institutional and systematic disenfranchisement. Therefore, being self-compassionate may be negatively related family achievement guilt but might not act as a buffer for the relationship between family achievement guilt and psychological ill-being.

Supplemental Analyses

I conducted supplemental analyses examining mean differences on family achievement guilt, depressive symptoms, anxiety symptoms, and negative affect between first-generation students and non-first-generation students. These supplemental analyses were conducted given the disparities between first-generation and non-first-generation students in terms of family achievement guilt and mental health outcomes in the literature (Covarrubias & Fryberg, 2015; Stebleton et al, 2014). Consistent with previous research (Covarrubias & Fryberg, 2015), I found that first-generation students reported significantly higher levels of family achievement guilt compared to non-first-generation students. These results are logical given the theoretical foundation of the cultural mismatch theory within family achievement guilt (Stephens et al., 2012) and researchers' contentions that family achievement guilt is more prevalent in first-generation students (Covarrubias & Fryberg, 2015). Ultimately, the cultural mismatch theory states that a discrepancy between one's cultural norms and the norms of an institution will negatively impact performance and well-being (Stephens et al., 2012). More specifically, first-generation students, whose cultural norms are more likely to be interdependent and family-oriented, are hypothesized to be more likely to experience family achievement guilt due to conflict with this mismatch, given that university cultural norms often emphasize independence

(Stephens et al., 2012; Covarrubias & Fryberg, 2015). Therefore, my results provide additional evidence to support the theoretical contribution of the cultural mismatch theory to the experience of family achievement guilt.

I also found that there were no significant differences between first-generation and non-first-generations students in terms of depressive symptoms, anxiety symptoms, or negative affect. These results contribute to a mix of findings regarding first-generation student mental health. Although some researchers have found that first-generation students reported worse mental health compared to non-first-generation students (Jenkins et al., 2013; Stebleton et al, 2014), others have found no differences between these groups of students (Wang & Castaneda-Sound, 2008; House et al., 2020). Though researchers maintain that first-generation students may endure more barriers and challenges while attending university (Bui, 2002; Stebleton et al., 2014) my findings highlight that first-generation status may not be significantly linked to depressive symptoms, anxiety symptoms, or levels of negative affect. Therefore, generational status may not be the most fundamental aspect contributing to psychological ill-being in university students.

Practical Implications

If family achievement guilt is associated with indicators of psychological ill-being, in what ways can excessive family achievement guilt be reduced? Researchers using the cultural mismatch theory have found that promoting diversity on campus helps to reduce negative consequences of a cultural mismatch. For example, Sladek et al. (2020) found that students who watched a video about their university's commitment to cultural diversity displayed significantly lower levels of cortisol reactivity (i.e., an indicator of stress) compared to students who watched a control video about a campus tour. Therefore, it is possible that efforts that promote diversity

and inclusivity on campuses should also minimize psychological ill-being concerns associated with family achievement guilt. Moreover, other researchers have outlined that college counselors should implement logotherapy, a therapeutic technique that emphasizes finding meaning and living purposely, as a means of addressing survivor guilt in first-generation students (Tate et al., 2013). Finally, Greene et al. (2019) found that psychological need satisfaction within parental relationships, a tenet of the self-determination theory (Ryan & Deci, 2017), was negatively associated with family achievement guilt in upcoming university students. Future research should examine if psychological need satisfaction and frustration are related to experiencing family achievement guilt and if promoting psychological need satisfaction may in turn reduce family achievement guilt.

Limitations

There are limitations that should be addressed for my study. First, the design of this study was cross-sectional in nature and therefore only allowed me to gather information from one moment in time. Researchers should examine longitudinal studies in order to study trajectories of change in self-compassion, family achievement guilt, and mental health in university students, or experimental studies to examine if self-compassion exercises or interventions reduce family achievement guilt.

Second, it is possible that social desirability bias may exist in my self-report data. Social desirability bias refers to the tendency for survey participants to respond to questions in a favourable manner, potentially underreporting behaviour deemed negative (Krumpal, 2011). Therefore, participants in my study may have underrepresented their scores on the measures of psychological ill-being. Third, it is possible that these results may not be generalizable to men or other gender identities given the over-proportion of women in the study. Furthermore, my study

recruited from the undergraduate psychology student pool at Carleton University. Therefore, these results may also not be generalizable to other universities across Canada and students in other fields. Finally, another limitation is the lack of previous research on family achievement guilt and the Family Achievement Guilt Scale (Covarrubias et al., 2020). Researchers should continue to examine the score validity and reliability of this scale to ensure construct representation.

Future Directions

My study found that the overall self-compassion score did not moderate the relationship between family achievement guilt and psychological ill-being. Given evidence from previous researchers that some of the sub-scales did act as moderators and others did not (Kelley et al., 2019) researchers should explore whether individual subscales of self-compassion rather than a total score of self-compassion moderate the relationship between family achievement guilt and psychological ill-being.

Additionally, researchers should examine the relationship between family achievement guilt and shame. Guilt and shame are similar self-conscious emotions but differ in intensity, attribution styles, and response. (Tangney & Dearing, 2002; Tracy & Robins, 2006). It is common for researchers to mistakenly conflate these emotions though they are distinct. To my knowledge, the Family Achievement Guilt Scale was not psychometrically evaluated to ensure that items reflect feelings of guilt rather than feelings of shame. Researchers should examine whether items for the Family Achievement Guilt Scale are sufficiently different from shame. Furthermore, future research with family achievement guilt should control for shame in order to see if guilt contributes significantly to psychological ill-being beyond the components that it may share with feelings of shame.

Lastly, there are potential issues with the Family Achievement Guilt Scale that may have caused discrepancies with scoring family achievement guilt. Covarrubias et al. (2020) found evidence of commendable internal reliability, re-test reliability, and convergent and discriminant validity. Nonetheless, the scale has not yet been widely tested by other researchers. One issue with the scale is that, though it is approved for use in both first-generation and non-first-generation students, some items do not apply to non-first-generation students. For example, one item states *"I feel bad that my family didn't have the opportunity to go to university"*, which would not make sense for students whose family did attend university. Additionally, this scale was designed and tested in American university students and may not fully capture the differences between the American and Canadian post-secondary system. Moving forward, researchers could examine the content validity and factor structure of the Family Achievement Guilt scale responses and its applicability to Canadian university student populations to determine the future use of this scale.

Conclusion

The purpose of my study was to examine whether family achievement guilt was associated with psychological ill-being and determine whether self-compassion would act as a buffer (i.e., a moderator) for this relationship. Consistent with my first hypothesis, I found that higher levels of family achievement guilt were associated with greater levels of depressive symptoms, anxiety symptoms, and negative affect. Inconsistent with my second hypothesis, self-compassion did not moderate the relationship between family achievement guilt and psychological ill-being. These results remained non-significant when including first-generation students only. Finally, supplementary analyses revealed that first-generation students reported higher levels of family achievement guilt compared to non-first-generation students, and that

there were no significant differences for psychological ill-being between first-generation students and non-first-generation students. Taken together, findings from my thesis will contribute to the dearth of research on family achievement guilt and its implications for student mental health and well-being. Although I did not find that self-compassion presented significant protective benefits on mental health in the presence of family achievement guilt, it can nonetheless be considered an important positive psychological construct for optimal mental health and psychopathological resistance. Moving forward, ongoing investigation into alternate ways in which family achievement guilt may be attenuated should be explored in an effort to empower and improve the well-being of first-generation students.

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Appendix A: Demographic Questions

1. Are you a Carleton University student?

    A. Yes
    B. No

2. How old are you? _____years old

3. What is the year of your birth? (YYYY) _____

4. What is your gender?
    A. Man
    B. Woman
    C. Other (please specify)
    D. Prefer not to answer

5. Are you an Aboriginal person?

    A. Yes – First Nations
    B. Yes – Métis
    C. Yes – Inuk (Inuit)
    D. No

6. Do you belong to any of the population groups listed below? Please select all that apply.

    A. White
    B. Chinese
    C. South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
    D. Black

E. Filipino
F. Latin American
G. Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai, etc.)
H. Arab
I. West Asian (e.g., Iranian, Afghan, etc.)
J. Korean
K. Japanese
L. Not sure
M. Other (please specify) _____

7. What is your parents' marital status?

A. Married
B. Divorced or separated
C. Never Married
D. Widowed parent

8. What is your current academic level?

A. First year undergraduate
B. Second year undergraduate
C. Third year undergraduate
D. Fourth year undergraduate
E. Fifth+ year undergraduate
F. Masters student
G. PhD student

9. How would you describe your living situation?

A. On campus
B. Off campus and at home with family
C. Off campus but not at home with family

D. Other – Please specify

10. Would your current living situation be different if not for COVID-19?

A. Yes – I would not be living at home with my family
B. Yes – I would be living somewhere different
C. No – COVID-19 has not changed my living situation
D. Other – please specify

11. What is your immediate family household's estimated annual income?

A. Less than $5,000
B. $5,000 to less than $10,000
C. $10,000 to less than $15,000
D. $15,000 to less than $20,000
E. $20,000 to less than $30,000
F. $30,000 to less than $40,000
G. $40,000 to less than $50,000
H. $50,000 to less than $60,000
I. $60,000 to less than $70,000
J. $70,000 to less than $80,000
K. $80,000 to less than $90,000
L. $90,000 to less than $100,000
M. $100,000 to less than $150,000
N. $150,000 and over
O. Not sure
P. Prefer not to say

12. What language is spoken at your home?
A. English only
B. Mostly English
C. ½ English and ½ Other

D. Mostly Other
E. Only Other

If B, C, D, or E, 13. Please specify the other language spoken at home _____	If A, go to Question 14

14. Has either of your parent(s)/guardian(s) been diagnosed with a mental health issue? Please check a box for each parent/guardian (i.e., generalized anxiety disorder, major depressive disorder, obsessive compulsive disorder, etc).

Parent/Guardian 1	**Parent/Guardian 2**	
		Yes
		No
		Not sure
		Prefer not to answer
		Not applicable

15. **Think of this ladder as representing where people stand in Canada.**

At the **top (10)** of the ladder are the people who are the best off – those who have the most money, the most education and the most respected jobs. At the **bottom (1)** are the people who are the worst off – who have the least of money, least education and the least resected job or no job. The higher up you are on this ladder, the closer you are to the very top; the lower you are, the closer you are to the very bottom. **Where would you place yourself on this ladder?**

Please indicate which rung using the drop-down menu below from 1 (bottom rung) to 10 (top rung) where you think you stand at this time in your life, relative to other people in Canada.

Appendix B: First-Generation Student Status

Item 1.

First-generation students are often defined as students who do not have any parent(s)/primary caregiver(s) with a four-year/bachelor's degree. Are you a first-generation student?

A. Yes
B. No
C. Not sure

Item 2.

What is the highest level of education obtained by your parent(s)/guardian(s)? Please check a box for each parent/guardian.

Parent/Guardian 1	**Parent/Guardian 2**	
		Less than high school
		Some high school
		High school diploma/GED
		Diploma or 1-3 years of college
		Bachelor's degree
		Graduate (Master's or PHD)/professional degree
		Not sure
		Prefer not to answer
		Not Applicable

Appendix C: The Family Achievement Guilt Scale

University is a time when students experience a lot of ups and downs. The following statements highlight some challenging emotions students might feel as they compare their experiences in University with their experiences back home. Students might feel these emotions despite the support they receive from close others back home (e.g., parents, legal guardians, siblings).

	Never true				Always true
1. I feel sad when I can't help with challenges back	1	2	3	4	5
2. I feel bothered when I can't help my family because of school	1	2	3	4	5
3. I feel bad for not being able to fulfill my responsibilities back home	1	2	3	4	5
4. I feel sad when I hear about struggles back home while I'm away at university	1	2	3	4	5
I feel bad when my school responsibilities prevent me from helping out at home	1	2	3	4	5
6. I feel bad that I am not there when my family needs me	1	2	3	4	5
7. I worry I am neglecting family or responsibilities back home when I am away at school	1	2	3	4	5
8. I feel frustrated when I am not in the loop about challenges back home	1	2	3	4	5
9. It bothers me when school keeps me from participating in activities back home	1	2	3	4	5
10. I feel bad for focusing on school when there are problems at home	1	2	3	4	5
11. I worry about my family back home since I am not there anymore	1	2	3	4	5
12. I feel bad for leaving home to pursue my interests in university	1	2	3	4	5
13. I feel bad because going to university means many sacrifices from my family	1	2	3	4	5
14. I feel bad that my family didn't have the opportunity to go to university	1	2	3	4	5
15. I feel angry that my family doesn't have access to the same kind of opportunities that I do	1	2	3	4	5
16. I feel sad that I have more opportunities (e.g., learning new material, attending social events) in university than family members have back home	1	2	3	4	5
17. I feel sad that family cannot experience the opportunities I have in university	1	2	3	4	5
18. I feel bad that I have benefits in university (e.g., freedom, privacy) that my family does not	1	2	3	4	5
19. I feel bad that I have it pretty good in university while family members struggle	1	2	3	4	5
20. I feel sad that my family is not exposed to the things I'm learning in university	1	2	3	4	5
21. I feel conflicted that I have more freedom in university than family members have back home	1	2	3	4	5
22. I feel bad when my family thinks that university is changing me	1	2	3	4	5
23. I worry that my family sees me differently now that I am in university	1	2	3	4	5

24. I worry if my family thinks that I'm changing in university.	1	2	3	4	5
25. I worry that my family thinks I am too good for them or smarter than them	1	2	3	4	5
26. I feel frustrated when my family thinks I'm "all that" now that I'm in university	1	2	3	4	5
27. I feel uncomfortable talking about my academic goals in front of my family	1	2	3	4	5
28. I feel sad when my family doesn't seem to understand my university experiences	1	2	3	4	5
29. I feel bad when I disagree with the opinions of my family, even if I keep it to myself	1	2	3	4	5
30. I worry that I won't be able to meet the expectations of my family	1	2	3	4	5
31. I feel pressured to do well so as to not disappoint my family	1	2	3	4	5
32. I worry that I won't be able to succeed in university for my family	1	2	3	4	5
33. I feel bad if my family thinks that I am not doing well in university (e.g., academically, socially, mentally)	1	2	3	4	5
34. I worry that I won't be able to repay my family for their investment in me (e.g., working long hours, educational support	1	2	3	4	5

Appendix D: The Self-Compassion Scale (SCS)

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

	Almost never				Almost always
1. I'm disapproving and judgmental about my own flaws and inadequacies.	1	2	3	4	5
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.	1	2	3	4	5
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.	1	2	3	4	5
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.	1	2	3	4	5
5. I try to be loving towards myself when I'm feeling emotional pain.	1	2	3	4	5
6. When I fail at something important to me I become consumed by feelings of inadequacy	1	2	3	4	5
7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.	1	2	3	4	5
8. When times are really difficult, I tend to be tough on myself.	1	2	3	4	5
9. When something upsets me I try to keep my emotions in balance.	1	2	3	4	5
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	1	2	3	4	5
11. I'm intolerant and impatient towards those aspects of my personality I don't like.	1	2	3	4	5
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.	1	2	3	4	5
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.	1	2	3	4	5
14. When something painful happens I try to take a balanced view of the situation.	1	2	3	4	5
15. I try to see my failings as part of the human condition.	1	2	3	4	5
16. When I see aspects of myself that I don't like, I get down on myself.	1	2	3	4	5
17. When I fail at something important to me I try to keep things in perspective.	1	2	3	4	5

18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.	1	2	3	4	5
19. I'm kind to myself when I'm experiencing suffering.	1	2	3	4	5
20. When something upsets me I get carried away with my feelings.	1	2	3	4	5
21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.	1	2	3	4	5
22. When I'm feeling down I try to approach my feelings with curiosity and openness.	1	2	3	4	5
23. I'm tolerant of my own flaws and inadequacies.	1	2	3	4	5
24. When something painful happens I tend to blow the incident out of proportion.	1	2	3	4	5
25. When I fail at something that's important to me, I tend to feel alone in my failure.	1	2	3	4	5
26. I try to be understanding and patient towards those aspects of my personality I don't like.	1	2	3	4	5

Appendix E: The Center for Epidemiologic Studies Depression Scale (CES-D)

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually don't bother me.				
2. I did not feel like eating; my appetite was poor.				
3. I felt that I could not shake off the blues even with help from my family or friends.				
4. I felt I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				
7. I felt that everything I did was an effort.				
8. I felt hopeful about the future.				
9. I thought my life had been a failure.				
10. I felt fearful.				
11. My sleep was restless.				
12. I was happy.				
13. I talked less than usual.				
14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				
18. I felt sad.				
19. I felt that people dislike me.				

Appendix F: The Positive Affect Negative Affect Schedule (PANAS)

*This scale contains a number of words describing different feelings and emotions. Indicate to what extent **YOU** generally felt this way in the **past 7 days (week).***

	1 Very slightly or not at all	2 A little	3 Moderately	4 Quite a bit	5 Extremely
1. Distressed					
2. Alert					
3. Scared					
4. Determined					
5. Afraid					
6. Nervous					
7. Excited					
8. Upset					
9. Inspired					
10. Enthusiastic					

Appendix G: Beck Anxiety Inventory (BAI)

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by that symptom during the past month, including today, by circling the number in the corresponding space in the column next to each symptom.

	Not at all	Mildly, but it didn't bother me much	Moderately – it wasn't pleasant at times	Severely – it bothered me a lot
Numbness or tingling				
Feeling hot				
Wobbliness in legs				
Unable to relax				
Fear of worst happening				
Dizzy or lightheaded				
Heart pounding / racing				
Unsteady				
Terrified or afraid				
Nervous				
Feeling of choking				
Hands trembling				
Shaky / unsteady				
Fear of losing control				
Difficulty in breathing				
Fear of dying				
Scared				
Indigestion				
Faint / lightheaded				
Face flushed				
Hot / cold sweats				