Personal Projects and Coping Strategies in University
Relating to Financial Stress

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in partial fulfillment of the requirements for the
degree of Master of Arts

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Abstract

Adolescence and early adulthood are particularly vulnerable periods for young people, who are attempting to gain social, economic, and emotional independence from their families. For those individuals who choose to pursue post-secondary studies during this period, the transition to adulthood may be further complicated by additional stressors of university life, such as, financial concerns, along with the demands of their academic programs and maintaining social equilibrium. University students leaving school in 1997, in general, incur a debt of \$40,000 and subsequently they have felt a great sense of stress about their ability to retire the debt in the future (Lange & Byrd, 1998). The purpose of this research is to examine the relationship of financial stress with students who feel that they are engaging in meaningful personal projects. The present study revealed that students who worked, with or without accumulating debt, were significantly more financially stressed than those students who did not. Where students under financial pressures indicated greater financial distress than those who were not, similar elevations in depressive symptoms and anxiety were not found, although financial distress and anxiety were positively related. Also, a significant relationship was found between financial stress and ratings of integrity and meaning for financial projects. Students who indicated higher financial stress rated their financial projects closer to their core identity, and that the project was consistent with their struggle for self-identity.

The first year of university is a time for adjustment and turmoil for many students (Chickering & Reisser, 1993), and such difficulties may be sufficiently severe students are unable to manage them and maintain their academic status (Gerald, 1992). Factors affecting academic performance and the retention of university students have been studied extensively, and theoretical models have been developed to describe elements affecting college students' adjustment and performance (Astin, 1993; Pascarella & Terenzini, 1991; Tinto, 1993). In spite of this, the percentage of students who drop out of university in their first year has reached a record high (Tinto, 1993). The projections of the National Centre for Educational Statistics from 1990-2000 suggests that almost half of the students who enter post secondary education will leave before completing their chosen degree program (Gerald, 1992). Such concerns have led a new wave of scholars to investigate the factors that cause student attrition in post-secondary education (Ting, 2001). Several factors have been identified as placing a student at greater risk for dropping out, including lack of social support (Cross & Vick, 2001; Smith & Naylor, 2001), poor time management skills (Mpofu, D'Amico & Cleghorn, 1996), family socio-economic status (Clark-Lempers, Lempers & Netusil, 1990; Lange & Byrd, 1998), and financial worries and concerns (Lange & Byrd, 1998; McCarthy & Humphrey, 1995).

Of particular interest in the present study was the role of financial pressures on students' stress and academic achievement, which may ultimately affect their ability to successfully complete their degree program (Dunkel-Shetter & Lobel, 1990; Gerdes & Mallinchrodt, 1994; Patton & Goldenberg, 1999). Few studies have been specifically designed to assess the impact of finances on post-secondary students. Existing research has found that grants and fellowships have a positive influence on minority students' access to and persistence in university, while receiving loans has been found to be related

with attrition (Baker & Velez, 1996). The latter finding is of particular interest, given that when classes resumed in the fall of 2001, approximately 350,000 students in Canadian Universities were on student loans (Boudreau, Wood & O'Malley, 2001). For those on student loans, the average debt was \$25,000, up from \$8,690, 10 years previously (Boudreau, Wood & O'Malley, 2001). In addition, to minimize the accumulation of loans, many students sought part-time or full-time employment (Sandler, 2000), while others relied on family members to help cover their expenses (Boudreau et al., 2001; Lempers, & Clark-Lempers, 1990).

Financial stress was proposed in the present study to be an important source of distress in students' lives because many fundamental activities of daily living and many of life's chances to succeed are closely tied to personal financial resources (Pearlin & Radabaugh, 1976). Moreover, research finds a relationship between debt level and psychological stress, depression, and the coping resources available (Chi & Chou, 1999; Peirce, Frone, Russell & Cooper, 1996). While these relations are likely not unique to students, the additive effects of academic stress load over and above work, social, and financial concerns may make this population particularly prone to psychological distress.

Despite this expectation, the results of past research are not unequivocal, in that, Humphrey and McCarthy (1998) found that the extent of debt was not related to student stress. Do these latter findings indicate that debt may be an accepted part of the student experience and that some students enter the academic world expecting to accumulate debt throughout their time at university? As Cox (1978) states, stress results from an inability to cope with the demands made upon oneself. Acceptance of debt as simply a part of student life could be an effective coping strategy for living with the inevitability of an

insufficient income. It is also possible that the stress associated with student debt is deferred until the time repayment becomes necessary.

Alternatively, students carrying more of the financial burden themselves through work or are relying on their parents to contribute to school and living expenses (Boudreau et al., 2001) may worry about the burden they or their families bear. Thus academic pressure can be exacerbated when the financial and personal cost of an education are so high. Students may feel that it is essential to excel in order to justify the major sacrifices that they and/or their parents are making. As a result, stress levels may not be reduced by efforts to minimize the accumulation of long-running debts. It is therefore the goal of the present study to explore the factors associated with student finances that may be associated with psychological well-being, and the moderating effects of coping strategies.

Transactional Model of Stress

Prime among the variables that influence the impact of stressors is the perceived threat/risk elicited, coupled with the individual's ability to cope with the challenges. In the transactional model of stress (Lazarus, 1966; Lazarus & Folkman, 1984), Lazarus contends that stress does not exist in the "event" but rather is a result of a transaction between a person and his or her environment. As such, stress encompasses a set of cognitive, affective, and coping variables.

Lazarus (1966), and later Lazarus and Folkman (1984) asserted that the primary mediator of person-environment transactions was appraisal of the stressor. Three types of appraisal were identified: primary, secondary, and reappraisal. *Primary appraisal* is a judgement of the balance of demands and resources. If the demands of a situation outweigh available resources, then the individual may determine that the situation represents (a) a potential for harm or loss (threat), or that (b) actual harm has already

occurred (harm), or (c) the situation has potential for some type of gain or benefit (challenge). *Secondary appraisal* is the process of determining what coping options or behaviours are available to deal with a threat. Often, primary and secondary appraisals occurs simultaneously and interact with one another, which makes measurement very difficult (Lazarus & Folkman, 1984). *Reappraisal* is the process of continually evaluating, changing, or re-labelling earlier primary or secondary appraisals as the situation evolves. What was initially perceived as threatening may now be viewed as a challenge, or as benign or irrelevant. There are many situational factors that influence appraisals of threat, including the number of threats and their complexity, novelty of the situation, situational constraints, degree of uncertainty and ambiguity, proximity (time and space), intensity and duration of the threat, controllability of the threat, the availability of coping resources, social support, the person's values, commitments, and goals, self-esteem, and coping skills (Lazarus, 1966; Lazarus & Folkman, 1984). Thus, not surprisingly there is much variation across individuals in their assessment of a given situation as stressful and their response to it.

The transactional model of stress and coping defines coping as constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands appraised as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984). The effectiveness of particular strategies of coping with stressors, especially problem- and emotion-focused coping, has received considerable attention. In addition or subsumed under, these principle categories, is a broad range of strategies (Carver et al., 1989). For example, individuals may employ cognitive restructuring (re-evaluating the relation between the person and the threat), positive activity (constructive or recreational activities), social support seeking (as a buffer or venting outlet), humour,

and/or rumination (Carver et al., 1989; Endler & Parker, 1994; O'Brien & DeLongis, 1996). Furthermore, emotion-focused coping may comprise numerous dimensions, including emotional expression, emotional containment, blame, withdrawal, denial, or passive resignation.

The coping method employed may reflect the appraisal of the stressor (Carver, Scheier & Weintraub, 1989; Folkman & Lazarus, 1980, 1985). When the stressor is perceived as being controllable, then problem-focused strategies prevail. If, in contrast, the stressor is one that must be endured, then emotion-focused coping strategies will be dominant (Billings & Moos, 1981; Folkman & Lazarus, 1980). The relationship between appraisal and coping is a dynamic process, as the coping strategies perceived as being available may impact on stressor appraisal, just as appraisal may influence the coping method used (Lazarus, 1966; Lazarus & Folkman, 1984). The coping strategies employed by my students may depend upon what they appraise the threat of their financial situation to be.

Student Stressors

Stress is defined as environmental, social, or internal demands (stimuli) that require individuals to readjust their usual behavioural patterns (Holmes & Rahe, 1967). Stress can be studied from a multidimensional perspective, ranging from daily hassles (Kanner, Coyne, Schaefer & Lazarus, 1981) to global (psychological) stress (Lazarus & DeLongis, 1983), and economic or financial stress (MacFadyen, MacFadyen & Prince, 1996).

The university years have been described as stressful for students, with a general increase over time in the types and severity of personal stressors (Stone & Archer, 1990). In the 1970s, a cluster of studies noted the high prevalence of emotional distress among

college students. For example, Comstock and Slome (1973) surveyed a random sample of 1,260 university students and found that 30 percent had moderate to severe emotional problems (e.g., depression, anxiety). Other studies conducted around this time also noted comparable rates of students reporting emotional difficulties (Christenfeld & Black, 1977; Mechanic & Greenley, 1976; Moos & Van Dort, 1977). However, it appears that stress in university students increased in the 1980s (Astin et al., 1988; Koplik & DeVito, 1986). A survey of undergraduate males at a Midwestern university found 93 percent had experienced physical signs of stress, such as headaches, and 88 percent had experienced stress related feelings, such as depression (Pinch, Heck, & Vinal, 1986).

Researchers attempted to identify stressors on university campuses that could potentially cause or exacerbate student problems. Archer and Lamnin (1985) studied the academic and personal stressors reported by students on a university campus in open-ended questionnaire format. Content analyses of the student's stressors resulted in the derivation of 13 academic and 15 personal stressor categories. They found that the most common academic stressors were (in descending rank order) tests, grade competition, time demands, professors and classroom environment, and career and future success. The major personal stressors identified were (in descending rank order) intimate relationships, parental conflicts, finances, and interpersonal conflicts with friends.

In a follow-up study ten years later, Murphy and Archer (1996) found that there were significant changes in the levels of reported stress. They looked at "academic" and "personal" stressors as reported by students in the 1983 as compared to those reported in the current study. They found that students in 1993 reported personal stress in the areas of finances and current jobs more often, while reporting stress in relation to parental conflicts and expectations, interpersonal conflicts, judgement and goal setting,

approaching and meeting other students, general adjustment to unexpected change, and personal appearance less frequently. The researchers found that there was little change from the mid-eighties in the area of academic stressors.

Other research on student stress and adjustment to university (e.g., Compas, Wagner, Slavin & Vannatta, 1986; Cultrona, 1982) concurs with these findings in noting that the first year of university is often a difficult one. Students leave support systems and form new friendships, and there are high and often unclear academic demands and a large number of new distractions (Lecompte, 1986). However, much of the past research examining the role of stress in students' well-being has concentrated on various behavioural problems and pathologies that result in students seeking help from campus mental health centres (Rice & Leffert, 1997). Such studies have investigated the effects on depression (Haines, Norris, Kashy, 1996; Sherer, 1985), psychiatric disturbance (Gelman, Swartz, Tredoux & Strauss, 2001), sleep disturbances (Farnill & Roberson, 1990) eating disorders (Santonastaso, Friederici & Favaro, 1999), drug abuse and alcoholism (Miller, Toscova, Miller & Sanchez, 2000), and suicide (Gutierrez, Osman, Kopper, Barrios & Bagge, 2000) on university campuses. This approach fits into the body of work that links stressful life events with poor physical and mental health (Kessler, Price & Wortman, 1985). In addition to looking at the effects of academic stress on pathological outcome, this research has also examined the role of major negative life events, such as the death of a loved one, which, consistent with other literature, notes that such events are associated with various symptoms or illnesses in students, including high blood pressure (Myers, Bastien & Miles, 1983) and affective disorders (Ionescu & Popescu, 1986). Stronger links are typically found when social support or other

resources are not available to buffer the effects of these stressful life events (Cohen & Hoberman, 1983).

In contrast to this work, some have suggested that school stress may facilitate learning and performance, in that such stress may be perceived as a challenge and be motivating in terms of adopting effective coping strategies that maximize performance (e.g., problem-solving) (Linn & Zeppa, 1984). Clearly, some students adapt effectively to postsecondary education, while other students are unable to respond to the stress adaptively, resulting in negative psychological and academic outcomes (Clifton, 1987; Gerdes & Mallinkrodt, 1994; Simmonds, 1987). The transition from school to university involves adjustment to an environment that presents new academic and social demands, and some students appear to be more successful in learning and implementing strategies for coping with the new challenges and tasks which confront them (Compas, Wagner, Slavin & Vannatta, 1986; Farnill & Roberson, 1990).

In summary, although the number of studies examining stress among university students is diverse, the available research indicates that a student's university life today does not reflect the classic image of blissful late adolescence wherein the strains of the real world are nonexistent. Instead, the picture is one of a troubled and difficult time, the sources of which are only somewhat understood.

Financial Distress

Where students have been assessed in terms of the effects of daily hassles (Sarafino & Ewing, 1999), less work has been focused on the impacts of the new financial situation that students are placed in. Individuals, whether they are students or not, suffer significant financial strain when they perceive their current and projected financial status to be unstable. They constantly worry and must make adjustments in

managing their resources (Voydanoff, 1990). For many students, commencing university studies may involve a substantial drop in their financial status, and many expect to incur substantial debt and financial difficulties for several years, through the duration of their academic program. Petersdorf (1990) reported findings of a study of 3800 third year residents conducted by the association of American Medical Colleges in 1987 that 80 percent of residents reported carrying an average debt of more than \$40,000 each. Six years later, Kassebaum, Szenas, and Schuchert, (1996) found that students' average debt load had increased to \$60,000. Also reported by Kassenbaum et al. (1996) was that from 1985 to 1995, loans for medical education had increased 93 percent for students at public schools and 58 percent for students at private schools. Thus, although medical students are a unique sample, it is not surprising that financial concerns have become an increasingly prominent stressor among students. Indeed, while the expenses of less specialized programs may not be as substantial as medical school, the expectations of financial payoff following graduation are also often correspondingly lower (Looker & Lowe, 2001).

The history of student loans in Canada Former Canadian Prime Minister Lester Pearson started the Canada Student Loans Program in 1964. He hoped to make post-secondary education financially possible for lower-income families. The result of this was an increase in enrolment in post-secondary education. Since then, the federal government has provided \$16.7 billion in loans to more than 3.4 million post-secondary students. However, in the early 1990s, in an attempt to battle the looming deficit, the federal government cut \$4 billion from Canada Health and Social Transfer payments to the provinces. The implication was that students now had to pay more for their education because of less transfer payments. At this time the government also adopted stricter

measures to force ex-students to pay their loans on time and did not allow them to default on loans.

How does the student loan system work? During post-secondary education, the Canada Student Loans Program (CSLP) gives the student an annual sum of money based on family income. The Canadian government pays the interest on the loan while the student is in university, college or at private vocational school. The student begins repaying the loan six months after leaving school. People with low income can apply for the interest relief plan, under which the government pays the interest for up to 30 months. If the borrower faces extreme difficulty, it can be extended for another 24 months. The loan repayment period is generally 10 years, but can be lengthened to 15 years. Thus, a student owing \$25,000 in loans at 8.5 percent interest faces a repayment schedule of \$310 a month for 10 years. Salaries for graduates average about \$30,000-\$35,000 a year while people that do not attend school earn average salaries of about \$28,000-\$31,000 in their first 5 years of work. With rent, food, bills and loan payments, there's little money left over for the student that has gone to university because even though there is difference in the level of salary, a student who has graduate on average must makes loan payment of \$4,800 a year and this is just to cover the minimum amount of the loan that is due. In the summer of 1997, Statistics Canada and Human Resources Development Canada did a survey of university graduates of 1995. They found this group borrowed more than any other did in the past 15 years. Forty percent of the class of 1995 did not know when they would be able to retire their loans. Thus, it is not surprising that students are experiencing significantly more stress associated with finances than they did in previous years.

Financial stress and well-being Research indicates that financial strain exerts a harmful influence on psychological health and well-being (Krause, 1987; de Leon, Rapp & Kasl, 1994). Greater financial stress has been associated with feelings of depression and loneliness in female students (Lempers & Clark-Lempers, 1990,) student distress and poor overall feelings of well-being (Lea, Tarpy & Webley, 1987; Lempers, Clark-Lempers & Simons, 1989). Perlin and Radabaugh (1976) noted that such chronic financial stress was positively related to anxiety, and that anxiety was related to avoidance coping strategies as a means to control the distress (Chi & Chou, 1999; Peirce, Frone, Russell & Cooper, 1996).

Nonetheless, a perception of the demands presented by a financial situation is generally more predictive of financial distress than more objective features of their true financial situation (Lange, & Byrd, 1998). In effect, consistent with Lazarus' stress model, the event or stressor itself will only be perceived as stressful, if it is appraised as one that is threatening and the individual has inadequate resources to cope with the threat. Thus, in examining the effects of financial stress it is important to evaluate the stress load as a subjective experience.

Students' Coping Resources and Skills

Because many students have not experienced such high levels of stress before, they may lack insight into the necessary skills for coping with these stressors. Financial stress is theorized to be an important source of distress in students' lives because many fundamental activities of daily living and many of life's chances to succeed are closely tied to levels of personal financial resources (Pearlin & Radabaugh, 1976). Due to this, we cannot look at financial stress in isolation, but rather we must consider the effect on other stressors and coping resources. One factor that may be of critical importance,

particularly among students who are trying to reduce their stress through ongoing employment, may be time-management abilities. Students who are better able to maintain time management practices may be more likely to utilize more effective coping strategies (Ranjita, McKean, McKean, 2000).

Time Management as a Coping Resource. According to Lakekin's (1973) description of time management, an individual first determines their needs and wants, and then ranks them in terms of importance. Specific activities include setting goals to achieve the needs or wants and prioritizing the tasks necessary to accomplish them. The tasks of utmost importance are then matched to time and resources available by planning, scheduling, and making lists. In general, it has been found that individuals who set goals and priorities, and had a preference for organization, perceived themselves to have greater control over their time than did persons who did not. In turn, a perception of control over time was related to reduced stress and tension (Macan, 1994). Moreover, Macan's (1994) proposal of perceived control of time as a composite outcome of time behaviours (i.e., goal setting and prioritizing; task execution) and time attitudes (i.e., preference for organisation), which was more predictive of performance outcomes than either of time behaviours or time attitudes taken alone. Studies indicate that many students work full-time while also taking a full-time course load (Dunkel-Schetter & Lobel, 1990). Such employment may reduce students' concerns about increasing debt load or their inadequate day-to-day financial resources. However, employment responsibilities have been found to influence student retention. Pantages and Creedon (1975) found that full-time students who worked more than 15 hours per week were more likely to withdraw than full-time students who worked less than 15 hours per week. Time management skills may act as a moderating variable, in that, it may represent a

form of problem solving coping and goal directed behaviour. Students' academic programmes are often packed with goals and tasks that are in conflict or competition with each other in terms of time and demands. Academic achievement could therefore, to an extent depend on the student's ability to manage time with regard to the selection and prioritization of goals, tasks and the means of achieving these.

The Present Study

For those who choose to pursue post-secondary studies, the transition to adulthood is complicated by additional stressors of university or college life, such as separation from family, unfamiliar people and surroundings, financial concerns and the demands of their academic programs. One of the major personal stressors for students identified by Murphy and Archer (1996) was finances. Some students try to circumvent the accumulation of significant debt loads through concurrent employment. Others accumulate a debt load, but have to deal with the knowledge that they are expected to retire this debt load in the future. Finally, some students will incur no significant debt load as their expenses are minimal and/or the costs have been anticipated and are assumed in advance by the self or others. It may be that students in each of these groups will respond quite differently to the stressors imposed upon them in the course of their academic experiences and outcomes.

However, the effectiveness of their response may depend on the coping strategy they employ, including time management. For example, those who are employed may maintain well-being if they are able to demonstrate strong time-management and problem-solving skills. By maintaining time management practices and problem solving skills these students may be able to effectively reducing the anxiety associated with juggling both work and school. Students who are accumulating substantial debt may fair

better if they adopt cognitive restructuring or avoidance strategies. The students that are accumulating debt may try to look at the debt as an investment in their future; by investing in education they will have better occupational success and opportunities. Alternatively, the student amid loans may put off evaluating their financial situation until they are in a professional position that allows them to begin paying back the money. This distraction strategy might be effective in reducing current anxiety associated with future financial difficulties. Thus, the coping strategies of participants with varying financial situations will be examined to assess the effects on students' financial stress, anxiety, and depressive affect.

In addition to using an objective indicator of students' financial status, a more subjective approach was also incorporated. More specifically, this study examined the effects of financial pressures and coping strategies through the assessment of individuals' "pursuit of personal projects", and in particular their financial projects, and how these in turn influenced students' anxiety and depressive affect. Previous research by Little (1987, 1989) has shown that well-being is enhanced when the individual is engaged in meaningful personal projects. However, what happens when that meaningful project (e.g., academics) comes at a great cost, and when maintaining that project (academics) involves the establishment of other projects (such as part- or full-time work) that may negatively affect success on the central project (academic performance) is less well-studied? It was the goal of the present study to examine the relative project structure of students with different financial concerns. In particular, it was expected that academic projects may be described as more meaningful, but simultaneously be more difficult to manage and be more stressful to students with financial concerns. This expectation was based on studies using personal project analysis that have shown that people differ in

their goal-directed pursuits and that various dimensions of project, such as enjoyment or perceived difficulty, correlated with distress (Little, 1987; 1989). Moreover, support for academic projects may be less for students with financial concerns. As a result, these students may be particularly vulnerable to negative psychological outcomes when their academic projects do not succeed.

Personal Projects Analysis (Little, 1983) is conceived of as an interrelated set of activities extending over time, which is intended to maintain or attain a state of affairs foreseen by the individual (Little, 1983). Personal project methodology involves the drawing out of a list of projects or current concerns from each participant (e.g. running a 6 minute mile; working 3 shifts this week), thereby providing a unit of analysis both meaningful and salient to the individual. Studies using personal projects analysis have shown that people differ in their goal-directed pursuits and that various dimensions of projects, such as enjoyment or perceived difficulty, correlate with measures of affect. An assumption underlying personal projects research has been that goal-directed pursuits serve the purpose of helping people meet the adaptation demands of their environments. One would thus expect that project dimensions such as progress or outcome might correlate with measures of adjustment or well-being, and this has typically been the case. For example, studies have shown that persons scoring high on measures of depression or anxiety also rate their personal projects as more stressful and difficult (Lecci, Karoly, Briggs, & Kuhn, 1994). The core dimensions of personal projects have consistently explained nearly 25% of the variation in measures of depression and well-being.

Along these lines, individuals' subjective appraisals of their financial projects might be best tapped by their ratings of the project dimensions in regard to their financial situation. These appraisals in turn would be expected to be associated with well-being,

although consistent with a transactional model, the relation between appraisals and psychological distress is likely mediated by individuals' ability to cope with the stressor.

Hypotheses

1. Students who were trying to pay for school through work would report higher financial stress, anxiety and depressive affect than students who were not working. Further, the students who were incurring debt load may report higher levels of anxiety and depressive affect than those not incurring such debts.
2. Students who enabled better time management skills would have lower anxiety or depression scores regardless of financial circumstances.
3. Coping strategies, and in particular time management would moderate the effects of financial status on stress, anxiety and depressive affect. Time management skills were likely to be particularly important in determining the well-being of employed students. For students incurring debt, the use of cognitive restructuring and avoidance were expected to be most associated with reduced levels of stress and anxiety.
4. To the extent that academic projects were highly important to the student, they would be more likely to experience distress when having to co-ordinate all three project types
5. The relation between subjective appraisals of their financial situation (i.e., project ratings) and psychological distress were expected to be mediated by coping strategies.

Method

Participants

Carleton University students were preselected from a mass testing of their first year seminar classes at the beginning of the academic year. Over 1000 students were screened for the study and of these, 112 participants (70 female and 42 males) met the

criteria for inclusion, and agreed to participate (Appendix A). The inclusion criteria was that the student fit exclusively into one of four groups reflecting their financial status, including (1) no debt or work, (2) paying for their education through loans, (3) paying for their education by working, and (4) accumulating debt and working. Students who met the criteria for 'no debt or work' were students who had not received student loans and did not currently participate in paid employment as a means to pay for school and living expenses. The group classified as 'loans' were distinguished by the fact that these members received loans, that would be re-paid back in the future, as their primary method of payment for school and living expenses. The group classified as 'work' were participants that worked part- to full-time, paid for school and living expenses themselves and did not receive loans. The group labelled 'debt and work' met the criteria of working part- to full-time and also acquired money through loans that would have to be paid back in order to pay for school and living expenses.

Procedure

Students who met the inclusion criteria were contacted by telephone and invited to participate in a study on student stress. Students were offered one experimental credit for their participation. Participants were run individually or in small group sessions, while others were allowed to complete the questionnaire package at home. They completed an informed consent (Appendix B) followed by a questionnaire that took approximately 1-hour to complete. This questionnaire assessed background information, the Personal Projects Grid (Little, 1983), the Financial Stress Scale (Flynn, Chow & Saunders, 2001), the Spielberger State Anxiety Scale (Spielberger, Gonzalez, Taylor, Anoton, Algaze, Ross, & Westberry, 1980), the Beck Depression Inventory (Beck, 1972), Time Management Behaviour Scale (Adams & Jex, 1997), and a modified version of the

Coping Strategies Scale (Beckham & Adams, 1984) (see questionnaires in Appendix C).

At the end of the session, participants were provided with a written debriefing, along with a list of contact numbers should they have any further questions or concerns in regards to the study (Appendix D).

Measures

Background information. The background information included questions on gender, age, current student status (e.g. full- or part-time student), whether students were currently employed (yes or no), and to what extent they were employed (i.e., number of hours and typical shift). The background information also assessed how students paid for their education. Responses could be any combination of the following: Scholarship money; government grants; student loan; money from parents/spouse; nothing- I pay for my own expenses in full (Appendix A).

Time Management Behaviors Scale. Macon (1994) developed a 28-item measure of time management behaviours using theoretical and empirical evidence to support their notions of time-management behaviours represented by three underlying factors that are thought to encompass the scope of time management behaviours, including (1) setting goals and priorities, (2) engaging in the mechanics of time management, and (3) having a preference for organization. These three factors can be examined individually or the scale can be used as a whole as a general indicator of time management behaviours. Because we were only interested in time management behaviours as a whole, we did not examine the dimensions. The internal reliability for this sample was $\alpha = .79$.

Student Financial Stress. To investigate students' financial stress, this 40-item instrument incorporates four conceptually distinct scales (Flynn, Chow & Saunders, 2001). They were based on specific properties of student financial stress that were

derived from the literature, including influence of financial issues on education and future goals, work and school stress, financial support and sources, and financial worries and behaviours. The subscale *influences of financial issues on education and future goals* assesses the present school situation and future educational plans. The financial issues that are included pertain to worries about covering current living expenses, the future financial situations' effect on further education and the ability to meet the rising costs of education. *Work and School Stress* pertains to students reliance on part-time work for such things as entertainment money and living expenses. It also measures students' ability to concentrate on schoolwork after the job hours have been completed. *Financial Support and Sources* pertains to the ability of the students to have sources of income to cover living expenses. This includes the ability of part-time work to contribute and the ability of student loans to adequately cover all expenses. *Financial Behaviours and Worries* includes a variety of behaviours that could influence financial stress levels such as keeping a financial budget and using credit cards carelessly at times. It also includes questions that pertain to worrying about money sources and going into debt. Responses were indicated on 5-point scales ranging from (1) Strongly Disagree to (5) Strongly Agree, as well as the option to indicate Not Applicable. Internal reliability for the Financial Stress Scale has been found to be moderate to high in a first year university sample ($\alpha = .69$), a fourth year university sample ($\alpha = .74$), and a teachers college sample ($\alpha = .81$). This Student Financial Survey is scored as a whole because empirical support has not been noted for the use of the sub-scales individually. The internal reliability for this sample was $\alpha = .84$.

Beck Depression Inventory. The Beck Depression Inventory is one of the most widely used self-report measures of depression (Beck, Ruch, Shaw & Emery, 1979). The

13-item version of the Beck Depression Inventory (Beck, 1972) was used. Responses included item sets that gave respondents a choice between 4 different behaviours reflecting increasing degrees of problem severity (e.g., from 0 ("I do not feel sad") to 3 ("I am so sad or unhappy that I can't stand it"). Responses were summed to provide a single index of depressive symptomatology. From a meta-analysis of studies conducted from 1961 to 1986, Beck, Street, and Garbin (1988) report a mean internal consistency coefficient of .86 for psychiatric subjects and .81 for nonpsychiatric subjects, and test-retest correlations of .48-.86 for psychiatric subjects and .60-.83 for nonpsychiatric subjects. Beck et al. (1988) report validity estimates of .60 or higher for the relationship with clinical assessments and other depression measures such as the Hamilton Psychiatric Rating Scale for Depression, Zung Self-reported Depression Scale, MMPI Depression Scale and Multiple Affect Adjective Checklist Depression Scale.

Anxiety. Data concerning the students' perceived levels of anxiety were collected using the State Anxiety Inventory (Spielberger, Gonzalez, Taylor, Anoton, Algaze, Ross, & Westberry, 1980). This scale consists of 20 statements that evaluated how respondents feel right now, at this moment. Response options ranged from (1) not at all to (4) very much so. The essential qualities evaluated by the State Anxiety scale are feelings of apprehension, tension, nervousness, and worry. Construct validity through factor analysis has been established (Spielberger et al., 1983), as has concurrent validity through comparisons with other anxiety scales. The Anxiety scale was scored as total indicator of overall anxiety level. The internal reliability for this sample was $\alpha = .53$.

Coping Strategies Scale. A modified and reduced version (87 items) of Beckham and Adams (1984) measure of coping strategies was used. Response options ranged from (1) never to (4) always, in terms of the self-application of each strategy in recent months.

This scale was chosen because it represented a multidimensional assessment of coping strategies, such as blame (“thought a lot about who is responsible for problems besides yourself”), expression (“expressed anger that others were not making effort to help you”), emotional containment (“felt angry, but held it in”), social support seeking (“sought sympathy from others”), cognitive restructuring (“told yourself that some good can come out of your misfortune”), general activity (“gone shopping”), avoidance/denial (“avoided thinking about your problems”), problem-solving (“taken steps to improve your problems”), and passivity (“decided to wait and see how things turn out rather than making an effort”).

Personal Projects Analysis. Participants were given 10 minutes to generate a list of personal projects that they were engaged in or intending to begin over the next month or so. They then selected the 7 that together provided the most complete and informative overview of their lives. These projects were then entered onto a grid, along with three additional projects that were supplied because they were particularly relevant to the theoretical concerns of this research. These included “doing well at school”, “covering living expenses”, and “having friends” which all participants were asked to rate along the same dimensions. Only responses to these three projects were examined in the present study. Participants rated each of the projects along 17 dimensions such as difficulty and importance. Anchors were supplied for all of the dimensions (e.g., “use 10 for a project that you find very difficult to carry out and 0 for one that you do not find difficult at all”).

Results

Descriptives

There was a fair range of depressive symptoms (from 0 to 28) in this sample ($M = 6.6$, $SD = 5.5$). As expected, the majority reported minimal, if any symptoms of

depression (scored less than 4; $n = 48$, 39.3%). Nonetheless, a sizeable proportion reported moderate symptoms (scored between 4 and 8; $n = 29$, 25.8%) or high symptoms (greater than 8; $n = 34$, 27.8%). Similarly, there was a range of scores on the Financial Stress scale (from 46 to 156), and the mean score was 100.4 ($SD = 24.07$) which was 22 points higher than that found in a previous student population (Flynn et al., 2001). There was a fair range of anxiety scores (from 20 to 69) in this sample, although the range and average scores ($M = 40.9$, $SD = 11.5$) were within the normative values reported for students (Burns & Edgar, 1994). Similarly, the range (from 53 to 136) and average time management scores ($M = 81.0$, $SD = 13.1$) were within the normative values reported for students (Adams & Jex, 1997).

Correlations among the outcome variables financial stress, anxiety and depressive symptoms were examined. Consistent with other research, anxiety and depressive symptoms were highly positively correlated, $r = .69$, $p < .001$. Further, anxiety was moderately positively related to financial stress, $r = .21$, $p < .05$, where depressive symptoms were not, $r = .12$, ns .

Examination of Differences in Psychological Well-being across Financial Groups

It was proposed that students who were trying to pay for school by working would report higher financial stress than students who are not working or were circumventing debt through loans that could be dealt with after completing their post-secondary education. However, students with the greater debt load were expected to report higher levels of anxiety than those not incurring such debts. One-way analyses of variance (ANOVAs) were conducted to assess whether the four financial groups differed on the psychological well-being variables, including financial stress, anxiety and depressive

symptoms. Significant ANOVAs were followed-up by pairwise comparisons using Tukey's correction to maintain family-wise error at $p < .05$.

The ANOVA on financial stress was significant, $F(3, 108) = 24.4, p < .001$, $\eta^2 = .404$. Follow-up pairwise comparisons (see Table 1) indicated that those students who were neither incurring debt nor working were significantly less stressed about their finances than any of the other groups. As well, students who were working were more stressed than students who were not. Neither anxiety scores, $F < 1$ (Table 2), nor depressive symptoms, $F(3, 108) = 1.5, ns$, $\eta^2 = .041$ (Table 3) varied as a function of financial group.

Table 1 *Differences Among Financial Groups on Financial Stress Scores*

Financial Group	<i>M</i>	<i>SD</i>	<i>n</i>
Debt	94.3 ^a	20.2	21
Debt and Work	118.9 ^b	13.7	31
Work	108.1 ^{a,b}	22.45	27
No Debt and Work	80.6 ^c	18.8	33

Note: Values with different superscripts were significantly different from one another at $p < .05$ using Tukey's correction

Table 2
Differences Among Financial Groups on Anxiety Scores

Financial Group	<i>M</i>	<i>SD</i>	<i>n</i>
Debt	41.3	13.7	21
Debt and Work	39.5	12.0	31
Work	41.1	8.7	27
No Debt and Work	41.6	11.9	33

Table 3
Differences Among Financial Groups on Depressive Symptoms

Financial Group	<i>M</i>	<i>SD</i>	<i>n</i>
Debt	7.8	7.6	21
Debt and Work	6.4	5.4	31
Work	4.8	4.3	27
No Debt and Work	7.4	4.7	33

Examination of the Moderating Effects of Time Management Practices on the Relationship Between Financial Status and Well-being

The second hypothesis of the present study was that students who had better time management skills would experience lower financial stress, anxiety or depressive symptoms. To assess the effect of time management skills on the relation between financial status and well-being, a series of hierarchical regressions was conducted in which financial status (comprising 3 dummy variables using effect coding), time

management scores, and the interaction between these variables (cross product between time management scores and dummy vectors representing financial status) were entered on separate steps. Time management scores were entered on the second step because we believed that these skills would moderate the distress associated with financial status. The outcome variables were financial stress, anxiety, and depressive symptoms.

Financial stress scores were significantly related to financial status, $R^2 = .40$, $F(3, 108) = 24.42$, $p < .001$, which was noted earlier. Financial stress scores were not significantly predicted by time management skills ($B = .06$; $R^2_{\text{change}} = .00$, $F_{\text{change}} < 1$). Nor was the financial stress associated with debt and work moderated by time management skills ($R^2_{\text{change}} = .03$, $F_{\text{change}} < 1$).

Anxiety was not significantly related to financial status scores ($R^2 = .01$, $F < 1$), or the main effect of time management ($B = -.03$, $R^2_{\text{change}} = .00$, $F_{\text{change}} < 1$). However, anxiety was significantly predicted by the interaction of financial status and time management ($R^2_{\text{change}} = .07$, $F_{\text{change}}(3, 104) = 2.7$, $p < .05$). The simple main effects of time management in relation to anxiety were examined for each category of financial status. For those students incurring debt, the relation between time management and anxiety was significant, such that the greater their time management skills, the less their anxiety ($B = -.49$, $p < .05$). The relation between time management and anxiety was not significant for any of the remaining groups (Figure 1). Thus, it would appear that time-management skills did not reduce the anxiety of students who were attempting to juggle their academic and work demands.

Figure 1 *Unstandardized Anxiety Score by Financial Group*

When *depressive symptoms* were regressed onto financial status, the relation was not significant ($R^2 = .08$, $F < 1$), nor was the relation with time management skills ($B = -.08$, $R^2_{\text{change}} = .007$, $F_{\text{change}}(3, 107) = 1.50$, *ns*). Depressive symptoms were, however, significantly associated with the interaction between financial groups and time management ($R^2_{\text{change}} = .07$, $F_{\text{change}}(3, 104) = 3.06$, $p < .05$). The simple main effects of time management on depression for each category of financial status revealed a similar pattern of results as was found for anxiety. For those students incurring debt without working, greater time management skills were associated with lower depressive symptoms, $r = -.49$, $p < .05$. The relation between time management and depressive symptoms was not significant for any of the other financial groups (Figure 2).

Figure 2 *Unstandardized Depression Scores by Financial Group*

*Examination of the Moderating Effects of Coping Strategies on the Relation
Between Financial Status and Well-being*

The third hypothesis predicted a moderating effect of coping strategies on the relation between financial status and well-being (financial stress, anxiety and depression). To reduce the number of coping strategies involved in this analysis (given the sample size), only those coping strategies that showed significant zero-order correlations with each of the outcome variables were considered. This was viewed as an appropriate data reduction strategy, as the predicted interaction effects were ordinal in nature, and hence should have been evident through an examination of the direct relations between the outcome variables and coping strategies. As seen in Table 4, the coping strategies that were associated with financial stress included active distraction, rumination, and self-blame. The coping strategies associated with anxiety were cognitive avoidance,

rumination, emotional expression, other-blame, self-blame, and emotional containment. These same coping strategies were associated with depressive symptoms, along with passive resignation.

Table 4

Correlations of the Coping Strategies and Financial Stress, Anxiety and Depression

Coping Strategies	Financial Stress	Anxiety	Depressive Symptoms
Problem Solving	.04	.00	-.13
Cognitive Restructuring	.12	.14	.02
Active Distraction	.24*	.07	.00
Avoidance	.07	.25**	.24**
Rumination	.18*	.51***	.49***
Social Support	-.03	.05	.01
Humor	.07	.00	.01
Emotional Expression	.04	.28***	.17*
Other Blame	-.00	.37***	.26*
Self Blame	.20*	.46***	.44***
Emotional Containment	.13	.41***	.48***
Passivity	.00	.13	.16*

* $p < .05$; ** $p < .01$; *** $p < .001$.

To assess the moderating effects of coping strategies, financial stress was regressed onto financial status (effect coded) on the first step, the three coping strategies associated with any of the indicators of well-being on the second, and the interaction between financial status and the three coping strategies on the third step (Table 5). After controlling for financial status, a significant amount of variance in financial stress scores was predicted by coping strategies ($R^2_{\text{change}} = .07$, $F_{\text{change}}(3, 105) = 4.65$, $p < .01$), although examination of the regression coefficients indicated financial stress was not uniquely associated with any of the coping strategies, meaning that the three strategies worked in tandem to increase financial stress. Financial stress scores were not related to the interaction between coping and financial status ($R^2_{\text{change}} = .02$, $F_{\text{change}} < 1$).

Table 5
Regression of Financial Status, Coping, and the Interaction of the two predicting Financial Stress.

Predictor	.r	B	R ² change	Semi-Partial
Financial Status	.25***	-.18	.40***	-.17
	.60***	.60**		.50
	.40***	.21*		.22
Coping Strategies				
Active Distraction	.21**	.12	.07**	.18
Rumination	.14*	.17		.21
Self-Blame	.22*	.04		.04
Interactions			.02	
Vector 1 & Act. Distraction	.25**			
Vector 2 & Act. Distraction	.57***			
Vector 3 & Act. Distraction	.43***			
Vector 1 & Rumination	.27**			
Vector 2 & Rumination	.54***			
Vector 3 & Rumination	.42***			
Vector 1 & Self Blame	.24**			
Vector 2 & Self Blame	.51***			
Vector 3 & Self Blame	.37***			

*p<.05; **p<.01; ***p <.001.

After controlling for financial status, there was a significant amount of variance of anxiety scores explained by coping strategies ($R^2_{\text{change}} = .34$, $F_{\text{change}}(6, 102) = 8.95$ $p < .001$). Examination of the regression coefficients indicated that rumination was uniquely associated with an increase in anxiety scores (Table 6), while the remaining emotion-focused and blame variables worked together to increase anxiety. The relationship between anxiety and the interaction of financial status and coping strategies was not significant ($R^2_{\text{change}} = .02$, $F < 1$).

Table 6
Regression of Financial Status, Coping, and the Interaction of the two predicting anxiety.

Predictor	.r		B	R ² change	Semi-Partial
Financial Status	-.01	.02	.00		.02
	-.06	-.09			-.07
	-.02	.01			-.02
Coping Strategies				.34***	
Avoidance	.25**	.06			.07
Rumination	.51***	.32**			.28
Emotional Expression	.28***	.02			.02
Other Blame	.37***	.13			.12
Self Blame	.46***	.21			.18
Emotional Containment	.41***	.01			.01
Interactions				.15	
Vector 1 & Avoidance	-.00				
Vector 2 & Avoidance	-.06				
Vector 3 & Avoidance	-.02				
Vector 1 & Rumination	-.02				
Vector 2 & Rumination	.00				
Vector 3 & Rumination	-.04				
Vector 1 & E. Expression	-.04				
Vector 2 & E. Expression	-.06				
Vector 3 & E. Expression	-.03				
Vector 1 & Other Blame	-.00				
Vector 2 & Other Blame	-.03				
Vector 3 & Other Blame	.00				
Vector 1 & Self Blame	-.01				
Vector 2 & Self Blame	-.06				
Vector 3 & Self Blame	-.08				
Vector 1 & E. Containment	-.07				
Vector 2 & E. Containment	-.06				
Vector 3 & E. Containment	-.07				

*p<.05; **p<.01; ***p<.001.

Similarly, a significant amount of unique variance of depressive symptoms was explained by coping strategies ($R^2_{\text{change}} = .34$, $F_{\text{change}}(7, 101) = 6.31$ $p < .001$).

Examination of the regression coefficients demonstrated that depressive symptoms were uniquely associated with an increase in rumination as a coping strategy (Table 7), whereas the remaining emotion-focused strategies were redundant with one another. The relationship between depressive symptoms and the interaction of coping and financial

status was found to be nonsignificant ($R^2_{\text{change}} = .00$, $F_{\text{change}} < 1$). Thus, the coping strategies did not moderate the effects of financial status on psychological well-being.

Table 7

Regression of depression on Financial Status, Coping, and their Interaction of the Two

Predictor	.r	B	R^2_{change}	Semi-Partial
Financial Status	.00	.14*	.04	.11
	-.06	-.02		-.06
	-.16*	-.24		-.18
Coping Strategies			.34***	
Avoidance	.24**	.08		.09
Rumination	.49***	.28*		.24
Emotional Expression	.17*	-.05		-.05
Other Blame	.26**	.05		.05
Self Blame	.44***	.21		.18
Emotional Containment	.48***	.17		.13
Passivity	.16*	-.06		-.06
Interactions			.09	
Vector 1 Avoidance	-.03			
Vector 2 Avoidance	-.08			
Vector 3 Avoidance	-.16*			
Vector 1 Rumination	-.01			
Vector 2 Rumination	.01			
Vector 3 Rumination	-.13			
Vector 1 E. Expression	-.00			
Vector 2 E. Expression	-.04			
Vector 3 E. Expression	-.16*			
Vector 1 Other Blame	.03			
Vector 2 Other Blame	-.01			
Vector 3 Other Blame	-.12			
Vector 1 Self Blame	.01			
Vector 2 Self Blame	-.04			
Vector 3 Self Blame	-.14			
Vector 1 E. Containment	-.07			
Vector 2 E. Containment	-.08			
Vector 3 E. Containment	-.16*			
Vector 1 Passivity	-.00			
Vector 2 Passivity	-.05			
Vector 3 Passivity	-.14			

* $p < .05$; ** $p < .01$; *** $p < .001$.

The Relations between financial, academic, and social projects with psychological well-being

From previous research, there was reason to believe that well-being is enhanced when the individual is engaged in meaningful personal projects (Little, 1987, 1989). However, what happens when that meaningful project (e.g., academics) comes at a great cost, and when maintaining that project involves the establishment of other projects (such as part-time work) that may negatively affect success on the central project. In the present study, the extent to which academic, financial and social projects were related to psychological well-being was assessed. To reduce the data associated with the Personal Project Analysis, mean ratings across the projects on the 17 dimensions were computed. The 17 dimension scores were then subjected to a principal components analysis, and based on a scree test, four factors were extracted (explaining 62.06% of the variance) (Table 8). Based on items loading greater than .50, 7 of the dimensions were found to load onto the first factor, including progress, outcome, support, competence, autonomy, control and time. Factor 1 was consistent with McGregor and Little's (1998) factor labelled *efficacy*, which refers to how likely one's projects are to be successful. The second factor appeared to reflect the extent to which the project demonstrated *integrity*, that is how consistent one's projects are with the core self. The factor integrity (Factor 2) included value congruence, other view, self-confidence, importance, absorption, responsibility and competence. The third factor included the dimensions of difficulty and challenge, reflecting McGregor and Little's (1998) *meaning* factor, referring to the extent to which participants appraise their personal projects as consistent with a struggle with self-identity. The final factor consisted of two dimensions, visibility and time, which was named *support* as these dimensions related to the influence of others and time resources on projects. One of the dimensions (Time) loaded equally on the first and fourth

dimension, which is not unusual (McGregor & Little, 1998), and so was maintained on both factors. Overall, it appears the findings of the present factor analysis were consistent with those of earlier personal projects factor analysis (McGregor & Little, 1998). Thus, for each of the three projects of interest (financial, academic and social) average unit-weighted factor scores were derived for each of the four PPA dimensions (efficacy, integrity, meaning, and support).

Table 8

Eigenvalues, Variance Explained, and Factor Loadings of Items onto Factor Subscales in Order of Strength of Loading

Scale Name (Eigenvalue, % of variance explained) and Dimensions	Factor Loading
Factor 1 ($\lambda=5.70$; 33.55%)	
Progress	.75
Outcome	.73
Support	.62
Competence	.60
Autonomy	.57
Control	.56
Time	.53
Factor 2 ($\lambda= 2.43$; 14.33%)	
Value Congruence	.81
Other View	.71
Self-confidence	.65
Importance	.62
Absorption	.60
Responsibility	.53
Competence	.53
Factor 3 ($\lambda= 1.24$; 7.32%)	
Difficulty	.85
Challenge	.85

Factor 4 ($\lambda = 1.16$; 6.84%)	
Visibility	.70
Time	.53

To determine if subjects' evaluations of their projects ratings were affected by their objective financial status three MANOVAs were conducted with the independent variable being the four financial status groups and the dependent variables being the project ratings (efficacy, integrity, meaning, and support) for each of the project types (financial, academic and social). In the first MANOVA examining financial projects, there was a significant effect for financial status, Pillais = .34, $F(3, 95) = 16.29$, $p < .05$, which reflected a univariate difference on the support dimension $F(3, 97) = 28.81$, $p < .01$, $\eta^2 = .11$. Follow-up pairwise comparisons indicated that those students who worked (with or without debt accumulating) rated their financial projects higher on support than did the no debt or work group.

In the second MANOVA examining academic projects ratings did not vary as a function of financial status group, Pillais = .59, $F(3, 104) = 5.03$, *ns*. Finally, financial status did not affect ratings of social projects Pillais = .30, $F(3, 104) = 15.29$, *ns*.

The relations between project ratings and psychological well-being were assessed using hierarchical regression analyses. Each of the outcome variables was regressed onto the four factor scores associated with financial projects, followed by academic projects, and then social projects (reflecting a priori beliefs about the relevance of the project types).

A significant amount of variance was explained in financial stress by the dimensions associated with the financial projects ($R^2 = .25$, $F(4, 95) = 7.99$, $p < .001$). Examination of the regression coefficients (see Table 9) revealed that financial stress was uniquely

associated with higher ratings of integrity and meaning in students' financial projects.

Although, financial stress was not associated with dimensions of academic projects (R^2 change = .01, F change <1), the social project dimensions were (R^2 change = .08, F change (4, 87) = 2.70, p <.05). However, examination of the regression coefficients revealed that none of them (nor their zero-order correlations) were significant, and thus the increase in variance explained may have been due to these ratings having a slight mutual suppressor effect on previously entered variables.

Table 9

Regression of Financial Stress and financial projects, academic project and social projects

projects			
Predictor	.r	B	R ² change
Financial Projects			
Efficacy	-.02	-.08	.25***
Integrity	.39**	.29**	
Meaning	.42*	.27*	
Support	.24	.06	
Academic Projects			
Efficacy	.09	.09	.01
Integrity	.13	.04	
Meaning	-.04	-.06	
Support	.05	-.10	
Social projects			
Efficacy	-.11	-.14	.08*
Integrity	-.12	-.24	
Meaning	.15	.16	
Support	-.03	.01	

* p <.05; ** p <.01; *** p <.001.

B's reported at the step of entry

In the second regression (Table 10), anxiety symptoms were not found to be associated with PPA ratings of financial projects (R^2 = .30, F <1), or academic projects (R^2 change = .04, F change (4, 91) = 1.18, ns). However, when social projects were entered, a significant relationship was found (R^2 change = .10, F change (4, 87) = 2.89, p <.05), in that,

anxiety was associated with higher meaning and lower feelings of efficacy in social projects.

Table 10

Regression of Anxiety and financial projects, academic project and social projects

Predictor	.r	B	R ² change
Financial Projects			
Efficacy	-.20	-.17	.09
Integrity	.10	.15	
Meaning	.18	.13	
Support	-.09	-.13	
Academic Projects			
Efficacy	-.16	-.19	.04
Integrity	.01	.19	
Meaning	.07	-.01	
Support	-.15	-.14	
Social projects			
Efficacy	-.28*	-.31*	.10*
Integrity	-.16	-.05	
Meaning	.20*	.27*	
Support	-.14	.00	

*p<.05; **p<.01; ***p<.001.

B's reported at the step of entry.

In the third regression (Table 11), a significant relationship was observed between depressive symptoms and financial projects ratings, $R^2 = .34$, $F(4, 95) = 3.09$, $p < .05$, in that higher depressive symptoms were associated with lower feelings of efficacy.

Academic project ratings were also significantly associated with depressive symptoms, $R^2_{\text{change}} = .12$, $F_{\text{change}}(4, 91) = 3.73$, $p < .01$, in that higher depressive symptoms were associated with lower ratings of efficacy and higher ratings of integrity. Finally, a significant relationship was also observed between depressive symptoms and social projects ratings, $R^2_{\text{change}} = .08$, $F_{\text{change}}(4, 87) = 2.85$, $p < .05$. Examination of the

regression coefficients revealed that higher depressive symptoms were associated with lower efficacy and greater meaning in social projects.

Table 11

Regression of Depressive symptoms? and financial projects, academic project and social projects

Predictor		.r	B	R ² change
Financial Projects				
Efficacy	-.30*	-.29*	.11*	
Integrity	.00	.06		
Meaning	.19	.11		
Support	-.07	-.03		
Academic Projects				
Efficacy	-.33**	-.42**	.12**	
Integrity	-.06	.31*		
Meaning	.10	-.09		
Support	-.24	-.17		
Social projects				
Efficacy	-.39	-.30	.08*	
Integrity	-.20	.00		
Meaning	.16*	.24*		
Support	-.23	-.06		

*p<.05; **p<.01; ***p<.001.

B's reported at the step of entry

In sum, through assessing the relation between personal project dimensions and psychological well-being, we were able to determine the subjective appraisals of students' projects that were associated with well-being. Where dimensions of students' financial projects were associated with financial stress (integrity and meaning), it was only their self-efficacy in relation to finances (and both academic and social projects) that was associated with depressive symptoms. Increased anxiety scores were uniquely associated with ratings of meaning and self-efficacy on social projects.

The Moderating Effects of Time Management on Financial Projects and Well-Being.

To assess whether the relations between individuals' subjective evaluations of their financial project and well-being were mediated by time management, a series of hierarchical regressions was conducted in which each of the indicators of well-being was regressed onto the dummy variables reflecting financial status group on the first step (to control for objective financial status), time management, the interaction between time management and financial status on the third step (as a mediating effect), and the financial project dimensions of the fourth step. This analysis was only conducted in relation to depressive affect, as this was the only variable that was found earlier to be related to both financial project ratings and time management scores.

As noted earlier, the interaction of time management and financial status was related to depression ($R^2_{\text{change}} = .13$, $F_{\text{change}}(3, 93) = 5.11$, $p < .01$). However, as seen in Table 10, financial project dimensions continued to explain unique variance in depressive symptoms when entered on fourth step ($R^2_{\text{change}} = .08$, $F_{\text{change}}(4, 89) = 2.47$, $p < .05$). Thus, it would appear that an ability to manage time did not mediate the relation between efficacy appraisals in relation to their financial project and depressive affect.

Table 12
Regression of Depressive Symptoms on Financial Status, Time Management and Financial Project Dimensions

Predictor	.r	B	R^2_{change}
Financial Status			.02
Time Management	-.07	-.08	.00
Interaction of Financial Status and Time Mang.			.13**
Financial Projects			
Efficacy	-.30**	-.19*	.08*
Integrity	.00	.08	

Meaning	-.20*	.15*
Support	-.07	-.07

* $p < .05$; ** $p < .01$; *** $p < .001$.

To assess whether the effects of financial projects on well-being were mediated by coping strategies, a series of hierarchical regressions in which well-being was regressed onto the financial status (dummy coded) on the first step, relevant coping strategies on the second step, and the financial project dimensions on the third step. These analyses were conducted only in relation to financial stress and depressive affect, as subjective appraisals of the financial project were unrelated to anxiety scores, and so assessing a mediated effect was not appropriate.

Over and above financial status and coping strategies, the financial project dimensions continued to predict a significant amount of variance in financial stress symptoms, $R^2_{\text{change}} = .10$, $F_{\text{change}}(4, 90) = 5.46$, $p < .001$ (see Table 13), although the proportion of variance explained by the project ratings was considerably reduced from the original 25%. Thus, it would appear that coping was only a partial mediating factor between these appraisals and financial stress.

Table 13
Regression of Financial Stress on Financial Status, Coping Strategies and Financial Project Dimensions

Predictor	.r	B	R^2_{change}
Financial Status			.40**
Coping Strategies			.05**
Active Distraction	.21*	.12	
Rumination	.14	.17	
Self-Blame	.22*	.04	

Financial Projects			.10***
Efficacy	-.02	-.07	
Integrity	.39***	.25*	
Meaning	.42***	.24*	
Support	.24**	.09	

* $p < .05$; ** $p < .01$; *** $p < .001$.

Depressive symptoms also remained significantly related to financial project dimensions, over and above financial status and coping ($R^2_{\text{change}} = .08$, $F_{\text{change}}(4, 86) = 3.77$, $p < .01$) as seen in Table 14. In this case, the amount of variance explained by the appraisals of their financial projects was not substantially reduced (originally 11%), suggesting that coping strategies did not mediate the relation with depressive symptoms.

Table 14

Regression of Depressive Symptoms on Financial Status, Coping Strategies and Financial Project Dimensions

Predictor	.r	B	R^2_{change}
Financial Status	.03 -.01 -.10	-.06	.02
Coping Strategies			.39***
Avoidance	.23**	.08	
Rumination	.53***	.34	
Emotional Expression	.20	-.05	
Other Blame	.31	.12	
Self Blame	.44	.14	
Emotional Containment	.49	.17	
Passivity	.19	-.01	
Financial Projects	-.30***	-.25**	.08**
Efficacy	.00	.01	
Integrity	.20*	.12	
Meaning	-.07	.10	
Support			

* $p < .05$; ** $p < .01$; *** $p < .001$.

Discussion

Financial pressures may represent an important source of distress in students' lives because many fundamental activities of daily living and many of life's chances to succeed are closely tied to levels of personal financial resources (Pearlin & Radabaugh, 1976). Students are unique because at a time when they could go out and find work or pursue other endeavours, such as travel, they continue with nonobligatory schooling that has a financial cost, in order to pursue various future goals and opportunities. This decision has the potential for presenting competing concerns, but as well, raises the possibility that subjective appraisals of a potentially dire current financial situation are not as negative as they might otherwise be, and that different coping strategies might alleviate possible distress.

The present study revealed that students who worked, with or without accumulating debt, were significantly more financially stressed than those students who did not. Students who currently worked were expected to be more financially stressed because they were actively trying to circumvent their financial situation, and thus, they would more likely be aware of their financial pressures. While this finding was consistent with previous research (Pantages & Creedon, 1995), the elevated financial distress among those who were incurring debt was contrary to findings of Humphrey and McCarthy (1998) who found that incurring debt was not related to levels of student stress. Differences in the findings of the two studies may be a result of the fact that Humphrey and McCarthy (1998) conducted their research at the beginning of the academic year. At the beginning of the academic year students have just received their loans and are not faced with the reality of their financial situation or a shortage of money. However, as the academic year goes on these first year students would experience more issues related to financial stress. Indeed this distress was evident in the present study, which was conducted near the end of the academic year.

While students under financial pressures indicated greater financial distress than those who were not, similar elevations in depressive symptoms and anxiety were not found, although financial distress and anxiety were positively related. This finding was contrary to previous research indicating that financial strain is associated with feelings of depression and anxiety (Chi & Chou, 1999; Lempers & Clark-Lempers, 1990; Lempers & Simons, 1989). However, these previous findings looked at students who grew up in families that had poor financial resources (Lempers & Clark-Lempers, 1990; Lempers & Simons, 1989), and the effect that this had on depressive symptoms. Thus, as noted at the outset, the broad spectrum of students in the present study with respect to familial financial status meant that for many of them, their current financial situation was relatively temporary, and therefore may not have disrupted well-being. It is also possible that the present sample did not incur depression or anxiety symptoms due to possible mediating variables such as strong social support and well developed time management skills and career goals, as suggested by McKenzie & Schweitzer (2001).

In considering these findings that anxiety and depression were not related to financial status, we must also address possible methodological limitations. A weakness of this study was that it did not assess the future intentions of students to finance their studies. Anecdotally, many of the students reported that their parents would be paying for their first year of school but after the lead time they would be on their own or would gradually take on more of the responsibility to pay for their education. This is an important issue because it would affect the validity of our no debt or work classification, in that a number of these students knowingly faced a future situation of financial stress. It would be of benefit for research to look at students throughout their university education to assess how they are affected by finances. As students' academic life continues they likely become faced with greater financial stress, along with an increase in debt load (at least for those student who are relying on loans to finance their education). Also, this cross-sectional data does not

allow for causal conclusions regarding financial stress, in that numerous other factors may contribute. To this end, prospective longitudinal studies are needed.

Examination of Psychological Well-being and Time Management

It was expected that time management skills would enhance psychological well-being, as research indicated that many students worked full-time while also taking a full-time course load (Dunkel-Schetter & Lobel, 1990), and that time management skills may act in a moderating role in that they may represent a form of coping through goal-directed behaviours. However, in the present study, financial stress was not significantly predicted by time management nor the interaction between time management and financial status. Thus, knowing that one can balance demands does not necessarily reduce the distress associated with a particular demand. However, time management did appear to moderate the effects of financial status on the more general indicators of well-being, namely anxiety and depressive symptoms. More specifically, among those students incurring debt, the relation between time management skills and well-being was significant, such that the better their time management skills, the less they reported anxiety and depressive symptoms. This was not surprising, in that, time management may be associated with more efficient and less anxious people who perceive control over time and the outcomes they generate. For those incurring debt, it is possible that incurring debt in itself is a time management strategy in that it allows students to focus their time entirely on their studies, as opposed to work and its related activities. The relation between time management and well-being was not significant for any of the remaining financial groups. Thus, it would appear that time management skills did not reduce the anxiety of students who were attempting to juggle their academic and work demands as we expected. While unexpected, the findings regarding the moderating effects were largely consistent with other research demonstrating that time management behaviours did not moderate the impact of role overload to reduce stress or anxiety among students (Jex & Elacqua, 1999; Lang, 1992).

It has been argued that well-being is enhanced when the individual is engaged in meaningful personal projects (Little 1987, 1989). It was the goal of the present study to examine the relative project structure of students with different financial concerns. In particular, it was expected that academic projects may be described as more meaningful, but simultaneously be appraised as more difficult to manage and be more stressful to students with financial concerns. This expectation was based on studies demonstrating that people differ in their goal-directed pursuits and that various dimensions of a project, such as enjoyment or perceived difficulty, correlated with distress (Little, 1987; 1989). Our findings indicated that students who worked rated their financial project higher on support than did the no debt or work group. Academic and social projects did not vary as a function of financial group. This means that financial projects of the work group are influenced by others support and influence on the project.

We examined the extent to which financial, academic, and social projects were related to psychological well-being. Research relating personal projects and well-being reflects the incorporation of the individual's subjective appraisals of their on-going projects in the prediction of well-being. Personal projects represent middle-level units of analysis designed to explore how individuals attempt to construct meaning and purpose in their lives (Little, 1989, 1990, 1998).

A significant relationship was found between financial stress and ratings of integrity and meaning for financial projects. Students who indicated higher financial stress rated their financial projects closer to their core identity, and that the project was consistent with their struggle for self-identity. This suggests that students' appraisal of their financial circumstances does exert a deleterious influence on the psychological health and well-being to the extent that financial projects are central to their identity. Given that the data is correlational, however, it is also possible that

financial distress makes such projects more integral to the survival or other projects that are core to the individual.

Anxiety for students has been associated with academic expectations and performance, social factors and financial concerns (Clifton, 1987; Gerdes & Mallinkrodt, 1994; Simmonds, 1987). Just as objective financial status was unrelated to anxiety, nor were individuals' ratings of their financial projects, consistent with the recent findings by Chi and Chou (1999). Nor was anxiety associated with students' academic projects, possibly meaning that students felt their academic projects were likely to be in line with expectations at this point of their academic career. Anxiety was, however, related to social projects in that higher anxiety was associated with lower ratings of efficacy on the social projects. This is consistent with past research that found social factors, such as loneliness and limited time for family and friends, were associated with greater anxiety (Clifton, 1987; Gerdes & Mallinkrodt, 1994; Simmonds, 1987).

Finally, students subjective constructs of their financial projects were related to symptoms of depression, in that students with greater depressive symptoms were less likely to believe their financial projects would be successful. Because this was also true of their academic and social projects, this relation may reflect a generalized sense of ineffectiveness or hopelessness (De Leon, Rapp, & Kasl, 1994). This is different from our other findings in that we found that objective financial status was not related to depressive symptoms. Thus, subjective feelings of inadequacy are a more important factor affecting well-being than objective financial standing.

It was originally argued that there would be a mediated relationship between subjective appraisals, coping strategies (including time management), and well-being. While appraisal dimensions of financial projects were associated with both financial distress and depressive symptoms time management skills were only effective in buffering individuals against depressive symptoms. These skills were only viable as a strategy to mediate the relation between appraisals of financial projects and this

dimension of well-being. However, even after controlling for time management skills (and in particular, the interaction between time-management and financial status), ratings of efficacy in relation to the financial project remained a significant predictor of depressive symptoms. Thus, it would appear that an ability to manage time did not mediate the relation between efficacy appraisal in relation to financial projects and depressive affect.

While time-management is one strategy for dealing with multiple pressures, individuals may adopt numerous other coping strategies to deal with a stressful situation (Carver, Scheiner & Weintraub, 1989; Folkman & Lazarus, 1980, 1985). Indeed, though financial stress was not associated with time-management skills, it was related to endorsing greater active distraction, rumination, and self-blame, and these three strategies worked in conjunction with one another (given their redundant relations to financial distress) to predict greater distress. Active distraction involves focusing on other tasks, which may have been a compensatory action to reduce ruminating about their financial situation and blaming themselves. Alternatively, those students who were most involved in these activities (e.g., going out to movies, shopping etc.), may have a greater number of activities with financial costs, that results in greater distress, greater rumination, and greater recognition of the role their own behaviour played in their financial situation. While some coping strategies might serve protective functions by regulating the negative emotions associated with stress, rumination as a coping strategy could be either positive or negative. If students are ruminating on the financial situation they might generate alternative solutions, thus reducing the negative consequences of the stressor, while others may exacerbate the effects of stressor through ruminating about the related distress. Clearly, given the correlational nature of these findings, the relations between these coping strategies and heightened distress must be interpreted with caution.

The coping strategies that were associated with anxiety and depressive symptoms included cognitive avoidance, rumination, emotional expression, other-

blame, self-blame and emotional containment, and depressive symptoms were further associated with passive resignation. This pattern of relations is consistent with Matheson and Anisman (2002) who found that students showing anxiety and depressive symptoms were more likely to endorse cognitive restructuring and distraction along with rumination, as well as greater emotional expression, other-blame, self-blame and emotional containment.

It was further expected that coping strategies would moderate the effects of objective financial status on financial stress, anxiety and depressive symptoms, given that effective coping may enhance subjective appraisals of a problematic financial situation as within their control. The interaction between financial status and coping was not significant in relation to any of the indicators of well-being. One explanation for this may have been a statistical lack of power, due to the small sample size, particularly given the large number of coping strategies despite data reduction. However, another possibility is methodological in that administration of the questionnaire package did not take place until the last few weeks of school. By this time many of the students who were unable to handle the work or financial debts they were accumulating may have dropped out of school. Thus, the truly financially stressed students with poor coping strategies may not have participated, giving us a constricted picture of the financially stressed student.

Economic change continues to occur in the university sector, as well as other educational sectors. A comprehensive report by the Canadian Policy Research Networks (2001) showed trends suggesting that the number of students with debt, and the amount of individual debt, would continue to grow. More research is needed to longitudinally trace the long-term effects of an increased financial burden on students. While the present study suggests that work is an important factor to student financial stress, more of this research is needed to suggest specific interventions, which may help, alleviate stress in students and facilitate their academic success.

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Table 1

*Eigenvalues, Variance Explained, and Factor Loadings of Items onto Factor Subscales
in Order of Strength of Loading*

Scale Name (Eigenvalue, % of variance explained) and Dimensions	Factor Loading
Factor 1 ($\lambda=5.70$; 33.55%)	
Progress	.75
Outcome	.73
Support	.62
Competence	.60
Autonomy	.57
Control	.56
Time	.53
Factor 2 ($\lambda= 2.43$; 14.33%)	
Value Congruence	.81
Other View	.71
Self-confidence	.65
Importance	.62
Absorption	.60
Responsibility	.53
Competence	.53
Factor 3 ($\lambda= 1.24$; 7.32%)	
Difficulty	.85
Challenge	.85
Factor 4 ($\lambda= 1.16$; 6.84%)	
Visibility	.70
Time	.53

Appendix A

Preselection Criteria Included in Mass Testing

EMPLOYMENT

Are you currently employed full-time _____ part-time _____ not at all _____

Are you currently employed at Carleton University? No _____ Yes _____

In order to pay for your education (tuition and living expenses), do you receive (please check **all** that apply)

_____ Scholarship money

_____ Government grants

_____ Student loan

_____ Money from parents/spouse

_____ Nothing – I pay for my own expenses in full

Appendix B

Informed Consent Form

The purpose of an informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. The informed consent has to provide sufficient information such that you have the opportunity to determine whether you wish to participate in the study.

Study Title: Personal Projects and Coping Strategies in University

Study Personnel: Dr. Kim Matheson (Faculty Investigator, and Chair, Dept. of Psychology), 520-2648

Matthew Saunders (Student Investigator), 520-2683

If you have any ethical concerns about how this study please contact Dr. M. Sénéchal, Chair of Dept. of Psychology Ethics Committee, 520-2600, X1155

Purpose and Task Requirements: The purpose of this study is to assess how your individual personality characteristics along with your social and personal resources and personal projects are related to your quality of life and academic performance. We are asking you to fill out a questionnaire regarding personal characteristics (e.g., how you cope with things in your life), about things you may be stressed about (such as finances), as well as a number of questions regarding the projects you are currently involved in and how you feel about them. This part of the study will take approximately 1-hour.

Potential Risk and Discomfort: There are no physical risks in this study. There may be some mild discomfort when thinking about various stressors in your life.

Anonymity/Confidentiality: The data collected in this study will be kept confidential. The informed consent will be removed from the question packages before them are examined.

Right to Withdraw: Your participation in this study is entirely voluntary. At any point during the study you have the right to not complete certain questions or to withdraw with no penalty whatsoever.

I have read the above description of the study concerning how personal resources and factors may influence my personal and academic well-being. The data collected will be used in research publications and/or for teaching purposes. My signature indicates that I agree to participate in the study, and this in no way constitutes a waiver of my rights.

Full Name (please print): _____

Participant Signature: _____

Researcher Signature: _____

Date: _____

Appendix C

Background information

Sex: Female/ Male (please circle one)

Age: _____

Are you a full-time _____ or part-time _____ student? (please check one)

EMPLOYMENTAre you currently employed full-time _____ part-time _____ not at
all _____In order to pay for your education (tuition and living expenses), do you receive (please
check **all** that apply)

_____ Scholarship money

_____ Government grants

_____ Student loan

_____ Money from parents/spouse

_____ Nothing – I pay for my own expenses in full

Time Management Behaviours Scale

Often we have to juggle numerous activities. To do this we might adopt certain strategies to get everything done. **Rate how much you participate in these behaviours:**

	1- Not at all	3-Moderately	5-Very much		
1. You evaluate your daily schedule-----	---1---	---2---	---3---	---4---	---5---
2. Review your activities-----	---1---	---2---	---3---	---4---	---5---
3. Set deadlines-----	---1---	---2---	---3---	---4---	---5---
4. Increase task efficiency-----	---1---	---2---	---3---	---4---	---5---
5. Set priorities-----	---1---	---2---	---3---	---4---	---5---
6. Breaks down tasks-----	---1---	---2---	---3---	---4---	---5---
7. Sets short-term goals-----	---1---	---2---	---3---	---4---	---5---
8. Reviews goals-----	---1---	---2---	---3---	---4---	---5---
9. Complete high priority tasks first-----	---1---	---2---	---3---	---4---	---5---
10. Keep long term goals-----	---1---	---2---	---3---	---4---	---5---
11. Carries an appointment book-----	---1---	---2---	---3---	---4---	---5---
12. Makes list of things to do-----	---1---	---2---	---3---	---4---	---5---
13. Writes reminder notes or to do lists-----	---1---	---2---	---3---	---4---	---5---
14. Use waiting time to get other tasks done	---1---	---2---	---3---	---4---	---5---
15. Assesses the progress of tasks and goals	---1---	---2---	---3---	---4---	---5---
16. Carries an appointment book-----	---1---	---2---	---3---	---4---	---5---
17. You avoid interruptions-----	---1---	---2---	---3---	---4---	---5---
18. Schedule events weekly-----	---1---	---2---	---3---	---4---	---5---
19. You organize you work and projects-----	---1---	---2---	---3---	---4---	---5---
20. Sets clothes out nightly-----	---1---	---2---	---3---	---4---	---5---
21. I am disorganized-----	---1---	---2---	---3---	---4---	---5---
22. You have messy work space-----	---1---	---2---	---3---	---4---	---5---
23. Organizes tasks by preference-----	---1---	---2---	---3---	---4---	---5---
24. Forget to do lists I've made-----	---1---	---2---	---3---	---4---	---5---
25. My days are too unpredictable to plan---	---1---	---2---	---3---	---4---	---5---
26. Schedule in some leisure time-----	---1---	---2---	---3---	---4---	---5---
27. Keep a clean work space-----	---1---	---2---	---3---	---4---	---5---
28. I don't organize tasks-----	---1---	---2---	---3---	---4---	---5---

Student Financial Survey

Please answer the following statements in terms how descriptive they are of you.

SD-Strongly Disagree D-Disagree N-Neutral A-Agree SA-Strongly Agree NA- Not Applicable

1. The cost of tuition influenced your choice of which university to attend.	SD	D	N	A	SA	NA
2. Your parents contribute to you tuition fees.	SD	D	N	A	SA	NA
3. You rely on student loans to pay your tuition.	SD	D	N	A	SA	NA
4. Your job has helped you pay your tuition fees.	SD	D	N	A	SA	NA
5. You work on weekends.	SD	D	N	A	SA	NA
6. You worry constantly about money.	SD	D	N	A	SA	NA
7. You worry about the increase in tuition costs.	SD	D	N	A	SA	NA
8. You have money saved for emergencies.	SD	D	N	A	SA	NA
9. Studying is difficult to do after work.	SD	D	N	A	SA	NA
10. You worry about your debts after graduation.	SD	D	N	A	SA	NA
11. You worry about how you are going to cover living expenses.	SD	D	N	A	SA	NA
12. Your ability to pay for your education had an influence on your choice of program.	SD	D	N	A	SA	NA
13. Your job has interfered with school work.	SD	D	N	A	SA	NA
14. You worry about your financial before you go to sleep.	SD	D	N	A	SA	NA
15. You sometimes can't afford to pay your bills.	SD	D	N	A	SA	NA
16. The availability of financial support influenced your decision to go to university.	SD	D	N	A	SA	NA
17. Your student loans adequately cover all your expenses.	SD	D	N	A	SA	NA
18. You have had a hard time finding summer employment.	SD	D	N	A	SA	NA
19. You feel graduate studies are too expensive.	SD	D	N	A	SA	NA
20. You are able to keep a good financial budget.	SD	D	N	A	SA	NA
21. Your financial situation has had an influence on your decision to live at home with parents.	SD	D	N	A	SA	NA
22. Your parents financially support you living expenses.	SD	D	N	A	SA	NA
23. Your financial situation had an influence on the number of courses you are taking this year.	SD	D	N	A	SA	NA
24. You feel drained from your job.	SD	D	N	A	SA	NA
25. Sometimes you spend money carelessly.	SD	D	N	A	SA	NA
26. You have missed classes to work at your job.	SD	D	N	A	SA	NA

27. Your financial situation will influence your decision to further your education after graduation.	SD	D	N	A	SA	NA
28. Your parents provide you with entertainment money.	SD	D	N	A	SA	NA
29. You worry about school when at work.	SD	D	N	A	SA	NA
30. Summer employment has influenced your decision to go to university.	SD	D	N	A	SA	NA
31. You will apply for student loans to pay for future education.	SD	D	N	A	SA	NA
32. Your summer employment helps you pay your tuition fees.	SD	D	N	A	SA	NA
33. You worry about getting a job after graduation.	SD	D	N	A	SA	NA
34. You have thought about going bankrupt to get out of dept.	SD	D	N	A	SA	NA
35. You rely on work for entertainment money.	SD	D	N	A	SA	NA
36. You have had to seek emergency loans to cover living expenses.	SD	D	N	A	SA	NA
37. You sometimes think of quitting school to work full-time.	SD	D	N	A	SA	NA
38. You work during school breaks.	SD	D	N	A	SA	NA
39. Your summer job contributes to your living expenses for the school year.	SD	D	N	A	SA	NA
40. You have used credit cards carelessly at times.	SD	D	N	A	SA	NA

BECK INVENTORY

On this questionnaire are groups of statements. Please read the entire group of statements of each category. Then pick out ONE statement in that group which best describes the way you feel. Check off the number beside the statement you have chosen.

1. ☐ 0 = I do not feel sad
☐ 1 = I feel sad or blue
☐ 2 = I am blue or sad all of the time and I can't snap out of it
☐ 3 = I am so sad or unhappy that I can't stand it
2. ☐ 0 = I am not particularly pessimistic or discouraged about the future
☐ 1 = I feel discouraged about the future
☐ 2 = I feel I have nothing to look forward to
☐ 3 = I feel that the future is hopeless and things cannot improve
3. ☐ 0 = I do not feel like a failure
☐ 1 = I feel I have failed more than the average person
☐ 2 = As I look back on my life, all I can see is a lot of failures
☐ 3 = I feel I am a complete failure as a person
4. ☐ 0 = I am not particularly dissatisfied
☐ 1 = I don't enjoy things the way I used to
☐ 2 = I don't get satisfaction out of anything anymore
☐ 3 = I feel as though I am very bad or worthless
5. ☐ 0 = I don't feel particularly guilty
☐ 1 = I feel bad or unworthy a good part of the time
☐ 2 = I feel quite guilty
☐ 3 = I feel as though I am very bad or worthless
6. ☐ 0 = I don't feel disappointed in myself
☐ 1 = I am disappointed in myself
☐ 2 = I am disgusted with myself
☐ 3 = I hate myself
7. ☐ 0 = I don't have thoughts of harming myself
☐ 1 = I feel I would be better off dead
☐ 2 = I have definite plans about committing suicide
☐ 3 = I would kill myself if I had the chance
8. ☐ 0 = I have not lost interest in other people
☐ 1 = I am less interested in other people than I used to be
☐ 2 = I have lost most of my interest in other people and I have little feeling for them
☐ 3 = I have lost all my interest in other people and don't care about them at all
9. ☐ 0 = I make decisions about as well as ever
☐ 1 = I try to put off making decisions
☐ 2 = I have great difficulty in making decisions
☐ 3 = I can't make decisions at all anymore

10. ___ 0 = I don't feel I look any worse than I used to
___ 1 = I am worried that I am looking old or unattractive
___ 2 = I feel that there permanent changes in my appearance and they make me look unattractive
___ 3 = I feel that I am ugly or repulsive looking
11. ___ 0 = I can work about as well as before
___ 1 = It takes extra effort to get started at doing something
___ 2 = I have to push myself very hard to so anything
___ 3 = I can't so any work at all
12. ___ 0 = I don't get anymore tired than usual
___ 1 = I get tired more easily than I used to
___ 2 = I get tired from doing anything
___ 3 = I get too tired to do anything
13. ___ 0 = My appetite is no worse than usual
___ 1 = My appetite is not as good as it used to be
___ 2 = My appetite is much worse now

SELF-EVALUATION QUESTIONNAIRE

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then circle the number to the right of the statement to indicate how you feel *right* now, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	Not At All	Somewhat So	Moderately So	Very Much
1. I feel calm	1	2	3	4
2. I feel secure	1	2	3	4
3. I am tense	1	2	3	4
4. I feel strained.....	1	2	3	4
5. I feel at ease	1	2	3	4
6. I feel upset	1	2	3	4
7. I am presently worrying over possible..... misfortunes.	1	2	3	4
8. I feel satisfied.....	1	2	3	4
9. I feel frightened.....	1	2	3	4
10. I feel comfortable	1	2	3	4
11. I feel self-confident.....	1	2	3	4
12. I feel nervous.....	1	2	3	4
13. I am jittery	1	2	3	4
14. I feel indecisive.....	1	2	3	4
15. I am relaxed.....	1	2	3	4
16. I feel content.....	1	2	3	4
17. I am worried.....	1	2	3	4
18. I feel confused	1	2	3	4
19. I feel steady	1	2	3	4
20. I feel pleasant.....	1	2	3	4

PERSONAL PROJECTS ANALYSIS®

Project Elicitation

We are interested in studying the kinds of activities and concerns that people have over the course of their lives. We call these *personal projects*. All of us have a number of personal projects at any given time that we think about, plan for, carry out and sometimes (though not always) complete.

Some projects may be focussed on achievement (getting my degree) others on the process (enjoying a night out with friends); they may be things we choose to do or things we have to do; they may be things we are working towards or things we are trying to avoid. Projects may be related to any aspect of your daily life, university, work, home, leisure and community, among others. Please think of projects in this broad way.

Here are some examples of projects:

Pass my psychology course
Cut down on junk food
Walk my dog
Clean my apartment
Try to get along with my parents
Clarify my religious beliefs
Exercise more often
Go to Europe this summer
Be a better parent
Break off with Bob
Climb the Matterhorn
Ask Julie for a date
Find a part-time job
Stop putting off studying until the last minute

We are also interested in finding out what you think and how you feel about these personal projects and activities, how important or stressful they are, and so on.

To start, please take 10-15 minutes and write down on the following page(s) as many personal projects and activities you can that you are currently engaged in or considering -- remember these need not be formal projects or even important ones -- we would prefer you to give us more of the everyday kinds of activities or concerns that characterize your life at present.

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Project Rating

Now select 10 projects from your list that you feel are important to you or typical of your life and copy them onto the matrix on the next page. If you have many more than 10 such projects, choose those that you expect to be actively working on in the next couple of months.

Once you have written in all 10 projects you may begin to rate each one from 0 - 10 on the series of dimensions listed along the top of the page. If you feel a dimension is not relevant to a project, you may put an X in the space instead of a numerical rating, but please try to rate each project on all dimensions wherever possible. Attached to the back of this questionnaire is a list of these dimensions and a more detailed explanation of what each one means. Please detach the list for easy reference and refer to it as needed while you rate your projects.

Personal Projects Rating Matrix: What do you think about what you are doing?

[illegible]

Project Dimension Definitions.

1. Importance

How important is this project to you? (Use 10 if you consider it to be very important and 0 if it is not at all important)

2. Difficulty

How difficult do you find it to carry out each project? (use 10 for a project which is extremely difficult to carry out and 0 for one that is not difficult at all.)

3. Visibility

How visible is this project to others that are close to you? (Use 10 for a project which is very visible to those around you and 0 for a project which is not at all visible to those around you).

4. Control

How much do you feel you are in control of this project? (Use 10 if you feel completely in control of the project and 0 if you feel you have absolutely no control over the project.)

5. Responsibility

How responsible are you for carrying out this project? (use 0 if you do not feel any responsibility for making progress in this project and 10 if you feel entirely responsible for the project.)

6. Time Adequacy

How adequate is the amount of time you spend working on this project? (Use 10 if you feel the amount of time is perfectly adequate and 0 if you feel that the amount of time you spend working on the project is not at all adequate.)

7. Outcome (Likelihood of Success)

How successful do you believe this project will be? (use 10 if you expect the project to be entirely successful and 0 if you think the project will turn out to be a total failure.)

8. Self-Identity

All of us have things we do that we feel are typical or truly expressive of us. These things can be thought of as our "trade marks". For example, some people engage in sports every chance they get, others prefer to read, others prefer to socialize. Think of what your own personal "trade marks" are, and then rate this project on the extent to which it is typical of you. (Use 10 if a project is very typical of you and 0 if it is not typical at all.)

9. Others' View of Importance

How important is this project seen to be by those people who are close to you? (Use 10 if a project is seen by others as very important and 0 if it is seen as not important at all.)

10. Value Congruency

To what extent is each project consistent with the values that guide your life? (Use 10 if a project is totally consistent with your values and 0 if a project is totally at odds with them)

11. Progress

How successful have you been in this project so far? (use 10 to indicate that you have been very successful and 0 to indicate that you have had no success at all.)

12. Challenge

How challenging do you find this project? (Use 10 if it is very challenging, perhaps more than you can handle, and 0 if it is not at all challenging, indeed you find it almost boring).

13. Absorption

To what extent do you become engrossed or deeply involved in a project (Use 10 if you generally get absorbed in an activity and 0 if you tend to be uninvolved when doing it).

14. Support

To what extent do you feel each project is supported by other people? Support may come in different forms, e.g. emotional (encouragement, approval), financial (money, material possessions) or practical (active assistance). (use 10 if you feel other people support the project a lot and 0 if there is no support at all).

15. Competence

To what extent do you feel competent to carry out this project? (Use 10 if you feel completely competent to carry out the project and 0 if you do not feel competent to carry it out).

16. Autonomy

How much is this project one which you feel you are pursuing autonomously, that is, you are engaged of your own free will in the project, not because anyone else wants you to do it. (Use 10 if you are engaged in this project entirely of your own free will and 0 if this project is one that you feel totally obliged to complete because of or for someone else)

17. Stage

Projects often go through several stages, which can be visualized along a time-line, such as:

0.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Think of each project as moving through stages on such a time-line. Using the scale on this page, rate each project's stage:

0 to 1: Awareness The idea for the project has just come to you.

2: the	Transition	You have the idea for the project and some thoughts on how to approach it. You are deciding whether project can actually be carried out.
3 to 4:	Planning	You have decided to proceed with the project. You are planning it and obtaining whatever personal and material support it may require.
5:	Transition	You have the project planned out and you are beginning to (or trying to) actively start the project.
6 to 7	Action	You are actively working on the project and trying to balance it with your other projects, resources and time commitments.
8: to	Transition	You are evaluating the project and your motivation continue with it, or bring it to completion/disengage from it.
9 to 10	Completion	The project is coming to a close or has actually been completed or terminated.

Debriefing

Adolescence and early adulthood are particularly vulnerable periods for young people, who are attempting to gain social, economic, and emotional independence from their families. For those individuals who choose to pursue post-secondary studies during this period, the transition to adulthood maybe further complicated by additional stressors of university life, such as, financial concerns, along with the demands of their academic programs and maintaining social equilibrium. University students leaving school in 1997, in general, incur a debt of \$40,000 and subsequently they have felt a great sense of stress about their ability to retire the debt in the future (Lange & Byrd, 1998). The purpose of this research is to examine the relationship of financial stress with students who feel that they are engaging in meaningful personal projects. We also want to see the cross impact that your current financial situation has on your academic pursuits and social life.

By gathering your responses to the Personal Project Analysis, along with measures assessing financial distress, general stress and indicators of your quality of life and academic performance, we are hoping to be able to identify the dimensions of students' lives that are particularly important in how you cope with the financial burden of university education. When we do, we will be in a position to make recommendations to the university on how to improve students' lives to help them maximize their performance and satisfaction with their university experience. Your participation will therefore be useful in letting us know what types of projects allow you to cope with the financial stress and the academic demands involved in pursuing an undergraduate education.

Contacts

The following people are involved in this research project and maybe contacted at any time if you have any further questions about the project, what it means, or concerns about how it was conducted:

Dr. K. Matheson, Chair, Dept. of Psychology, 520-2600 X2648

If you have any ethical concerns about how this study was conducted, please contact:

Dr. M. Sénéchal, Chair of Dept. of Psychology Ethics Committee, 520-2600, X1155

If you have any worries or concerns about your personal well-being, or study skills, you can contact the following services:

Carleton University Health and Counselling Services 520-6674
Student Life Services 520-6600