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DO PERCEPTIONS OF PARENTAL GOAL PROMOTION AND AUTONOMY

SUPPORT EXPLAIN THE RELATIONSHIP BETWEEN GENERATIONAL

STATUS AND ACADEMIC PROCESSES AND OUTCOMES?

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DO PERCEPTIONS OF PARENTAL GOAL PROMOTION AND AUTONOMY
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A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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DEDICATION

This dissertation is dedicated to my beloved husband, James Murdock, Jr. I believed that with God all things were possible. You believed in me. As long as we go through things together we will be all right. I cannot imagine another man on the earth that could have the kind of love, patience, strength, perseverance, and endurance that you have shown me. Truly, love bears all things, believes all things, hopes all things, and endures all things. You never complained (much), you were always ready to give a word of encouragement or help out where you could. We did not always agree, but you allowed me to be me the only way I know how and I am grateful. We have shared so much. I look forward to all the years ahead that I have with you. I love you with all my heart. Thanks for being you too. P. S. No more "Dallas".

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ABSTRACT

The term "first-generation" has long been used in the literature as a descriptive term to identify a subpopulation of college students who may experience obstacles toward earning their degree in part because of the disadvantage of having neither parent nor primary caregiver earn a four-year college degree. Prior research has identified "who" first-generation students are and the obstacles they face toward degree completion. However, less is known about the underlying factors which contribute toward the behaviors of first-generational students reported in the literature. Hierarchical multiple regression analyses were conducted to determine if a relationship exists between generational status, parental autonomy, and parental goal support, on one hand, and student aspirations, approaches to learning and GPA on the other. Participants were 890 undergraduate students who completed a booklet with five questionnaires. These questionnaires included a demographic questionnaire, Parental Goal Promotion, Parental Autonomy Support, Approaches to Study Skills Inventory for Students (ASSIST), and an Aspiration Index. My analyses showed no differences between FG and non-FG students on any of the above mentioned variables. Results of the study indicated that intrinsic parental goal promotion emerged as a statistically significant positive predictor of student intrinsic aspirations and strategic approaches to learning. Also, parental autonomy support was found to be a significant positive predictor of students' self-reported deep and strategic approaches to learning.

Keywords: first-generation, parental autonomy, parental goal promotion, student aspirations, approach to learning, academic achievement

CHAPTER ONE: INTRODUCTION

Research indicates that it is more difficult for first-generation (FG) college students to adjust to college life than non-first generation (NFG) students. Compared to their NFG counterparts, FG students are less likely to achieve academically (Pascarella, Pierson, Wolniak, & Terenzini, 2004) are more likely to drop out of school (Próspero & Vohra-Gupta, 2007) and are less likely to re-enroll at a later time after discontinuing their college education (Ishitani, 2006). This is unfortunate as there is evidence suggesting that those individuals who are least likely to complete college are the same ones who would be more likely to benefit economically in the long-run by obtaining a college degree (Brand & Xie, 2010). Moreover, research suggests that those FG students who remain in school exhibit cognitive outcomes that are comparable to NFG students (Pascarella et al., 2004).

The question driving this dissertation is "Why are FG students more likely to underperform academically and experience lower retention and graduation rates than NFG students?" Researchers have examined a number of possible psychological and non-psychological contributors to these behaviors. High on the list of factors researchers have linked to achievement and retention in college are self-efficacy, self-regulation, family income, educational aspirations, college integration, academic preparation, and academic engagement (Lee, Sax, Kim, & Hagendom, 2004; Pike & Kuh, 2005; Williams & Hellman, 2004). Nevertheless, much of this research has been rather a-theoretical in nature with emphasis placed on identifying differences on background characteristics and college experiences between FG and NFG students. Research that has been driven more explicitly by theoretical considerations has tended

to address rather small sets of factors that may intervene between generational status and college outcomes. To date, research suggests that FG students tend to exhibit greater financial struggles (Bui, 2002); lower levels of self-efficacy (McMurray & Sorrells, 2009; Ramos-Sánchez & Nichols, 2007); lower levels of integration into college life (Dolan, 2007; Engle, 2007; McKay & Estrella, 2008; Pike & Kuh, 2005); and less knowledge about college, as compared to NFG students (Collier & Morgan, 2008; Engle, Bermeo, & O'Brien, 2006; Giancola, Munz, & Trares, 2008).

The purpose of my study is to go beyond these findings by (a) providing a more comprehensive analysis of differences between FG and NFG students in terms of their perceptions of their parents' and their aspirations for the future and (b) addressing whether variation in these perceptions and aspirations may explain variation in students' achievement-related outcomes.

In my review of previous research on the relationship between generational status and college outcomes, I found very little concerning the role of student goals and aspirations, parental autonomy, parental goal promotion and their relationships to college outcomes in one study. However, there is research that has examined aspects of these factors in other studies. For example, Lee, Sax, Kim & Hagedorn (2000) conducted research regarding the influence of parental education on first-generation status. There is also some research (e.g. Addington, 2005; Pike & Kuh, 2005) which supports the claim that FG students tend to have lower educational aspirations than NFG students. In addition, there is research (Bui, 2002) suggesting that FG students are more likely than NFG students to report attending college for extrinsic reasons such as gaining respect or status and to financially help their family after college completion.

Moreover, a study by Schlechter and Milevsky (2010) suggested that college freshmen of higher, as opposed to lower, educated parents tend to endorse "societal expectations" as a reason for going to college. Nevertheless, it is unclear whether these findings might represent differences between FG and NFG students or whether they represent differences concerning broader aspirations (i.e. intrinsic or extrinsic).

Additionally, to my knowledge no research has been conducted to date that addresses whether FG and NFG students differ in their perceptions of their parents as (a) promoting intrinsic or extrinsic goals or (b) engaging in autonomy supportive behavior which has been linked to student aspirations and approaches to learning. Furthermore, it is unclear whether differences in these perceptions might also explain the relationship observed in previous studies between generational status and college academic outcomes. In general, my dissertation is designed to address these gaps within the literature.

Before continuing, it is necessary for me to define what I mean by "first-generation" and "non-first-generation" students. Within the literature, the term "first-generation" has been used in various ways (Pike & Kuh, 2005). Some researchers (e.g. Billson & Terry, 1982; Bui, 2002; Williams & Hellman, 2004) have used "first-generation" to denote that neither parent of a college student had any educational experience beyond high school. Glenn (2008) used the term first-generation to refer to students with neither parent having completed an associate or bachelor's degree. Barry, Hudley, Kelly and Cho (2009, p.56) defined the term first-generation as "students who are in the first generation of their family to attend a four-year institution of higher education." Other researchers (e.g. Engle, 2007; Giancola, Munz, & Trares, 2008; Ishitani, 2003;

Martinez, Sher, Krull, & Wood, 2009; Pike & Kuh, 2005; Próspero & Vohra-Gupta, 2007) have used the term to indicate that neither parent has *completed a college degree*, implying that a child's parents may have attended but not completed their education. In line with these researchers, students whose parents or caregivers have not completed a four year college degree will be used in the present study to define first-generation status.

First generation students, despite their best efforts, succumb to obstacles which prematurely terminate their plans to achieve higher education. Parents with college degrees may be their child's greatest asset. Fram, Miller-Cribbs and Van Horn (2007) suggested that parents with college degrees may possess a better understanding of the educational system and therefore a better understanding regarding what it takes to be successful in a college environment. Knowledge of the educational system may influence the use of parenting practices which model and teaches strategies that more closely resemble the "instructional strategies of academic classrooms" (Laosa, 1982, p. 791) .

Saljo (1979, p. 450) stated:

> "However, it is evident from the data that the transition from upper-secondary school to university is a process which for many results in the realization of the complex nature of the phenomenon of learning: students perceive learning in a university context to be very different from learning at earlier stages".

These findings are supported by other research. Addington (2005) conducted research which suggested that maternal education is linked to their child's aspirations. In the study (Addington, 2005) mother's level of education was positively linked to adolescent aspirations. It may be that parents who have not completed a college degree

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do not have an in-depth understanding of the learning process or come to the realization that learning in a university context is very different from learning in primary, junior high or high school. Therefore, it is less likely that FG students possess this knowledge. There have been few efforts on the part of researchers to develop psychologically-informed theoretical models that may help to bridge the gap between notions of social, cultural, and academic factors and differences in college outcomes between FG and NFG students.

The purpose of this dissertation is to take a step in that direction by testing a theoretical model aimed at explaining how parental goals for, and styles of interaction with, their children may explain the achievement gap between FG and NFG students. Specifically, I suggest that parental goal promotion (i.e. intrinsic and extrinsic) parental autonomy support and aspirations may be important links between generational status and achievement related outcomes.

The issue here may be that the academic and study skills of FG students are in some way different from those of NFG students. It seems possible that the interaction of socioeconomic (SES), generational status, and parenting behaviors may lead to differing academic pathways for FG and non FG students. The academic pathway of the FG student seems less likely to lead to academic success (Goldrick-Rab, 2006). If it were possible to control for ability and institutional quality, the influence of SES and social class disadvantage should diminish as children matriculate through the educational system (Walpole, 2003). However, this is not the case. It appears that SES continues to exert a strong influence on students in postsecondary educational institutions resulting in more negative achievement outcomes for lower-SES students (Walpole, 2003).

As indicated above, the research literature has shown that SES is a reliable correlate of college students' generational status. Moreover, the research literature indicates that SES substantially correlates with parenting styles (i.e. autonomy support and parental goal promotion).

FG students characteristically have low socioeconomic backgrounds (Bui, 2002) and low academic achievement (Engle & Tinto, 2008; Williams & Hellman, 2004). In addition, FG students have poor pre-college characteristics including lack of rigorous coursework (Engle & Tinto, 2008; Kuh, 2007; Payne & Corrin, 2009), inadequate math skills (Conley, 2007) and low class rank (Engle, Bermeo & O'Brien, 2006; Ishitani, 2006). This being said, Engle (2007) argued that the challenges and poor academic outcomes faced by first-generation college students cannot be sufficiently explained by examining the influences of demographic, pre-college academics, or enrollment characteristics. When controlling for these variables, FG status alone has been shown to be a major risk factor resulting in poor academic outcomes (Engle, 2007).

The negative consequences of FG students having these characteristics are well documented in the literature and include low graduation rates (Collier & Morgan, 2008; Ishitani, 2006; Kuh, 2007) and premature departure at the end of the first year (Ishitani, 2003; Pascarella et al., 2004; Somers, Woodhouse & Cofer, 2004). Increasing retention and graduation rates for FG students will require an understanding of the factors which contribute toward these characteristics.

In this dissertation study, I propose an alternative perspective for understanding the typology of the FG construct as it relates to academic endeavors. This perspective involves venturing into areas of research that have not been studied with regard to FG

students. It is an ambitious undertaking which contends that academic differences in generational status are partly explained by the influence of parental factors. These parental factors are hypothesized to vary with regard to generational status and parental income (i.e. an SES indicator). Specifically, the main question is as follows: does parental goal promotion (i.e. intrinsic or extrinsic goals), parenting styles (i. e. those that support or hinder individual autonomy) and generational status influence students' approaches to learning (i.e. deep, strategic, and surface), aspirations, and GPA. As far as I can ascertain, these links do not exist in the literature pertaining to FG students.

Rationale for the Present Study

The rationale for the present study is that understanding hypothesized links between parental factors, student aspirations and approaches to learning may advance the field of knowledge pertaining to generational status. Also, this new approach may inspire different avenues for providing assistance to FG students in overcoming their obstacles to academic achievement. This dissertation builds on student approaches to learning, parental autonomy, parental goal promotion, and aspiration research. I contend that FG and NFG college students adopt different orientations toward academics and education partly as a result of differences in parental influences, their personal aspirations, and their approach to learning.

Problem Statement

A considerable body of research has examined the relationship between generational status and college-related outcomes such as academic self-regulation (Naumann, Bandalos, & Gutkin, 2003; Williams & Hellman, 2004) achievement (Engle & Tinto, 2008) academic integration (Pike & Kuh, 2005; Prospero & Vohra-Gupta, 2007;

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Somers et al., 2004) and social integration (Harrell & Forney, 2003; McMurray & Sorrells, 2009). Despite this research, there have been few attempts to provide clear, developmental and social-psychological accounts of these associations. This is problematic because "generational status", as has been discussed in the literature is little more than a descriptive term for a sub-population of college students. As such, this demographic factor fails to adequately capture the intra-group variation present on relevant factors that may impact college adjustment or provide an effective explanatory account of what produces differences in adjustment between this group and non-first generation students.

Research Questions

1) (a) Is generational status related to approaches to learning (i.e. deep, superficial, strategic) student aspirations (i. e. extrinsic, intrinsic) and achievement (i.e., GPA) in college? (b) Does parental goal promotion mediate the link between generational status and student aspirations?

2) Is the relationship between generational status and approaches to learning, aspirations and achievement in college accounted for by family income?

3) Is the relationship between generational status and family income (on the one hand) and approaches to learning, aspirations, and achievement (on the other) accounted for by parental goal promotion (i.e. intrinsic, extrinsic) and parental autonomy support?

CHAPTER TWO: LITERATURE REVIEW

As noted in the introduction, the goal of this dissertation is to introduce a new perspective which will attempt to explain previous findings regarding the relationship between generational status and academic outcomes. In this study, I attempt to move beyond the focus on generational status as a descriptive variable by providing an alternative explanation to account for the academic disparity between FG and non-FG students. The literature review will provide a discussion of student approaches to learning and its documented association with a) academic outcomes and b) intrinsic and extrinsic orientations. Additionally, I will discuss the role of SES and the family, parental autonomy and parental goal promotion in student academic achievement. Finally, I will discuss student aspirations (i.e. intrinsic and extrinsic) and their relationship to academic functioning as well. In my study, approaches to learning and student aspirations are two of the three key outcome variables (the other being GPA) predicted by generational status, parental autonomy, and parental goal promotion. I conclude the review with my hypotheses for the study.

Approach to Learning

Researchers consistently report findings which suggest that FG students have lower academic achievement, lower retention, and lower graduation rates in college than NFG students. One reason for these findings (Pike & Kuh, 2005) is evidence that FG students lack adequate prior preparation to undertake college coursework. Pike and Kuh (2005) suggested that FG students often lack exposure to advanced placement courses or rigorous coursework in high school. For this reason, FG students undertaking college coursework often find it challenging. The challenging nature of college

coursework subsequently results in lower academic performance. However, another possible reason for the academic disparity between FG and NFG students may lie in differences to their approach to learning. Approach to learning is an unexplored area of research with regard to FG students that warrants investigation.

Over the course of their educational career, individuals develop an orientation toward the learning process that is considered to be relatively stable. In one study, (Duff, Boyle, Dunleavy & Ferguson, 2004) used a Revised Approaches to Studying Inventory (RASI) with undergraduate college students. One of the findings of this study (Duff et al., 2004) was that students demonstrated learning orientations that appeared to be a subset of their personality. Duff et al. (2004) stated, "In conclusion, this investigation reports that an individual's learning orientation, and therefore their approach to learning, is partially determined by their personality" (p. 1918). This finding, that individual learning orientations vary, is not new. Earlier research reported by Entwistle, Hanley, and Hounsell in 1979 reported similar findings.

Entwistle et al. (1979) noticed a major weakness in their review of early research using academic performance scales. According to Entwistle et al. (1979, p. 365) "These scales showed consistent but rather low correlations with academic performance. Their greatest weakness was an over-simple description of study methods, through a failure to take account the existence of very different approaches to studying used by students." The observation that Entwistle et al. (1979) made was that students appeared to have "very different ways of studying" (p. 366). Marton (1975) reported similar findings with regard to the ways students approached learning tasks. Researchers (e.g. Marton, 1975; Marton, Hounsell, & Entwistle, 1985) suggested that students experiencing the

same learning conditions, and given the same learning task, exhibited varying levels of learning outcomes. Matron (1975) concluded that the process of learning that students undertook was a major factor in their academic achievement. The observations made by Entwistle et al. (1979) led to the development of the approach to learning theory.

   Entwistle et al. (1979) suggested that the process of learning is first initiated by the approach the learner chooses to take to accomplish a specific learning task; hence the term "approaches" to learning.

   Entwistle et al. (1979) initially conceptualized approach to learning as a construct that had two dimensions. The dimensions reflect the learner's choice of how to approach a learning task. Entwistle et al. (1979) labeled these dimensions deep and surface approaches to learning. The dimensions were adopted using terminology from Craik and Lockhart's levels of processing theory (Entwistle et al., 1979). A third approach, a strategic dimension was added at a later date. Diseth and Martinsen (2003, p. 195) stated, "Approaches to learning refers to individual differences in intentions and motives when facing a learning situation, and the utilization of corresponding strategies. Understanding an individual's intentions toward a learning task is important. According to Beattie, Collins, & McInnes (1997, p. 6) ". . . what a student intends to get out of learning determines whether a deep or surface approach will be used. The approach used, in turn, determines the level of performance."

Deep Learning Approach

   The first dimension of the approach to learning theory involves a deep learning approach. A deep approach to learning is characterized as being a learning process in which a student is actively engaged in using information-seeking strategies (Diseth &

Martinsen, 2003). Students using deep level processing seek ways to understand learning material so that they can apply it in future situations. Diseth (2003) and Kember, Leung, and McNaught (2008) suggested that examples of deep level processing include an attempt to understand key concepts or the underlying meaning of course material; identifying relationships between concepts to form coherent knowledge structures from seemingly isolated facts (i.e. seeing the bigger picture); and relating new knowledge to prior knowledge or personal experiences. Deep level processing has been linked to intrinsic motivation (Serife, 2008) and is associated with a higher academic achievement.

Surface Learning Approach

The second dimension of the approach to learning theory is a surface learning approach. A surface approach is characterized as an approach to learning that involves giving the least amount of time or effort to a learning task (Kember et al., 2008). Also, a minimum personal investment is more likely to result in a lack of understanding of key concepts (Kember et al., 2008). In addition, individuals with a surface approach to learning rely almost exclusively on rote memorization (Diseth, 2003). The individual's intent is to reproduce isolated facts and bits of knowledge which are required to receive a passing grade (Kember et al., 2008). Diseth (2003) suggested that individuals using a surface approach to learning are driven by a "fear of failure". For example, Diseth (2003) and (Duff & McKinstry, 2007) have suggested that an individual may need to pass a test or exam, but find the course material uninteresting. Therefore, the individual does not possess an intrinsic reason for doing well in the course. In this instance, memorizing material may help the individual having an extrinsic need to pass the

course. However, the memorized information is not likely to be retained (Diseth, 2003). Students who perceive that they are being asked to accumulate a lot of unrelated facts that have little or no interest to them are more likely to adopt a surface approach to the learning task. Serife (2008) also suggested that a surface approach is more likely to be used by students who are experiencing high workload demands.

Strategic Learning Approach

The third dimension of the approach to learning theory is the strategic learning approach. According to Diseth and Martinsen (2003) the strategic approach to learning is not characterized by the use of distinct learning strategies. A strategic approach to learning was included in the approach to learning theory to describe an individual who is not interested in learning material in a course, but wants to get high grades. Individuals using strategic approaches to learning are driven by a need to achieve and will use either surface or deep strategies to accomplish this goal (Beattie et al., 1997; Diseth & Martinsen, 2003). The strategic learning approach is characterized as being very organized and methodical.

Approach to learning has been widely used to assess college student learning in higher education (Prosser, 2004). According to Prosser (2004) the approach to learning theory has become known as the "student learning perspective on teaching and learning in higher education (p. 51)." Approach to learning proposes that learning and the contexts in which learning takes place have a reciprocal relationship. It has been suggested that students adopt different approaches to learning based on their perception of the learning context. This has led researchers to use approach to learning to inform higher educational practices (Prosser, 2004).

In particular, research (Serife, 2008) and (Swanberg & Martinsen, 2010) has shown that approaches to learning can influence student academic performance. For example, Swanberg and Martinsen (2010) stated that deep and strategic approaches to learning were positively associated with course grades and surface approaches were negatively associated with course grades. However, (Kember, Jamison, Pomfret, and Wong, 1995) have argued that the relationship between approaches to learning and academic performance is not as simple as researchers have reported in the literature. For example, Kember et al. (1995) suggested that student motivations for learning play a significant role in the amount of work a student is willing to put into a course.

Nevertheless, Kember et al. (1995) also reported that students can adopt more than one approach to learning. For example, Kember et al. (1995) reported that surface approaches to learning were insufficient for learning in some engineering courses. Students using surface approaches were able to do well in the course if they studied longer hours. However, Kember et al. (1995) stated that a deep approach to learning would have been a more effective approach. While surface approaches to learning have been associated with lower quality learning outcomes, Entwistle et al. cautioned that all of the dimensions should be treated as valid approaches to learning. However, problems can arise when rote learning and memorization are the only approaches to learning that students know. According to Kember et al. (1995) "if students fail to distinguish important underlying principles from examples, illustrations and interesting asides, then they are left with memorizing as much of the material as they can manage" (p. 336).

The remainder of this chapter will provide a more in-depth review of the association between generational status, family income, parental autonomy support and parental goal promotion and their potential roles in college students' aspirations and academic achievement. This will set the stage for the regression analyses I propose in my study where I plan to address the question of whether parental autonomy support and goal promotion explain the association between generational status and the associated factor, family income, on the one hand, and achievement-related variables on the other.

Role of Parents, Family Income and Socialization

A second aim of this dissertation is to test whether generation status, again a factor that covaries with family income (i.e. a SES indicator) is associated with differences in parental autonomy support. Titus (2006) conducted a study using 1996-2001Beginning Postsecondary Student (BPS) survey data. The findings of the study (Titus, 2006) suggested that SES was positively linked to college completion. In addition, SES has been suggested as having a strong influence on parenting beliefs and subsequently on the value beliefs that children adopt. In support of this claim, Spera (2006) stated, "socioeconomic and social-contextual factors can also influence the values that people acquire" (p.908). Spera (2006) continued by stating, "the socialization goals that parents hold for their children drive the socialization process, leading parents to enact different types of parenting behaviors and ultimately influencing adolescent school outcomes" (p.459). It may be, as Spera (2006) suggested, that low SES and high SES parents share similar educational goals and aspirations for their children. However, children can have different adolescent outcomes partly due to differences in parenting styles which may be mediated by SES. Less clear is how completing college (assuming

satisfactory academic progress), is related to parental factors (i.e. parental autonomy and parental goal promotion). Parental autonomy and parental goal promotion are part of the global concept of parenting style.

Darling and Steinberg (1993) conceptualized parenting style "as a characteristic of the parent that alters the efficacy of the parent's socialization efforts by moderating the effectiveness of particular practices and by changing the child's openness to socialization" (p.488). As a result of different pathways that socialization can take, parents can adopt either autonomy supportive or psychologically controlling parenting styles (Soenens & Vansteenkiste, & Sierens, 2009). Of interest in the present study is the influence of parental autonomy support. However, I will first provide a brief overview of autonomy and its importance to academic achievement.

Autonomy is conceptualized as the ability (and opportunity) one has to regulate one's own behavior (Duriez, Soenens, & Vansteenkiste, 2007; Noom, Dekovic, & Meeus, 1999; Soenens, Vansteenkiste, Duriez, & Goossens, 2006). In other words, autonomy infers that individuals perceive that their actions have been initiated "from their core sense of self" (Grolnick, Ryan, & Deci, 1991, p. 509) as opposed to being initiated by an outside source (i.e. parents or teachers). Autonomy gives individuals a sense of freedom in making decisions. The freedom to make decisions may be liberating for individuals who may see the directives of others as being controlling or restrictive. The need and pursuit of autonomy is seen as a healthy and adaptive developmental phase that coincides with the transition into adolescence. However, adolescents need parental support to aid their ability to successfully become autonomous adults.

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Parental Autonomy

Parental autonomy support has been conceptualized (Soenens, Lens, Luyckx, Goossens, Beyers, & Ryan, 2007) "in terms of the encouragement of adolescents' enactment upon their true personal interests and values" (p. 633). Parents adopting an autonomous supportive parenting style are characterized as being warm, involved, and providing structure and discipline (Davis-Kean, 2005). Consistent with this finding, Andersen et al. (2000) stated that needs for "tenderness, warmth, emotional responsiveness, and acceptance" (p. 270) may be primordial. If this is so, then, parental warmth and emotional responsiveness may provide the optimal environment for adaptive social development. According to Andersen et al. (2000) "we argue as well, based on evidence obtained in the context of self-determination theory that the need for relatedness coexists with the need for autonomy" (p. 270). Children who are nurtured in warm and emotionally responsive environments with parents adopting a more authoritative parenting style (i.e. by providing opportunities for autonomous behavior) should behave "in a more integrated and intrinsic way" (Andersen, et. al. 2000, p. 270). Parenting styles that characterize autonomy granting behaviors are thought to be separate constructs from parenting styles that are characteristic of more psychologically controlling behaviors (Silk, Morris, Kanaya & Steinberg, 2003).

Parental autonomy granting behaviors focus on the needs of the child, whereas psychologically controlling parenting behaviors focus on the psychological needs of the parent to control and dominate their child often to meet their own needs (e.g. Barber, 1996; Soenens et al., 2005). Middle class parents have been found to value the internalization of instructions in their children and tend to adopt parenting styles

designed to develop more personal motivations (Kohn 1977, as cited in Kellerhals et al. 1992).

Kasser, Ryan, Zax and Sameroff (1995) suggested that mothers from low SES backgrounds are more inclined to value conformity rather than allow their children to develop self-direction. Children growing up in such controlling family environments are more likely to be taught that their desires should come second to the demands of others (Kasser et al., 1995). Parenting styles that use controlling and rigid forms of discipline are also characterized as engaging in very little communication with the child and sharing few activities (Kellerhals et al.1992).

Psychological control is defined (Barber, 1996, p. 3296) as "control attempts that intrude into the psychological and emotional development of the child (i.e. thinking processes, self-expression, emotions, and attachment to parents). Whereas behavioral control (Barber, 1996, p. 3296) is defined as "parental behaviors that attempts to control or manage children's behavior." These forms of parenting are very controlling and do not provide autonomy support.

However, authoritative parenting has been linked to strong school performance (Lamborn & Felbab, 2003). Renk, McKinney, Klein and Oliveros (2006) suggested that the key elements of an authoritative parenting style are high levels of democracy, warmth, and demandingness. The nature of authoritative parenting makes this style of parenting very time consuming and energy-demanding (Greenberger & Goldberg, 1989). Therefore, it is no wonder that some family systems adopt less strenuous parenting styles which may be more compatible with their other commitments (i.e. work schedule, parenting other siblings, being a single parent). However, the adoption of

other parenting styles seems to compromise the academic achievement of children. For example, parenting styles that were more neglectful were linked to the use of more maladaptive task avoidant strategies in students. Aunola, Stattin and Nurmi (2000) found that the achievement strategies used by students mediated the link between parental styles and academic achievement. It could be that parenting styles that promote autonomy may also lead children to take "ownership" of their academic career. Children from authoritative families are characterized as having low levels of failure expectations, less task-irrelevant behaviors and low levels of passivity (Aunola, et al., 2000). Children with autonomy supportive parents seem to be better able to view their education as a further step toward independence and self-reliance as opposed to a belief that their educational pursuit is an extension of their parent's continuing control and domination of their lives. For example, in a study of college student achievement motivations and perceptions of parenting styles, Turner, Chandler and Heffer (2009) reported a positive link between parental autonomy support, intrinsic motivation, and academic achievement.

The need and pursuit of autonomy is seen as a healthy and adaptive developmental phase that coincides with the transition into adolescence. However, adolescents need parental support to aid their ability to successfully become autonomous adults.

Parental Goal Promotion

Parental goal promotion refers to the types of goals that parents encourage their children to adopt (Duriez et al., 2007). Kim, Schallert and Kim (2010) have linked parenting styles, students' goal orientations, and academic achievement. Recently,

researchers (Duriez et al., 2007; Vansteenkiste et al., 2005) have emphasized two general classes of goals that parents promote: intrinsic and extrinsic goals.

A goal promotion represents a type of goal that individuals pursue (i.e. self-development, community contributions, and financial gain) as opposed to the reasons why they are choosing to pursue those goals (i.e. motivations). Goal pursuits are conceptually different constructs from goal motivations (Duriez et al., 2007). In this dissertation, intrinsic goal pursuits convey that individuals are pursuing goals for their own sake or the fulfillment they receive from engaging in those pursuits. Individuals pursue extrinsic goals for reasons other than the actual activity in which they are engaged (Duriez et al., 2007). I speculate that parental goal promotions have been internalized by their college age children. In turn, parental goal promotions are assumed to impact achievement-related behaviors and outcomes.

Given these bodies of research, I suspect that parental autonomy support may help to explain the previously documented associations between generational status and SES and academic outcomes. Parents adopting autonomy supportive parenting styles may increase the likelihood that their child will intrinsically develop the desire to continue their personal growth and development in college. Having an intrinsic motivation to pursue a college degree makes it more likely that students will utilize approaches to learning which enhance their chances of success. However, it is reasonable to assume that the approaches to learning utilized by first-generation students may be different from those utilized by NFG students.

Student Aspirations

Again, direct links are documented in the literature between income, generational status, and achievement outcomes. However, broader links between these variables and student aspirations are hypothesized in this dissertation as no studies were found in the literature which examined such links. Lekes, Gingras, Philippe, Koestner and Fang (2009) stated that children of parents having autonomy supportive parenting styles were more likely to endorse intrinsic life goals or aspirations. According to Vansteenkiste (2005, p.484) "environments that emphasize intrinsic versus extrinsic goal contents should have the same functional effects on learning and achievement as individuals' pursuit of intrinsic versus extrinsic goals." There is research (e.g. Vansteenkiste et al., 2005; Vansteenkiste et al., 2008) which linked intrinsic goal framing to a deeper processing of study material in elementary school children. Serife (2008) suggested that students who are intrinsically motivated because they find a learning task enjoyable will adopt a deep approach to learning. They seek to gain understanding and acquire knowledge for growth and future use. According to Serife (2008) "they adopt an intrinsic motivation to learn with an intellectual curiosity rather than looking for external rewards" (p. 712). Vansteenkiste, Simons, Lens, Soenens, Matos, and Lacante (2004) also found that extrinsic goals appeared to distract undergraduate students from performing well on learning tasks. Results of their study (Vansteenkiste et al., 2004) suggested that undergraduate students were less involved with learning tasks when an extrinsic goal orientation was introduced into an intrinsically goal oriented learning situation. This finding was replicated in a more recent study (Vansteenkiste, Timmermans, Lens, Soerens, & Broeck, 2008) with elementary school aged children.

The adoption of extrinsic goals may eventually undermine the pursuit of a college

degree by fostering the adoption of ineffective learning strategies (Vansteenkiste et al.,

2008). Similar findings (Andersen et al., 2000) linked extrinsic pursuits to diminished

interest and perseverance.

Extrinsic goals seem to shift the learners' attention toward more "rote and narrow

minded" (Vansteenkiste et al., 2008, p. 394) approaches to learning. To the extent that

FG students hold extrinsic life goals, these should in turn exert a negative impact on the

adoption of deep approaches to coursework.

In Summary

The gap between FG and NFG achievement outcomes has shown minimal signs of

abating despite extensive research identifying FG characteristics linked to low academic

achievement. As previously indicated, these factors include financial difficulties (Chen

& Carroll, 2005) premature college termination (Chen & Carroll, 2005; Dietsche, 2007)

low social and academic integration (Tym, McMillion, Barone, & Webster, 2004) and

low graduation rates (Collier & Morgan, 2008; Ishitani, 2006; Jenkins, Miyazaki, &

Janlsik, 2009). Prior research has spawned a plethora of remedial college courses and

programs designed to meet the academic needs of FG students (e.g. Chen & Carroll,

2005). Indeed, the problems facing FG students have been approached from many

different angles. Despite knowing "what" behaviors seem indicative of low FG

academic success, less is known regarding "why" FG behaviors seem to persist. In this

dissertation, I propose an alternative explanation that FG characteristics are outward or

perceptible indications of underlying socialization processes which have their origins in

parental socializing behaviors (i.e. parental autonomy support and parental goal

promotion) which are influenced by family income, student aspirations, and student approaches to learning.

Hypotheses

For my dissertation, I am hypothesizing the following:

1. Clear and distinct patterns will emerge (a) with regard to FG and NFG students reported approach to learning (i.e. deep, superficial, strategic) student aspirations (i.e. extrinsic, intrinsic) and achievement (i.e. GPA) (b) FG students will report significantly greater parental promotion of extrinsic goals than NFG students.

2. FG students will report significantly less parental promotion of intrinsic goals than NFG students.

3. FG students will indicate significantly lower levels of deep approaches to learning than NFG students.

4. The GPAs of FG students will be significantly lower than those of NFG students

5. Different patterns of relationship will emerge between generational status, family income, approaches to learning, aspirations and achievement in college.

6. Reported parental promotion of intrinsic and extrinsic goals and autonomy support will significantly predict approaches to learning (particularly a deep approach to learning) and GPA.

CHAPTER THREE: RESEARCH METHODOLOGY

Sample

This study utilized a convenience sampling of undergraduate students obtained from several undergraduate courses in psychology and education from three public universities in the mid-western United States. A total of 890 students were included in the study. A total of 370 students were recruited from the first university site, 97 students were recruited from the second university site, and 369 students were recruited from the third university site. Of this number, participants were eliminated for various reasons (i.e. not being an undergraduate student, being an international student, not indicating caregiver's highest level of education, or too much missing data). Among the participants eliminated from the study, 31 were not undergraduate students; 2 participants were in undergraduate classes but pursuing a second bachelor's degree; 12 participants did not indicate the highest level of education of their primary or secondary caregiver and generational status could not be determined; 3 participants were international students; 1 participant was from the middle east; 2 participants had survey packets with too much missing data, and 1 participant did not complete any demographic information. The remaining 838 participants were included for analysis in this study. First-generational status was determined by participants with neither parent nor caregiver having attained a bachelor's degree or higher education. A crosstabulation summary performed with SPSS showed that 33.29% (278) participants were categorized as first-generation and 66.71% (556) participants were categorized as non-first-generation. Female and male summary statistics are displayed in Table1.

TABLE 1   Male and Female Demographic Summary

		Gender		
		Total	Female	Male
Generational Status	FG	278	186	91
	NFG	556	365	191
Total		834	551	282

Summary statistics for participants by cultural background are provided in Table 2.

TABLE 2   Cultural Demographic Summary

	African-American	Asian-American	Hispanic-American	Native-American	White	Other	Total
Generational FG Status	68	14	23	25	141	8	279
NFG	84	21	27	34	377	14	557
Total	152	35	50	59	518	22	836

Instruments

Below is a description of the measures used in this study. Internal consistency
estimates from this sample are included in the results section.

Promotion of Independence and Promotion of Volitional Functioning Scale

Parental autonomy support was measured by the Promotion of Independence and
Promotion of Volitional Functioning Scale (Soenens et al., 2007). The present study
used the Promotion of Independence (PI) subscale to assess participant perceptions of
parental autonomy support. The PI subscale measured parental autonomy granting
behaviors (nine items). The instrument consisted of items which were adapted from
scales used in studies by Silk et al (2003) and Grolnick et al. (1997). The items were
modified in the present study to be rated using a six-point Likert scale instead of a five-
point Likert scale. The scale ranges from 1 (strongly disagree) to 6 (strongly agree).

Assessing the autonomy support perceived from the primary caregiver provided a
clearer picture as to which primary caregiver provided the most influential autonomy
support if more than one caregiver was in the home. Also, one caregiver may be absent
from the family. If that situation arose, the student could still provide information on
the caregiver with whom they were raised. Sample questions included "My primary
caregiver encourages me to be independent" and "My primary caregiver emphasizes
that every family member should have some say in family decisions" (see Appendix E).

Reliability for the Promotion of Independence Subscale was reported in to be $\alpha = .76$
in a previous study (Soenens et al., 2007).

Parental Goal Promotion Scale

The Parental Goal Promotion Scale (Duriez et al., 2007) is a twenty item assessment. The intrinsic/extrinsic subscale (12 items) and the conservation versus openness to change subscale (eight items) were used to assess the degree to which students perceived their parents as promoting extrinsic goals (i.e. financial success, image, fame) or intrinsic goals (i.e. personal growth, community contribution) and conservation versus openness to change. Students were asked to provide a rating for the primary caregiver with whom they lived. The items were rated using a modified six-point Likert scale instead of the standard five-point Likert scale. The scale ranged from 1 (strongly disagree) to 6 (strongly agree). A sample item for an extrinsic goal asks "My primary caregiver thinks it important that I honor the customs that are passed on to me by my family and the society I live in". A sample item for an intrinsic goal asks "My primary caregiver thinks it important that I develop myself as a person and continue to grow" (see Appendix F).

Cronbach alphas for the extrinsic/intrinsic subscale were reported in previous studies to be between $\alpha = .74$ and $\alpha = .78$. The reliability scores for the openness to change subscale were reported in previous studies to be between $\alpha = .61$ and $\alpha = .70$ (Duriez et al., 2007).

Approaches and Study Skills Inventory for Students (ASSIST)

The ASSIST is a 63 item instrument. The instrument was developed by Entwistle, Tait, and McCune (2000) as an assessment of college student's approaches to learning. Specifically, this scale taps the degree to which students characteristically adopt a deep

approach, superficial approach, or strategic approach to learning. Subjects are asked to rate a series of statements from strongly agree to strongly disagree as being typical of their behavior. The instrument is measured on a 6 point Likert scale. On the scale, "1" corresponds to strongly disagree to "6" which corresponds to strongly agree. Sample questions included "there's not much of the work here that I find interesting or relevant" and "I often seem to panic if I get behind with my work".

The assessment instrument was divided into four subscales. The Approaches to Studying subscale has reported reliability alphas from previous studies ranging from α = .53 for the *use of evidence* items to α = .84 for the *deep approaches to learning* items. The Surface Apathetic Approach subscale has been previously reported as reliability alpha of α = .80 with reliability alphas ranging from α = .54 for the *lack of understanding* items to α = .76 for the *deep approaches to learning* items. The Strategic Approach subscale has a reported alpha in previous studies of α = .87 with reliability alphas ranging from α = .55 for the *monitoring effectiveness* items to α = .76 for the *time management* items. Finally, the Preferences for Learning Environments subscale has been previously reported alphas of α = .62 for the *Deep (encouraging understanding)* items and α = .69 for the *Surface (transmitting information)* items (Entwistle et al., 2000). Typically, these subscales are added together to create composite indices of deep, superficial, and strategic approaches to learning, Subscales comprising the Deep Approach Dimension included Seeking Meaning, Relating Ideas, Use of Evidence, and Interest in Ideas. Subscales comprising the Surface or Apathetic Dimension included Lack of Purpose, Unrelated Memorizing, Syllabus Boundness, and Fear of Failure. Subscales comprising the Strategic Approach Dimension included

Organized Studying, Time Management, Alertness to Assessment Demands, Achieving, and Monitoring Effectiveness.

Aspirations Index

The Aspiration Index is a 105-item self-report assessment of intrinsic and extrinsic aspirations or life goals. The instrument was designed as a measure of aspirations across the lifespan. The instrument was developed by Kasser and Ryan (1996). The goal of the instrument is to examine intrinsic and extrinsic life aspirations. The intrinsic subscale assesses four areas of life aspirations and has alpha values which have been previously reported. These areas are s*elf-acceptance (growth)* α = .79, *affiliation (relatedness)* α = .78, *community feeling (helpfulness)* α = .91, and *Physical fitness (health)* α = .90. The Physical fitness items were excluded from the present study because the focus of the present study is to examine aspirations more closely related to academic and social pursuits of college students. The extrinsic subscale assesses three areas of life aspirations. These areas are f*inancial success (money)* α = .83, *social recognition (fame)* α = .77, and *appealing appearance (image)* α = .78 (Niemic, Ryan & Deci, 2009). Participants are presented with a life goal statement (i.e. "to be a wealthy person") and instructed to respond to the statement using three criteria (i.e. each statement has three questions). These criteria are *how important the goal is to them, how likely the participant is to achieve this goal, and indicate how much they have already attained this goal*. Participants are instructed to respond using a 7-point Likert scale ranging from 1 (not at all) to 7 (very). The scale was changed in the present study to a 6-point Likert scale with "1" being not at all important or likely to "6" being very important or likely". The change was made to keep the scale ratings consistent with

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other scales used in the study. The Health subscale was not used in the present study because that scale has been shown to be unreliable as a measure of the extrinsic or intrinsic dimensions (Kasser).   Removing these items shortened the instrument from 105 items to 90 items which were used in the study. The instrument has been used in other studies (Kasser, Ryan, Zax, & Sameroff, 1995 and Niemiec et al., 2009). In order to form the extrinsic aspirations index, scores on the wealth, fame and image subscales were aggregated as per instructions provided on the Self-determination website. The intrinsic aspirations index was formed by aggregating scores on the growth, relationship, and community subscales, again as described on the website. According to the description of the measure provided on the website, the health/ physical well-being scale does not effectively discriminate between intrinsic and extrinsic aspirations. As such, this dimension was not included in the computations of the aspiration indices.

Achievement

Achievement was measured by students self-reported GPA. Students were asked to indicate which of the following range their GPA falls into: 0-.49, .50-.99, 1.0-1.49, 1.5-1.99, 2.0-2.49, 2.5-3.0, 3.0-3.49, 3.5-4.0. Although technically these ranges reflect ordinal categories, the ranges were treated as interval data in all analyses. This was due, in part, because the interval ranges were quite small and the number of possible response categories was somewhat large (8). This is in keeping with the same logic employed when Likert-type items are treated as interval as opposed to ordinal. The response categories were coded from 1-8, assuming that 1=very low GPA and 8= very high GPA.

Socioeconomic Status Indicators

Socioeconomic status is a difficult construct to define and measure. SES is used primarily by governmental agencies to establish baselines for eligibility of services. Many governmental agencies have slightly different instruments to measure SES based on their needs. For example, SES instruments may include items such as "number of people living in the home" and "value of property". However, a commonality between many instruments used to establish SES is the inclusion of parental income and parental level of education. The present study has used parental annual income and parent's highest level of education as SES indicators. Participants self-reported annual parental income by checking a category for this question. Fifteen categories were provided for this question. Categories ranged from "less than $1000" to "more than $50,000". There was also a category for unknown. Participants were asked to report their primary and secondary caregiver's highest level of education by responding to one of the seven categories provided for this question. The categories ranged from "some high school education" to "unknown". This question was used to determine participant generational status. For this study, participants indicating that a primary caregiver had not received a bachelor's degree were determined to be first-generation. Participants indicating that a primary caregiver had received a bachelor's degree or higher degree were determined to be non-first-generation.

Procedures

After receiving approval from the main IRB office, the researcher applied for and was granted IRB approval for the other two campus sites included in the study. Faculty members will be identified and contacted as to their participation in the study. Faculty

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members were asked if they would like to see a copy of the instruments that was used in the study. Faculty members interested in participating in the study were provided a copy of all instruments. A commitment from the faculty and permission to schedule a time and date to distribute assessment instruments was obtained.

Procedure for Data Collection/Ethical Standards

At the preapproved time scheduled with the faculty, interested participants were informed as to the nature of the study as well as any potential risks or benefits associated with their participation (see Appendix A). I introduced myself and stated the purpose of the study and followed guidelines for participant protection, confidentiality, and freedom not to participate. An information sheet was also provided in the booklet of assessment instruments for the study which was given to each participant. The information sheet was located in the first two pages of the study booklet. Participants were assured in writing and through a verbal statement that all information related to their responses in the study will be kept confidential and will be used solely for the purposes of the study. Participants will also be informed that only the researcher and the committee chairperson will have access to information and data. Research materials will be kept in the sole possession of the researcher and will be destroyed after one year.

Participants were asked to read and sign a consent form (see Appendix B). A copy of the consent form that was signed was given to each participant. When consent forms were signed and returned to the researcher, the study began. All participants were told that they could withdraw from the study at any time without negative consequences. Participants were instructed that only one research session was required and that the session would not last more than 30 minutes.

Individuals returning signed consent forms to the researcher were given a research booklet to complete. The researcher reviewed the instructions to fill out the instruments. I remained present throughout the data collection process to be available to participants to answer any questions or concerns.

Plan of Analysis

Data were analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics were conducted to analyze the means and standard deviations for the instruments included in the study. SPSS was used to look for outliers and assess violations of statistical assumptions.

In order to address my primary research questions, hierarchical multiple regression analyses were used with my various outcome variables (e.g., deep, superficial, and strategic approaches to learning, intrinsic and extrinsic aspirations, and GPA) included as criterion variables and generational status, family income, parental goal promotion, family annual income, and parental autonomy support included as predictors. The predictor ordering was as follows: generational status (Step 1), family income (Step 2), and parental goal promotion (intrinsic and extrinsic) and parental autonomy support (Step 3). Steps 1 and 2 first allowed me to determine whether family income accounts for the relationship between generational status and the outcome variables. Step 3 allowed me to determine whether parental goal promotion and autonomy support might account for the any observed relationship between family annual income and my criterion measures. Step 3 was useful in explaining any potential residual variation in the criterion variables not previously explained by either generational status or family annual income.

CHAPTER FOUR: RESEARCH RESULTS

Descriptive Statistics

Descriptive statistics including means, standard deviations, and Cronbach's α for

the variables used in the study are listed in Table 3.

TABLE 3. Means, standard deviations, and Cronbach's alphas for measures used in the study.

Scale	Mean	SD	Cronbach's α
Parental Autonomy Support	42.02	7.43	.81
Intrinsic Aspirations (Student)	229.26	25.46	.78
Extrinsic Aspirations (Student)	143.63	45.71	.88
Intrinsic Parental Goal Promotion	50.64	7.54	.88
Extrinsic Parental Goal Promotion	41.62	7.55	.69
Deep Learning Approach	55.16	9.08	.81

Note: The Intrinsic Aspirations (Student) dimension were Community, Relationships, and Personal Growth. Subscales comprising the Extrinsic Aspirations dimension (Student) were Wealth, Fame, and Image. Parental Intrinsic Aspirations included the Intrinsic Dimension. Parental Extrinsic Aspirations included the Extrinsic Aspirations. Subscales comprising the Deep Approach Dimension included Seeking Meaning, Relating Ideas, Use of Evidence, and Interest in Ideas. Subscales comprising the Surface or Apathetic Dimension included Lack of Purpose, Unrelated Memorizing, Syllabus Boundness, and Fear of Failure. Subscales comprising the Strategic Approach Dimension included Organized Studying, Time Management, Alertness to Assessment Demands, Achieving, and Monitoring Effectiveness.

Preliminary Analysis of Data

Considering the nature of the study, it seemed appropriate to report demographic

statistics with regard to first-generation and non-first-generation subjects.

Data in the present study was analyzed using the Statistical Package for Social Sciences

(SPSS) computer software. A cursory examination of the data set revealed issues that

needed to be addressed before data analysis of the variables could be performed

properly. A preliminary look at skewness and kurtosis suggested that the variables did

not depart highly from normality, although some minor deviations were noted.

Analyses

Independent Samples T-Test Analysis

An independent samples t-test was conducted to compare differences between the

means of the first-generation (FG) and non-first-generation (NFG) subjects and nine

variables used in the sample. Table 4 shows summaries for these variables.

TABLE 4   Independent Samples T-Test Summary

Variable

	Gen Status	Mean	SD	N	Mean Difference	Sig. (2-tailed)
Family Income	FG	11.99	3.41	276		
	NFG	12.81	2.74	550	-.82	.001**
Parental Autonomy	FG	41.35	8.22	275		
	NFG	42.34	6.99	546	-.99	.09
Deep Learning Approach	FG	67.32	11.54	267		
	NFG	66.90	11.06	546	.42	.62
Strategic Learning Approach	FG	88.08	15.30	268		
	NFG	87.97	14.92	532	.11	.93
Surface Learning Approach	FG	58.24	11.94	268		
	NFG	58.03	12.23	540	.21	.82
Intrinsic Parental Goal Promotion	FG	4.94	0.91	275		
	NFG	5.21	0.71	546	-.27	.000**
Extrinsic Parental Goal Promotion	FG	3.65	0.91	275		
	NFG	3.61	0.94	548	.04	.58
Student Intrinsic Aspirations	FG	5.54	0.53	273		
	NFG	5.54	0.55	537	-.00	.95
Student Extrinsic Aspirations	FG	3.30	1.20	271		
	NFG	3.40	1.18	535	-.10	.26

Note: SD, standard deviation   **$p < .001$
    Gen Status, Generational Status was coded:
    1= First Generation (FG)
    2= Non First Generation (NFG)
Equal variances were not assumed

Correlation Analysis

A correlation analysis was conducted to examine the degree of relationship between the variables in the present study. Thirteen variables were included in the correlation matrix. A significant positive relationship was noted between "generational status" and "intrinsic parental goal promotion" (r=.16, p<.000). Also, significant positive relationships were noted between "GPA" and "family income" (r=.13, p<.000) and "GPA" and "strategic approach to learning" (r=.25, p<.000). In addition, significant

negative relationships were noted between "GPA" and the variables "extrinsic parental goal promotion" (r=-.07, p<.05) "student extrinsic aspirations" (r=-.10, p<.05) and "surface learning approach" (r=-.18, p<.000).

The variable "caregiver's highest level of education" had significant positive relationships with "intrinsic parental goal promotion" (r=.12, p<.001) and "student extrinsic aspirations" (r=.10, p<.05). In addition, the variable "parental autonomy support" had significant positive relationships with "intrinsic parental goal promotion" (r=.56, p<.000) "parent's highest level of education" (r=.07, p<.05) "extrinsic parental goal promotion" (r=.11, p<.05) "student intrinsic aspirations" (r=.24, p<.000) "student extrinsic aspirations" (r=.07, p<.05) "deep approach to learning" (r=.26, p<.000) "strategic approach to learning" (r=.05, p<.000) and "surface approach to learning" (r=.08, p<.05).

Further correlational analyses revealed that the variable "intrinsic parental goal promotion" had a significant negative relationship with "gender" (r=.14, p<.000). Significant positive relationships were noted between "intrinsic aspirations of students" and "intrinsic parental goal promotion" (r=.39, p < .000) "deep approach to learning" (r=.23, p<.000) and "strategic approach to learning" (r=.30, p<.000).

As indicated in the correlation matrix, the variable "deep approach to learning" had a significant negative relationship with "surface approach to learning" (r=.09, $p < .05$). The variable "deep approach to learning" showed a significant positive relationship with the variable "strategic approach to learning" (r=.50, $p < .000$)

In addition, the variable "strategic approach to learning" showed a significant negative relationship with "surface approach to learning" (r=.28, $p < .000$). The

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variable "surface approach to learning" had significant negative relationships with the

variables "deep approach to learning" (r=.09, $p < .05$) and "strategic approach to

learning" (r=-.22, $p < .000$). These correlations are summarized in Table 5.

Variables:

TABLE 5
Zero-Order Correlations for Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Gender	1	---	---	---	---	---	---	---	---	---	---	---	---
2 Generational Status	.006	1	---	---	---	---	---	---	---	---	---	---	---
3 Cumulative GPA	-.177**	0.027	1	---	---	---	---	---	---	---	---	---	---
4 Family Income	.031	.132**	.129**	1	---	---	---	---	---	---	---	---	---
5 Primary Caregiver's Highest Level of Edu.	.065	.621**	0.029	.188**	1	---	---	---	---	---	---	---	---
6 Parental Autonomy Support	-.024	0.048	-0.033	-0.008	.075*	1	---	---	---	---	---	---	---
7 Intrinsic Parental Goal Promotion	-.138**	.165**	0.027	0.055	.120**	.610**	1	---	---	---	---	---	---
8 Extrinsic Parental Goal Promotion	-.028	-0.012	-.072*	0.014	-0.004	.109**	.186**	1	---	---	---	---	---
9 Student Intrinsic Aspirations	-.251**	0	0.05	-0.028	0.005	.241**	.387**	.096**	1	---	---	---	---
10 Student Extrinsic Aspirations	.094**	0.044	-.096**	0.003	.094**	.072*	.079**	.536**	.132**	1	---	---	---
11 Deep Approach to Learning	.008	-0.024	0.029	-0.045	-0.019	.260**	.144**	.092**	.227**	-0.014	1	---	---
12 Strategic Approach to Learning	-.226**	0.011	.253**	-0.035	0.023	.247**	.241**	.155**	.296**	0.019	.503**	1	---
13 Surface Approach to Learning	.013	0.011	-.182**	0.03	0.008	.076*	0.059	.190**	-0.06	.266**	-.091*	-.219**	1

Note: N = 836
** $p < .01$
* $p < .05$

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Hierarchial Multiple Regression Models

  Section I: Regression Analysis Predicting GPA

Hierarchical regression analyses were performed using SPSS to examine the relationship between "GPA" and the set of predictor variables. The predictor variables included "generational status" (entered at Step 1), "family annual income", (entered at Step 2) and "parental autonomy support", "parental intrinsic goal promotion", "parental extrinsic goal promotion" and "parental autonomy" entered at step 3.

At Step 1, the multiple regression model was statistically non-significant $(R^2=.00, F(1,770)=.37, p=.54)$ with generational status failing to account for significant variation in GPA. At Step 2, generational status and family income combined to account for significant variation $(R^2=.02, F(2, 769)=5.88, p=.003)$ in GPA. Of the predictors included in the model, only family income was a statistically significant predictor $(\beta=.12, p=.001)$. At Step 3, the set of predictors included in the model again accounted for significant variation $(R^2= .02, F(5, 766)=3.85, p=.002)$ in GPA. Of the predictors included in the model, only family income $(\beta=.12, p=.001)$ and extrinsic goal promotion $(\beta=-.08, p=.03)$ were significant predictors. Table 6 summarizes the regression analysis results.

	B	Seb	Beta	r_{sp}
STEP 1	R^2=.000			
Generational Status	0.06	0.098	0.022	0.022
STEP 2	ΔR^2=.015**			
Generational Status	0.013	0.099	0.005	0.005
Family Income	0.053	0.016	.122**	0.121
STEP 3	ΔR^2=.009			
Generational Status	-0.014	0.1	-0.005	-0.005
Family Income	0.052	0.016	.120*·	0.119
Parental Autonomy Support	-0.013	0.008	-0.074	-0.058
Intrinsic Parental Goal Promotion	0.123	0.075	0.076	0.059
Extrinsic Parental Goal Promotion	0.109	0.051	-.078*	-0.076

TABLE 6   Multiple Regression Predicting GPA

Note: **p<.01, *p<.05

Gender was coded 1=Female, 2=Male

Generational Status was coded 1=First Generation, 2=Non First Generation

Section II: Regression Analysis Predicting Student Intrinsic Aspirations

The first regression model including generational status as a predictor of student intrinsic aspirations was statistically non-significant (R^2=.00, $F(1, 765)$ =.00, p=.96). The second regression model, including both generational status and family income as predictors, was also non-significant (R^2=.00, $F(2, 764)$ =.07, p=.93) when predicting intrinsic aspirations. The final model, including the full set of predictors, did account for significant variation (R^2=.16, $F(5, 761)$ =28.67, p<.001) in intrinsic aspirations. Of the predictors, only parental intrinsic goal promotion emerged as a significant predictor (β =.37, p<.001). The results of this regression analysis are summarized in Table 7.

TABLE 7   Multiple Regression Predicting Student Intrinsic Aspirations

	B	Seb	Beta	r_{sp}
STEP 1	R^2=.000			
Generational Status	-0.002	0.041	-0.002	-0.002
STEP 2	ΔR^2=.000			
Generational Status	0	0.042	0	0
Family Income	-0.003	0.007	-0.014	-0.014
STEP 3	ΔR^2=..159**			
Generational Status	-0.065	0.039	-0.057	-0.056
Family Income	-0.005	0.006	-0.028	-0.028
Parental Autonomy Support	0.029	0.028	0.044	0.035
Intrinsic Parental Goal Promotion	0.253	0.029	.370**	0.285
Extrinsic Parental Goal Promotion	0.013	0.02	0.022	0.022

Note: **p<.01, *p<.05

Gender was coded 1=Female, 2=Male

Generational Status was coded 1=First Generation, 2=Non First Generation

Section III: Regression Analysis Predicting Student Extrinsic Aspirations

The first regression model including generational status as a predictor, accounted for non-significant (R^2=.001, F(1, 760) =.74, p=.38) variation in the student extrinsic aspirations. The second regression model, including both generational status and family income as predictors was also non-significant (R^2= .00, F(2, 759) =.38, p=.68) when predicting student extrinsic aspirations. The final model, including the full set of predictors, did account for significant variation (R^2=.29, F(5, 756) =.62.54, p<.001) in extrinsic parental goal promotion emerged as a significant predictor (β=.54, p<.001). Results of the analysis are shown in Table 8.

TABLE 8   Multiple Regression Predicting Student Extrinsic Aspirations

	B	Seb	Beta	r_{sp}
STEP 1	R^2=.001			
Generational Status	0.079	0.09	0.032	0.032
STEP 2	ΔR^2=.000			
Generational Status	0.078	0.091	0.031	0
Family Income	0.001	0.014	-0.003	0.002
STEP 3	ΔR^2=.292**			
Generational Status	0.13	0.078	0.052	0.051
Family Income	0.001	0.012	0.003	0.003
Parental Autonomy Support	0.071	0.055	0.05	0.039
Intrinsic Parental Goal Promotion	-0.068	0.059	-0.046	-0.035
Extrinsic Parental Goal Promotion	0.693	0.04	.542**	0.553

Note: **$p<.01$, *$p<.05$

Gender was coded 1=Female, 2=Male

Generational Status was coded 1=First Generation, 2=Non First Generation

Section IV: Regression Analysis Predicting Deep Approaches to Learning

The first regression model including generational status as a predictor, accounted for non-significant (R^2= .00, $F(1, 766)$ =.03, p=.96) variation in deep approach to learning. The second regression model, including both generational status and family income as predictors, was also non-significant (R^2=.00, $F(2, 765)$ =.53, p=.59) when predicting the criterion variable. The final model, including the full set of predictors, did not account for significant variation (R^2= .065, $F(5, 762)$ =10.66, p=.001) in the criterion variable. Of the predictors, parental autonomy support (β=2.56, p<.001) and extrinsic parental goal promotion (β =.076, p=.033) were significant predictors of deep approach to learning. A summary of the results are shown in Table 9.

TABLE 9   Multiple Regression Predicting Deep Approaches to Learning

	B	Seb	Beta	r_{sp}
STEP 1		R^2=.001		
Generational Status	-0.158	.090.905	-0.006	-0.006
STEP 2		ΔR^2=.000		
Generational Status	-0.039	0.913	-0.002	-0.002
Family Income	-0.147	0.145	-0.037	-0.037
STEP 3		ΔR^2=.64**		
Generational Status	-0.174	0.896	-0.007	-0.007
Family Income	-0.126	0.14	-0.032	-0.032
Parental Autonomy Support	3.803	0.636	.256**	0.209
Intrinsic Parental Goal Promotion	-0.823	0.686	-0.054	-0.042
Extrinsic Parental Goal Promotion	0.976	0.457	.076**	0.075

Note: **p<.01, *p<.05

Gender was coded 1=Female, 2=Male

Generational Status was coded 1=First Generation, 2=Non First Generation

Section V: Multiple Regression Predicting Strategic Approaches to Learning

The first regression model including generational status as a predictor, accounted for non-significant (R^2= .00, $F(1, 755)$ = .012, p=.91) variation in strategic approach to learning. The second regression model, including both generational status and family income as predictors, was also non-significant (R^2= .00, $F(2, 754)$ =.65, p=.52) when predicting the criterion variable. The final model, including the full set of predictors, did account for significant variation (R^2= .09, $F(5, 751)$ = 15.65, p<.001) in the criterion variable. Of the predictors, parental autonomy support (β=.18, p=.016) and extrinsic parental goal promotion (β=.13, p<.001) were significant predictors of strategic approach to learning. Results of the analysis are shown in Table 10.

TABLE 10   Multiple Regression Predicting Strategic Approach To Learning

	B	Seb	Beta	r_{sp}
STEP 1	R^2=.000			
Generational Status	0.128	1.149	0.004	0.004
STEP 2	ΔR^2=.002			
Generational Status	0.296	1.158	0.009	0.009
Family Income	-0.212	0.186	-0.042	-0.041
STEP 3	ΔR^2=.093**			
Generational Status	-0.433	1.12	-0.014	-0.013
Family Income	-0.226	0.178	-0.045	-0.044
Parental Autonomy Support	3.269	0.1792	.181**	0.143
Intrinsic Parental Goal Promotion	2.037	0.844	.108*	0.084
Extrinsic Parental Goal Promotion	2.037	0.575	.125**	0.123

Note: **p<.01, *p<.05

Gender was coded 1=Female, 2=Male

Generational Status was coded 1=First Generation, 2=Non First Generation

Section VI: Multiple Regression Predicting Surface Approach to Learning

The first model including generational status as a predictor, accounted for non-significant (R^2= .000, $F(1, 761)$ =.01, p=.92) variation in surface approach to learning. The second regression model, including both generational status and family income as predictors, was also non-significant (R^2= .00, $F(2, 760) = 11$, p=.90) when predicting the criterion variable. The final model, including the full set of predictors did account for significant variation (R^2= .04, $F(5, 7517 = 5.85$, p<.001) in surface approach to learning. Of the predictors, only extrinsic parental goal promotion (β=1.76, p<.001) was a significant predictor of the criterion variable. The results of the analysis are shown in Table 11.

TABLE 11   Multiple Regression Predicting Surface Approaches To Learning

	B	Seb	Beta	r_{sp}
STEP 1	R^2=.000			
Generational Status	-0.075	0.071	-0.004	-0.004
STEP 2	ΔR^2=.000			
Generational Status	-0.12	0.741	-0.006	-0.006
Family Income	0.055	0.12	0.017	0.017
STEP 3	ΔR^2=.037**			
Generational Status	-0.027	0.746	-0.001	-0.001
Family Income	0.062	0.118	0.019	0.019
Parental Autonomy Support	0.995	0.53	0.085	0.067
Intrinsic Parental Goal Promotion	-0.372	0.564	-0.031	-0.024
Extrinsic Parental Goal Promotion	1.844	0.38	.176**	0.173

Note: **p<.01, *p<.05

Gender was coded 1=Female, 2=Male

Generational Status was coded 1=First Generation, 2=Non First Generation

CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

Based on gaps in the literature concerning generational status, I made several hypotheses concerning the relationships among the variables in the study. In this discussion section, I address the findings of the study in relation to each hypothesis.

My first two hypotheses assumed that FG students would report significantly higher levels of parental extrinsic goal promotion, and significantly lower levels of parental intrinsic goal promotion than NFG students. The independent samples t-test and correlation results indicated that there were no differences between FG and NFG students concerning extrinsic goal promotion. There was a slight relationship between generational status and parental goal promotion. NFG students reported greater promotion of intrinsic goal promotion than FG students.

The third hypothesis was that FG students would report significantly lower levels of deep and strategic approaches to learning and higher levels of surface approaches to learning than NFG students. None of my results were consistent with these suppositions.

My fourth hypothesis was that FG students would report significantly greater levels of extrinsic aspirations and significantly lower levels of intrinsic aspirations, than non-FG students. This hypothesis was not confirmed.

My fifth hypothesis was that FG students would exhibit significantly lower GPAs than non-FG students. Once again, this hypothesis was not confirmed.

My sixth hypothesis was that parental autonomy support and parental goal promotion would emerge as statistically significant predictors of student GPA, approaches to learning, and student aspirations. These assumptions were for the most

part supported. Extrinsic goal promotion emerged as a significant negative predictor of GPA and a significant positive predictor of student extrinsic aspirations, deep approach to learning, strategic approach to learning, and even surface approach to learning. The fact that extrinsic goal promotion correlated positively with all three approach to learning variables is curious. Other studies (Kempler et al.) have reported findings in which more than one approach to learning was indicated for a group of students.

Intrinsic goal promotion emerged as a statistically significant positive predictor of student intrinsic aspirations and strategic approaches to learning.

Finally, parental autonomy support was found to be a significant positive predictor of students' self-reported deep and strategic approaches to learning. This finding is interesting because a deep approach to learning indicates an intrinsic motive to learn because of curiosity or a desire to understand for future use. A strategic approach on the other hand indicates an organized approach designed to get the highest grade possible whether the learner understands the material or not. It is not clear from this study what conclusions should be drawn from this finding. Further research in this area is warranted.

My final hypothesis pertained to the question of whether or not any relationship between generational status and the abovementioned outcome variables might be explained by parental autonomy and goal promotion. As noted earlier, generational status was unrelated to my outcome measures. As such, my findings do not lend support for this possibility.

One final interesting point is that family income was also unrelated to my criterion variables. This finding is also curious given that one would assume that students would

be differentiated in some way based on family income. Again, the samples of FG and

NFG in the present study were very similar. Some FG subjects reported family incomes

over $50,000 per year and some NFG subjects reported family incomes of less than

$10,000 per year. It seems reasonable to conclude that the income variable had minimal

influence in this study and therefore accounted for no variability between the two

groups. The lack of association between family income and the other variables may be

partly explained by the sampling approach, as discussed in the following section

concerning threats to the internal validity of results.

Internal Threats to Validity

1. One potential threat to the validity of this study is the possible role that social

    desirability played in the results. Students may have been hesitant to honestly

    answer certain questions based on how they might appear to the researcher or

    even themselves. For example, students may implicitly understand that certain

    attitudes and behaviors (e.g. autonomy support) on the part of primary

    caregivers are viewed more favorably from a normative standpoint than others.

    As such, participants may have been inclined to report higher levels of

    autonomy support or support of intrinsic goals on the part of parents than they

    have actually experienced. Similarity, students may understand that educators

    generally favor "deeper" and more "strategic" approaches to learning than more

    "superficial" approaches. This recognition may have contributed to response

    biases that altered the results of the study.

2. The present study utilized a convenience sampling method. All subjects were

    enrolled in either psychology or Education courses. I speculate that there are

GPA requirements for students enrolling in upper-division Education and

psychology courses. Therefore, the FG students that comprised the FG sample

in this study had already overcome whatever academic obstacles they may have

faced to be enrolled in these courses.

3. The findings of the present study may not generalize to first-generation student

populations outside of the institutions and region from which data was collected.

Educational Implications and Future Research

The present study highlighted academic differences between freshmen FG

students and freshmen higher-level FG college students. In the present study, FG

subjects seemed to come from the same sample as NFG subjects. The distinction

between college rank and FG status was not clear to me until an examination of the

results of the study. The two samples being very similar was an unexpected finding

which led to very few differences being noted in the present study.

Interventions aimed to improve the retention and graduation rates of FG students

would probably have the greatest impact during their freshman year. Walpole

(2003) suggested that as low income students matriculate through the educational

system that at some point their academic outcomes should appear similar to students

from higher income backgrounds. Walpole (2003) went on to say that because of

the influence of SES this did not occur and low SES students continued to have low

academic outcomes. But the results of this study seem to indicate that in some

situations the academic outcomes of low income and non-low income students had

similar academic outcomes after freshman year. The results of the study also

suggested that many FG students are able to acclimate quite adequately into the mainstream college population.

Future research could use the variables in the present study to examine differences between freshmen FG and higher level FG students in one study and freshman FG and freshmen NFG students in another study. The first study could determine if differences are indicated between freshmen FG and higher-level FG students. The second study would determine if these variables could be used to predict GPA, student aspirations and approaches to learning between freshmen FG and freshmen NFG students.

Contributions of the Present Study

Despite not finding significant differences between the FG and NFG samples, the study nevertheless, had some findings that are new to the literature. Specifically, the present study added to the body of knowledge significant links between variables that have not been examined in relation to FG students. The present study found significant links between extrinsic parental goal promotion and GPA. Intrinsic parental goal promotion was significantly linked to a strategic approach to learning but not a deep or surface approach to learning. In addition, parental autonomy support was significantly linked to a deep and strategic approach to learning but not to a surface approach to learning. In the introduction section, the notion that parental education may play a role in student learning and achievement was strengthened by the finding that the variable "highest parental education" had a significant positive relationship with intrinsic parental goal promotion. The relationship between these two variables is promising for future research. The

findings suggest that the higher the parent's educational level the more they would be expected to adopt intrinsic goal promotions. Future research would have to determine if these variables show relationships for FG and NFG learners.

The study found a moderately significant positive relationship between parental autonomy and intrinsic parental goal promotion. The direction of the relationship suggests that parents who would rate high on demonstrating parental autonomy would also rate high on demonstrating intrinsic parental goal promotion. These two variables also had a significant positive relationship with student intrinsic aspirations, deep approaches to learning and strategic approaches to learning. There was no relationship with surface approaches to learning. These results confirm previous findings that link deep approaches to learning with intrinsic motives. Learners adopting deep approaches to learning are characterized as having a critical approach to their search for meaning (Duff et al., 2004). There have also been reports that link deep approaches to learning with strategic approaches to learning. Learners using strategic approaches to learning are usually very organized and have good study skills because their focus is on getting the highest grade possible (Duff et al., 2004). Prior research has shown that learners adopting these two approaches to learning do not adopt surface goals (Duff et al.).

    In addition, the present study suggested that it is possible that students may be influenced to develop intrinsic aspirations based on having a nurturing environment that supports autonomy development and the intrinsic goals of their parents. The study reports that surface approaches to learning had significant negative relationships with deep approaches and strategic approaches to learning. These

results are in line with prior findings and emphasize the opposing nature of these three constructs. New to the literature are findings that surface approaches to learning had a significant negative relationship with student intrinsic aspirations and a significant positive relationship with student extrinsic aspirations. This finding suggests that learners adopting a surface approach to learning which is characterized by "rote learning, repeating, memorizing" (Duff et al., p. 205) may do so because of extrinsic reasons. This could lead to poor educational outcomes, as surface approaches to learning had a significant negative relationship to GPA.

The study also found that GPA had significant negative relationships with extrinsic parental goal promotion, extrinsic student aspirations, and surface approaches to learning. However, GPA had a significant positive relationship with strategic approaches to learning. Prior research has shown a positive link between GPA and strategic approaches to learning. Again, students adopting strategic approaches to learning are trying to get the highest grade possible.

Conclusions

First-generation status is used in the literature as an umbrella encompassing a host of negative elements which combine to present some FG students with seemingly impenetrable barriers to retention and degree completion. The present study sought to move beyond the descriptive use of the term "first-generation" and focus instead on factors that may foster and perpetuate the research findings which have dominated and characterized the field of research and informed our knowledge regarding this sub-population of college students. To begin, it seems plausible from this study that not all first-generation students suffer the same plight of

underachievement and barriers toward degree completion. Some FG students, who survive freshman year, appear to do well enough academically that their first-generation "status" has little relevance to their academic success. Statistical analyses of the FG and NFG subjects in the present study did not find any statistically significant differences between these two groups. So, it would seem that being from a family in which neither parent has a four year bachelor's degree may initially be a hindrance in college. The present study sought to explore the relationship and mediating factors between FG parents and their children that might impact the student's future academic success. As far as I could ascertain, this is new to FG research.

Past research (Saljo, 1979) suggested that there are differences between learners with regard to their approach to learning based on their experience with education.

In conclusion, the present study did not explain differences between generational status, parental factors, student aspirations, and student approaches to learning as I had hoped. Nevertheless, we know that the academic challenges facing FG students continue to persist and FG students are at risk of poor retention. I remain hopeful that future research using a freshman FG sample may be able to determine specifically "what" is not working for FG students and what interventions might be useful.

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APPENDIX A

MODEL: GENERATIONAL STATUS, FAMILY INCOME, PARENTAL AUTONOMY SUPPORT AND PARENTAL GOAL PROMOTION AS PREDICTORS OF APPROACHES TO LEARNING, STUDENT ASPIRATIONS AND GPA

Parental Autonomy Support

Generational Status

Family Income

Parental Goal Promotion

GPA

Approaches to Learning

Student Aspirations
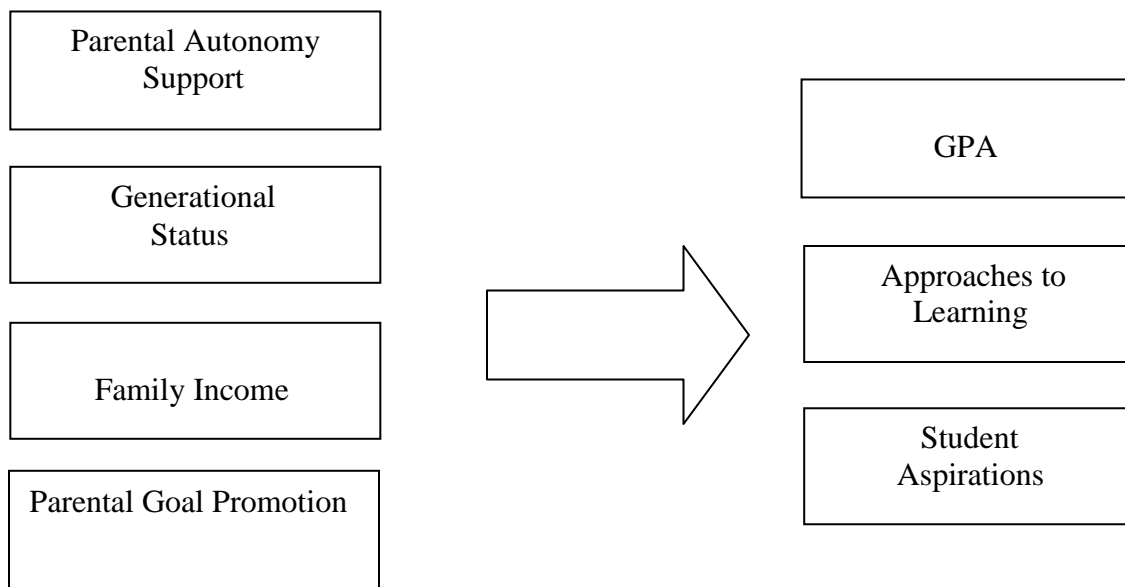
APPENDIX B

PARTICIPANT INFORMED CONSENT FORM

Informed Consent Form for Participation in Research that is Being Conducted Under the Auspices of The University of Oklahoma - Norman Campus

Dear student:
I am requesting your participation in a study titled "Understanding the Reasons Why I Study".

The goal of this study is to examine differences in college students' approaches to learning.

If you agree to participate, you will be asked to complete a research packet containing four (4) short questionnaires during one research session in your classroom in the semester. These questionnaires will focus on various aspects of parental autonomy, parental goal orientation and learning strategies as they relate to academic achievement. It is estimated that you will be able to complete all of the questionnaires in the research packet within 30 minutes.

In addition, as this study has to do with the effects of certain variables on academic achievement, it will be necessary to obtain your current GPA. Your GPA, along with all the information obtained from the questionnaires in the research packet, will be kept strictly confidential and will not be seen by anyone other than the researcher or her chairperson at any time. An identifying number will be assigned to your data and your name will not be linked to the questionnaires you complete in any way. Furthermore, all information derived from this study will be reported in terms of numbers and group findings, never in terms of individual names. There is no threat of physical or psychological harm related to participating in this study.

As participation in this study is completely voluntary, you may choose to withdraw from this project at any time. Furthermore, you may refuse to participate without penalty or loss of any educational privileges that you now experience.

If you have any questions about this project, you may contact Cheryl Murdock at the University of Oklahoma via email ▄▄▄▄ or by leaving a message with the Educational Psychology office ▄▄▄▄ You may also contact Dr. Michael Crowson who serves as the faculty sponsor for this research project (office phone ▄▄▄▄ . **Additionally, you may call the University of Oklahoma-Norman Campus Institutional Review Board at ▄▄▄▄ with questions about your rights as a research participant.** Thank you for your time and consideration.

Sincerely,
Cheryl Murdock, M. A. Doctoral Candidate, Instructional Psychology and Technology Program
Department of Educational Psychology
University of Oklahoma

I consent to participate in the study titled "Do Parental Goal Promotion and Autonomy Support explain the Relationship between Generational Status and Academic Processes and Outcomes? A Self-Determination Perspective". I acknowledge and understand that my participation in this research study will involve voluntarily completing four (4) questionnaires. I also acknowledge and understand that the responses to the questionnaires will be kept completely confidential by the researchers. Furthermore, I consent to allow the researcher to obtain my GPA with the understanding that this information will be kept strictly confidential and will be used only in reference to the goals of the research study.

Your Name Printed: _____
Your Signature: _____

PARTICIPANT INFORMATION SHEET

Information Sheet for Participation in Research Being Conducted Under the Auspices of The University of Oklahoma - Norman Campus

Dear student:

I am requesting your participation in a study titled "Understanding the Reasons Why I Study".

The goal of this study is to examine differences in college students' approaches to learning.

If you agree to participate, you will be asked to complete a research packet containing four (4) short questionnaires during one research session in your classroom in the semester. These questionnaires will focus on various aspects of parental autonomy, parental goal promotion and learning strategies as they relate to academic achievement. It is estimated that you will be able to complete all of the questionnaires in the research packet within 30 minutes.

 In addition, as this study has to do with the effects of certain variables on academic achievement, it will be necessary to obtain your GPA. Your GPA, along with all the information obtained from the questionnaires in the research packet, will be kept strictly confidential and will not be seen by anyone other than the researcher or her chairperson at any time. An identifying number will be assigned to your data and your name will not be linked to the questionnaires you complete in any way. Furthermore, all information derived from this study will be reported in terms of numbers and group findings, never in terms of individual names. There is no threat of physical or psychological harm related to participating in this study.

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If you have any questions about this project, you may contact Cheryl Murdock at the University of Oklahoma via email (cmurdock@ou.edu) or by leaving a message with the Educational Psychology office ▟▟▟▟▟ You may also contact Dr. Michael Crowson who serves as the faculty sponsor for this research project office phone ▟▟▟▟▟ **Additionally, you may call the University of Oklahoma-Norman Campus Institutional Review Board at** ▟▟▟▟▟ **with questions about your rights as a research participant.**
Thank you for your time and consideration.

Sincerely,
Cheryl Murdock, M.A.
Doctoral Candidate, Instructional Psychology and Technology Program
Department of Educational Psychology
University of Oklahoma

ORAL DESCRIPTION OF STUDY

Title of Research Study: "Understanding the Reasons Why I Study".

My name is Cheryl Murdock. I am currently completing my doctorate in educational psychology at the University of Oklahoma. As part of the requirements to obtain this degree, I am conducting a study regarding the influence of parental autonomy and parental goal promotion on academic achievement. I would greatly appreciate your participation in my study today by completing a research packet containing four assessment instruments. The estimated completion time for the instruments is 30 minutes.

Your participation in this research study is strictly voluntary. Refusal to participate will involve no penalty. You are always free to withdraw at any time without penalty as well. If you are participating in this study to obtain course credit or extra credit points, then you may not receive this credit if you decide not to continue. However, you will not be penalized any credit for withdrawing from the study. Should you complete the materials, you will receive course credit for your participation in this endeavor.

Please read, sign, and hand in the informed consent form. You will also be given a copy of the consent form that you have signed to keep for future reference. Note: this form will not have your signature on it. Then, you will be given a research packet with the five assessment instruments inside. All instruments are numbered so that each can be compared with the other instruments completed by the same student. No personal identification will be linked to your responses in any way. You are asked not to write your name or student ID number on any page other than the consent form. Data will be stored in the home of the researcher for one year and then destroyed by shredding.

Follow the directions at the top of each of the instruments. An example explaining how to complete the instrument is given at the top of each instrument. Please read and carefully consider your responses to each question asked. If you have questions, please raise your hand and I will come to you. It is very important that you not share your responses with anyone. Therefore, I will ask that you not speak to your neighbor until everyone has finished. You are free to skip any questions that you feel are too intrusive or you feel uncomfortable answering. Please leave that item response blank and continue. However, if possible, please complete the assessments in their entirety.

Before we begin, are there any questions (*pause for questions*). Feel free to ask any questions that come to you while you complete the instruments.

Thank you again for your cooperation and consideration in participating in this study.

APPENDIX E

DEMOGRAPHIC INFORMATION SURVEY

General instructions: The following questions relate to basic demographic information necessary to make statistical inferences related to various student characteristics. The information is important to the nature of the research study. Please answer the questions to the best of your ability.

Please check (√) the appropriate response in the space provided.

1. _____ Female _____ Male

2. Age: 16 – 20 _____   21 – 25 _____   26 – 30_____   31 – 40_____   41+ _____

3. Indicate marital status: _____ single _____ married _____ divorced _____ other

4. Do you have children? _____ no ____ 1 ____ 2 ____ 3 _____ more than 3 _____ other

5. Ethnicity: ____ African-American   ____Asian American   _____ Hispanic
   (check (√) all that apply)   ____ Native American   ____ White   _____ Other

6. Education level: _____Freshman   _____Sophomore   _____Junior   _____Senior _____ Other

7. Current Major: _____ Undeclared: _____

8. Indicate the number of semesters you have been in college (including junior college) _____

9. Indicate the total number of hours (include classroom courses, on-line courses, intercession courses) you are taking this semester: _____ less than 6 hours _____ 9 hours _____ 12 hours _____ 15 hours
   ____more than 15 hours

10. Indicate your current overall cumulative grade point average (GPA).

    _____ 0.00 – 0.49   _____ 1.00 – 1.49   _____ 2.00 – 2.49   _____ 3.00 – 3.49
    _____ 0.50 – 0.99   _____ 1.50 – 1.99   _____ 2.50 – 3.00   _____ 3.50 – 4.00

11. Indicate how many hours you spend studying each week? _____

12. Do you have any other activities or obligations which affect the amount of time you can spend studying for this class each week?
    _____

13. Hours per week spent working _____ none ____1 to 4 ____5 to 10 ____10 to 20 _____ more than 20

14. Are you a first-generation student? (neither parent or caregiver(s) has attended college) _____yes
_____no

15. Indicate ONE primary caregiver who raised you and had the MOST influence on your life: (note: if you had more than one primary caregiver during your childhood, indicate the ONE that raised you for the majority of your childhood or indicate the ONE primary caregiver that had the most influence on your life).

_____ mother   _____ father   _____ other
_____ grandmother   _____ grandfather   (INDICATE WHO THIS PERSON IS)
_____ aunt   _____ uncle

16. Indicate primary caregiver's highest level of education

17. _____ some high school
    _____ high school
    _____ junior or two-year college
    _____ bachelor's degree
    _____ master's degree
    _____ doctorate
    _____ unknown
    _____ not applicable

18. Indicate your families total   (both parents) annual or yearly income

    _____ less than $1000
    _____ $1000 to $2999
    _____ $3000 to $3999
    _____ $4000 to $4999
    _____ $5000 to $5999
    _____ $6000 to $6999
    _____ $7000 to $7999
    _____ $8000 to $9999
    _____ $10000 to $14999
    _____ $15000 to $19999
    _____ $20000 to $24999
    _____ $25000 to $34999
    _____ $35000 to $49999
    _____ more than $50000
    _____ unknown

19. How many times do you contact your professors outside of class:

    Per week: 0 times _____   1-3 times _____   4-5 times _____   5+ times _____

THIS COMPLETES THIS SECTION OF THE ASSESSMENTS. THANK YOU.

PROMOTION OF INDEPENDENCE AND PROMOTION
OF VOLITIONAL FUNCTIONING SCALE

Note: Please answer the following questions based on the person that you listed as your primary caregiver on the demographic question #15. This person had the most influence on you when you were growing up.

In the following questionnaire indicate the extent to which you agree that each statement is true of your primary caregiver.
If you strongly agree that the statement is true of your primary caregiver, circle 6.
If you strongly disagree that the statement is not true of your primary caregiver, circle 1.
If the statement is more or less true of your primary caregiver, circle the number between 1 and 6 that best describes this person.

1 strongly disagree	2	3	4	5	6 strongly agree

strongly agree →   strongly disagree →

My primary caregiver . . .

1.	…emphasizes that every family member should have some say in family decisions	1 2 3 4 5 6
2.	…emphasizes that it is important to get my ideas across even if others don't like it	1 2 3 4 5 6
3.	…says that you should always look at both sides of the issue	1 2 3 4 5 6
4.	…talks at home about things like politics or religion, taking a different side from others	1 2 3 4 5 6
5.	…pushes me to think independently	1 2 3 4 5 6
6.	…gives me more freedom to make my own decisions when I get a good grade	1 2 3 4 5 6
7.	…admits that I know more about some things than adults do	1 2 3 4 5 6
8.	…often says I have to think about life myself	1 2 3 4 5 6
9.	…encourages me to be independent from others	1 2 3 4 5 6
10.	…listens to my opinion or perspective when I've got a problem	1 2 3 4 5 6
11.	…let's me make my own plans for things I want to do	1 2 3 4 5 6
12.	…is usually willing to consider things from my point of view	1 2 3 4 5 6
13.	…isn't very sensitive to many of my needs (reverse coded)	1 2 3 4 5 6
14.	…whenever possible, allows me to choose what to do	1 2 3 4 5 6
15.	…allows me to decide things for myself	1 2 3 4 5 6
16.	… insists upon doing things his way (reverse coded)	1 2 3 4 5 6
17.	…allows me to choose my own direction in life	1 2 3 4 5 6

PARENTAL GOAL PROMOTION SCALE

Note: Please answer the following questions based on the person that you listed as your primary caregiver on the demographic question #16. This person had the most influence on you when you were growing up.

In the following questionnaire indicate the extent to which each item is true of your primary caregiver.
If you think the statement is very true of your primary caregiver, circle 6.
If a statement is not true of your primary caregiver, circle 1.
If the statement is more or less true of your primary caregiver, circle the number between 1 and 6 that best describes this person.

1	2	3	4	5	6
not at all true					very true

My primary caregiver thinks it important …

very true   not at all true

↓   ↓

1.… that I develop my talents and my personality	1	2	3	4	5	6
2.….that I develop good and intimate friendships with other people	1	2	3	4	5	6
3.….that I become financially successful in life	1	2	3	4	5	6
4.….that I receive recognition and admiration for the things I do	1	2	3	4	5	6
5.….that I look beautiful and attractive	1	2	3	4	5	6
6.….that I am surrounded by friends who care about me	1	2	3	4	5	6
7.….that I do something to help improve society	1	2	3	4	5	6
8.….that I become rich and have expensive possessions	1	2	3	4	5	6
9.….that I am known by many people and that I am popular	1	2	3	4	5	6
10....that I am up-to-date with fashion trends (clothing, hair style, etc.)	1	2	3	4	5	6
11…that I develop myself as a person and continue to grow	1	2	3	4	5	6
12…that I try to make the world a better place through tiny things	1	2	3	4	5	6
13…that I am creative and do things in my own, original way	1	2	3	4	5	6
14…that I can do a variety of different things in life	1	2	3	4	5	6
15…that I stick to rules and regulations, even if nobody is watching	1	2	3	4	5	6
16…that I show respect for the customs of my family and the society I live in	1	2	3	4	5	6
17…that I make my own choices, am free, and not dependent upon others	1	2	3	4	5	6

18… that I can lead an adventurous and exciting life   1 2 3 4 5 6

19… that I behave in an exemplary fashion and refrain from doing things   1 2 3 4 5 6
others would disapprove

20… that I honor the customs that are passed on to me by my family   1 2 3 4 5 6
and the society I live in

APPENDIX H

APPROACHES AND STUDY SKILLS INVENTORY
FOR STUDENTS (ASSIST)

Directions: The following statements represent opinions related to how you learn and study. Read each statement and indicate the extent to which you agree with it and mark a response according to the following key.

In the following questionnaire indicate the extent to which each item is true of you.
If you strongly agree with the statement, circle 6.
If you strongly disagree with the statement, circle 1.
If you more or less agree with the statement, circle the number between 1 and 6 that best describes you.

1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Somewhat agree	5 Agree	6 Strongly agree

strongly agree →   strongly disagree →

1. I manage to find conditions for studying which allow me to get on with my work easily.   1 2 3 4 5 6

2. When working on an assignment, I'm keeping in mind how best to impress the instructor.   1 2 3 4 5 6

3. Often, I find myself wondering whether the work I am doing here is really worthwhile.   1 2 3 4 5 6

4. I usually set out to understand for myself the meaning of what we have to learn.   1 2 3 4 5 6

5. I organize my study time carefully to make the best use of it.   1 2 3 4 5 6

6. I find I have to concentrate on just memorizing a good deal of what I have to learn.   1 2 3 4 5 6

7. I go over the work I've done carefully to check the reasoning and that it makes sense.   1 2 3 4 5 6

8. Often I feel I'm drowning in the sheer amount of material we're having to cope with.   1 2 3 4 5 6

9. I look at the evidence carefully and try to reach my own conclusion about what I'm studying.   1 2 3 4 5 6

10. It's important for me to feel that I'm doing as well as I really can
on the courses here.   1   2   3   4   5   6

11. I try to relate ideas I come across to those in other topics or other
courses whenever possible.   1   2   3   4   5   6

12. I tend to read very little beyond what is actually required to pass.   1   2   3   4   5   6

13. Regularly I find myself thinking about ideas from lectures when
I'm doing other things.   1   2   3   4   5   6

14. I think I'm quite systematic and organized when it comes to
revising my notes for exams.   1   2   3   4   5   6

15. I look carefully at instructor's comments on coursework to see how
to get a higher grade next time.   1   2   3   4   5   6

16. There's not much of the work here that I find interesting or relevant.   1   2   3   4   5   6

17. When I read an article or book, I try to find out for myself exactly what
the author means.   1   2   3   4   5   6

18. I'm pretty good at getting down to work whenever I need to.   1   2   3   4   5   6

19. Much of what I'm studying makes little sense: it's like unrelated bits
and pieces.   1   2   3   4   5   6

20. I think about what I want to get out of my courses to keep my studying
well focused.   1   2   3   4   5   6

21. When I'm working on a new topic, I try to see in my own mind how
all the ideas fit together.   1   2   3   4   5   6

22. I often worry about whether I'll ever be able to cope with the work
properly.   1   2   3   4   5   6

23. Often I find myself questioning things I hear in lectures or read in books.   1   2   3   4   5   6

24. I feel that I'm getting on well, and this helps me put more effort into
the work.   1   2   3   4   5   6

25. I concentrate on learning just those bits of information I have to know
to pass.   1   2   3   4   5   6

26. I find that studying academic topics can be quite exciting at times.   1   2   3   4   5   6

27. I'm good at following up some of the reading suggested by instructors.   1   2   3   4   5   6

28. I keep in mind who is going to grade an assignment and what they're
likely to be looking for.   1   2   3   4   5   6

29. When I look back, I sometimes wonder why I ever decided to come here.   1   2   3   4   5   6

30. When I am reading, I stop from time to time to reflect on what I am
trying to learn from it.   1   2   3   4   5   6

31. I work steadily through the semester, rather than leave it all until the last minute.　1　2　3　4　5　6

32. I'm not really sure what's important in lectures so I try to get down all I can.　1　2　3　4　5　6

33. Ideas in course books or articles often set me off on long chains of thought of my own.　1　2　3　4　5　6

34. Before starting work on an assignment or exam question, I think first how best to tackle it.　1　2　3　4　5　6

35. I often seem to panic if I get behind with my work.　1　2　3　4　5　6

36. When I read, I examine the details carefully to see how they fit in with what's being said.　1　2　3　4　5　6

37. I put a lot of effort into studying because I'm determined to do well.　1　2　3　4　5　6

38. I gear my studying closely to just what seems to be required for assignments and exams.　1　2　3　4　5　6

39. Some of the ideas I come across in courses I find really gripping.　1　2　3　4　5　6

40. I usually plan out my week's work in advance, either on paper or in my head.　1　2　3　4　5　6

41. I keep an eye open for what instructors seem to think is important and concentrate on that.　1　2　3　4　5　6

42. I'm not really interested in my courses, but I have to take them for other reasons.　1　2　3　4　5　6

43. Before tackling a problem or assignment, I first try to work out what lies behind it.　1　2　3　4　5　6

44. I generally make good use of my time during the day.　1　2　3　4　5　6

45. I often have trouble in making sense of the things I have to remember.　1　2　3　4　5　6

46. I like to play around with ideas of my own even if they don't get me very far.　1　2　3　4　5　6

47. When I finish a piece of work, I check it through to see if it really meets the requirements.　1　2　3　4　5　6

48. Often I lie awake worrying about work I think I won't be able to do.　1　2　3　4　5　6

49. It's important for me to be able to follow the argument, or to see the reason behind things.　1　2　3　4　5　6

50. I don't find it at all difficult to motivate myself.　1　2　3　4　5　6

51. I like to be told precisely what to do in essays or other assignments.　1　2　3　4　5　6

52. I sometimes get 'hooked' on academic topics and feel I would like to keep on studying them.　　　　　　　　　　1　2　3　4　5　6

53. I prefer instructors who tell us exactly what to put down in our notes.　　1　2　3　4　5　6

54. I prefer instructors who encourage us to think for ourselves and show us how they themselves think.　　　　　　1　2　3　4　5　6

55. I prefer exams which allow me to show that I've thought about the course material for myself.　　　　　　　　1　2　3　4　5　6

56. I prefer exams or tests which need only the material provided in our lecture notes.　　　　　　　　　　　　1　2　3　4　5　6

57. I prefer courses in which it's made very clear just which books we have to read.　　　　　　　　　　　　1　2　3　4　5　6

58. I prefer courses where we're encouraged to read around the subject a lot for ourselves.　　　　　　　　　　1　2　3　4　5　6

59. I prefer books which challenge you and provide explanations which go beyond the lectures.　　　　　　　　1　2　3　4　5　6

60. I prefer books which give you definite facts and information which can be easily learned.　　　　　　　　1　2　3　4　5　6

61. I want my family to think I am a good student.　　　　　　　　　1　2　3　4　5　6

62. I don't want to make my family unhappy.　　　　　　　　　　1　2　3　4　5　6

For this question, please circle the response which indicates your overall academic progress this semester.

63. How well do you think you are doing in your coursework overall, so far this semester?
   Very well　　　*Quite well*　　　*About average*　　　*Not so well*
   Rather badly
   　1　　　2　　　3　　　4　　　5　　　6　　　7　　　8　　　9

APPENDIX I

ASPIRATION INDEX

Directions: Everyone has long-term Goals or Aspirations. These are the things that individuals hope to accomplish over the course of their lives. In this section, you will find a number of life goals, presented one at a time, and you are asked three questions about each goal. (a) How important is this goal to you? (b) How likely is it that you will attain this goal in your future? (c) How much have you already attained this goal? Read each statement and follow the scale in answering the two questions about each life goal.

In the following questionnaire indicate the extent to which each item is true of you.
If the goal is very important to you or very likely in the future, circle 6.
If the goal is not at all important to you or not at all likely in the future, circle 1.
If the statement is more or less important or likely for you, circle the number between 1 and 6 that best describes you.

1	2	3	4	5	6
Not at all Important / OR Not at all likely			Moderately Important		Very Important/ OR Very likely

	not at all	moderately	very
	↓	↓	↓

Life goal: To be a wealthy person.
1. How important is this to you?   1 2 3 4 5 6
2. How likely is it that this will happen in your future?   1 2 3 4 5 6
3. How much have you already attained this goal?   1 2 3 4 5 6

Life goal: To grow and learn new things.
4. How important is this to you?   1 2 3 4 5 6
5. How likely is it that this will happen in your future?   1 2 3 4 5 6
6. How much have you already attained this goal?   1 2 3 4 5 6

Life goal: To have my name known by many people?
7. How important is this to you?   1 2 3 4 5 6
8. How likely is it that this will happen in your future?   1 2 3 4 5 6
9. How much have you already attained this goal?   1 2 3 4 5 6

Life goal: To have good friends that I can count on.
10. How important is this to you?   1 2 3 4 5 6
11. How likely is it that this will happen in your future?   1 2 3 4 5 6
12. How much have you already attained this goal?   1 2 3 4 5 6

Life goal: To successfully hide the signs of aging.
13. How important is this to you?   1 2 3 4 5 6

14. How likely is it that this will happen in your future?　　1　2　3　4　5　6
15. How much have you already attained this goal?　　1　2　3　4　5　6

Life goal: To work for the betterment of society.
16. How important is this to you?　　1　2　3　4　5　6
17. How likely is it that this will happen in your future?　　1　2　3　4　5　6
18. How much have you already attained this goal?　　1　2　3　4　5　6

Life goal: To have many expensive possessions.
19. How important is this to you?　　1　2　3　4　5　6
20. How likely is it that this will happen in your future?　　1　2　3　4　5　6
21. How much have you already attained this goal?　　1　2　3　4　5　6

Life goal: At the end of my life, to be able to look back on my life as
　　　meaningful and complete.
22. How important is this to you?　　1　2　3　4　5　6
23. How likely is it that this will happen in your future?　　1　2　3　4　5　6
24. How much have you already attained this goal?　　1　2　3　4　5　6

Life goal: To be admired by many people.
25. How important is this to you?　　1　2　3　4　5　6
26. How likely is it that this will happen in your future?　　1　2　3　4　5　6
27. How much have you already attained this goal?　　1　2　3　4　5　6

Life goal: To share my life with someone I love.
28. How important is this to you?　　1　2　3　4　5　6
29. How likely is it that this will happen in your future?　　1　2　3　4　5　6
30. How much have you already attained this goal?

Life goal: To have people comment often about how attractive I look.
31. How important is this to you?　　1　2　3　4　5　6
32. How likely is it that this will happen in your future?　　1　2　3　4　5　6
33. How much have you already attained this goal?　　1　2　3　4　5　6

Life goal: To assist people who need it, asking nothing in return.
34. How important is this to you?　　1　2　3　4　5　6
35. How likely is it that this will happen in your future?　　1　2　3　4　5　6
36. How much have you already attained this goal?　　1　2　3　4　5　6

Life goal: To be financially successful.
37. How important is this to you?　　1　2　3　4　5　6
38. How likely is it that this will happen in your future?　　1　2　3　4　5　6
39. How much have you already attained this goal?　　1　2　3　4　5　6

Life goal: To choose what I do, instead of being pushed along by life.
40. How important is this to you?　　1　2　3　4　5　6
41. How likely is it that this will happen in your future?　　1　2　3　4　5　6
42. How much have you already attained this goal?　　1　2　3　4　5　6
Life goal: To be famous.
43. How important is this to you?　　1　2　3　4　5　6

44. How likely is it that this will happen in your future?	1	2	3	4	5	6
45. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To have committed intimate relationships.

46. How important is this to you?	1	2	3	4	5	6
47. How likely is it that this will happen in your future?	1	2	3	4	5	6
48. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To keep up with fashions in hair and clothing.

49. How important is this to you?	1	2	3	4	5	6
50. How likely is it that this will happen in your future?	1	2	3	4	5	6
51. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To work to make the world a better place.

52. How important is this to you?	1	2	3	4	5	6
53. How likely is it that this will happen in your future?	1	2	3	4	5	6
54. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To be rich.

55. How important is this to you?	1	2	3	4	5	6
56. How likely is it that this will happen in your future?	1	2	3	4	5	6
57. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To know and accept who I really am.

58. How important is this to you?	1	2	3	4	5	6
59. How likely is it that this will happen in your future?	1	2	3	4	5	6
60. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To have my name appear frequently in the media.

61. How important is this to you?	1	2	3	4	5	6
62. How likely is it that this will happen in your future?	1	2	3	4	5	6
63. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To feel that there are people who really love me, and whom I love.

64. How important is this to you?	1	2	3	4	5	6
65. How likely is it that this will happen in your future?	1	2	3	4	5	6
66. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To achieve the "look" I've been after.

67. How important is this to you?	1	2	3	4	5	6
68. How likely is it that this will happen in your future?	1	2	3	4	5	6
69. How much have you already attained this goal?	1	2	3	4	5	6

Life goal: To help others improve their lives.

70. How important is this to you?	1	2	3	4	5	6
71. How likely is it that this will happen in your future?	1	2	3	4	5	6

72. How much have you already attained this goal?   1   2   3   4   5   6

Life goal: To have enough money to buy everything I want.
73. How important is this to you?   1   2   3   4   5   6
74. How likely is it that this will happen in your future?   1   2   3   4   5   6
75. How much have you already attained this goal?   1   2   3   4   5   6

Life goal: To gain increasing insight into why I do the things I do.
76. How important is this to you?   1   2   3   4   5   6
77. How likely is it that this will happen in your future?   1   2   3   4   5   6
78. How much have you already attained this goal?   1   2   3   4   5   6

Life goal: To be admired by lots of different people.
79. How important is this to you?   1   2   3   4   5   6
80. How likely is it that this will happen in your future?   1   2   3   4   5   6
81. How much have you already attained this goal?   1   2   3   4   5   6

Life goal: To have deep enduring relationships.
82. How important is this to you?   1   2   3   4   5   6
83. How likely is it that this will happen in your future?   1   2   3   4   5   6
84. How much have you already attained this goal?   1   2   3   4   5   6

Life goal: To have an image that others find appealing.
85. How important is this to you?   1   2   3   4   5   6
86. How likely is it that this will happen in your future?   1   2   3   4   5   6
87. How much have you already attained this goal?   1   2   3   4   5   6

Life goal: To help people in need.
88. How important is this to you?   1   2   3   4   5   6
89. How likely is it that this will happen in your future?   1   2   3   4   5   6
90. How much have you already attained this goal?   1   2   3   4   5   6