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Coping with the Transition to University:

The Impact of a Social Support-Based Intervention

By

Daniel Jeff Lamothe

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Abstract

The transition to university can be a particularly stressful time for incoming students, as indicated by high first-year attrition rates (Levitz & Noel, 1989). This stress may be produced in part by a reduction in social support that many students experience when they begin their university studies (Albert, 1988; Kenny, 1987). The present study examined an intervention program based on social support, and its impact on students' adjustment to university. Fifty-five first-year university students completed pretest questionnaires in August aimed at assessing levels of social support, as well as self-esteem, depression, stress, and integrative complexity of reasoning about university issues. Of the 55, twenty-seven (18 females, 9 males) were placed into one of three nine-member intervention groups, and participated in six weekly 90-minute group meetings, held in the first six weeks of classes, which focused on creating and maintaining social ties. The measures administered at pretest in August, as well as measures of university adjustment and daily hassles, were completed in early November and March. One of the three intervention groups was omitted from the analyses because delivery of the intervention was compromised for various reasons. For the other two intervention groups, results indicated that those involved in the discussions reported better adjustment to university, and lower levels of daily hassles, than did non-intervention participants (at both November and March testings). Intervention participants' perceived stress also dropped significantly from November to March, whereas no significant change over time was reported for control participants. The intervention's impact on university adjustment was "perfectly" mediated by

students' levels of perceived social support in November (according to the procedures outlined by Baron & Kenny, 1986). Task-oriented coping was found to have an interactive effect with the intervention on many of the outcome measures, such that participants with low task-oriented coping tended to benefit from the intervention more than others. These findings are discussed, with emphasis on the role of social support in university adjustment. Residence issues, gender differences, group cohesion, and the role of task-oriented coping style in the transition to university are also discussed, and suggestions for strengthening the impact of the intervention are made.

Acknowledgements

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Coping with the Transition to University: The Impact of a Social Support-Based Intervention Program

Introduction

This paper deals with a hectic period in the lives of many adolescents, the transition to university. Transitions in general are potentially stressful situations. However, incoming university students are particularly susceptible to stress, due to reduced access to social support networks during this time. This stress may account for some of the attrition rates across universities. The present study offers a proposed solution to this problem, in the presentation and evaluation of an intervention program aimed at creating and maintaining social ties during the first year at university.

Transitions and Adolescence

Our lives are marked by change. We define ourselves by what is now different from the past. Some changes are so overwhelming that a period of time is necessary for an individual to adjust to them. In the research literature, these periods are called transitions--periods in which an individual is progressing from one state to another. More specifically, transitions are "periods of change, disequilibrium, and internal conflict about gains and losses that occur between periods of stability, balance, and relative quiescence" (Cowan, 1991, p. 7). Such periods, while often positive in many ways, bring with them increased levels of stress as the individual struggles to regain stability in the face of new challenges.

This is particularly true of adolescents, who undergo a variety of developmental changes in a relatively short period of time (i.e., 6 - 8 years). In fact, many researchers have put forward the notion that adolescence is in itself a transition, a general period of change occurring between childhood and adulthood (e.g., Baumrind, 1991; Kimmel & Weiner, 1985; Lewin, 1948). According to this perspective, every event of growth or conflict in adolescence is a necessary, though small, step in the process of becoming an adult.

One potential drawback of this reasoning is that the focus of study is placed on the developmental stage of adolescence as a whole, to the detriment of conceptualizing precise and critical transitions during this period. In other words, the particular impact of a specific transition during adolescence is lost in the overall study of adolescence. A more informative method for studying transition in adolescence would surely involve an examination of the specific changes that occur across this developmental stage. In this way, the effects of specific life changes on adolescents overall could be examined. This is the reasoning behind the research on such specific life changes as parenthood (e.g., Cowan & Cowan, 1992), divorce (Emery, Hetherington, & Fisher, 1984, as cited in Cowan, 1991), and school transitions (Durlak & Jason, 1984; Felner, Ginter, & Primavera, 1982). Furthermore, there is evidence that specific life transitions in adolescence can have complex and cumulative effects on the quality of personal adjustment (Simmons, Burgeson, Carlton-Ford, & Blyth, 1987).

Transition to University

One specific transition in adolescence that has attracted much research is the transition from secondary to post-secondary education, or more simply, the transition to university. Like many transitions unique to adolescents, the transition to university involves changes in certain factors common in adolescence, such as autonomy (Chickering, 1969) and identity (Erikson, 1959, 1963, 1968; Marcia, 1980). As well, the impact of the transition on the family (Cowan, 1991) is important, as this impact reflects back on the individual. For example, an adolescent undergoing a transition who loses the protective environment of the family, may be vulnerable to increased stress (Baumrind, 1991).

The transition to university is not unique in this respect. Adolescents would certainly experience periods of change, and feel the impact on their family, in any of the following situations: a move across the country, parents' divorce, "coming out of the closet" in terms of sexual orientation. However, the transition to university is set apart from these situations by its commonality, or rather because it is a normative transition. According to Cowan (1991), transitions can be either normative or non-normative. A normative transition is one that occurs to almost every person, whereas a non-normative transition is less common and occurs at rare times, such as in a war, or only to some people, such as a serious illness (Cowan, 1991).

The transition to university marks the point of adolescent departure from home in many, though certainly not all, families in our culture (e.g., Flanagan, Schulenberg, & Fuligni, 1993). Additionally, the transition to university is, for many adolescents,

one part of the broader transition to adulthood. Both of these life experiences--adolescence departure from home and transition to adulthood--are certainly normative. Although the transition to university is thus appropriately viewed as a part of these more normative transitions, graduation from university is less common.

Many researchers have studied this problem of university attrition (e.g., Gilbert & Auger, 1988). Up to 40% of Canadian students fail to complete their university degrees (Smith, 1991). Also, the attrition rates are typically highest during the students' first year at university (Levitz & Noel, 1989; McIntosh, Wilson, & Lipinski, 1974). This suggests that many incoming first-year students do not manage to adjust to university, and drop out within their first year. For many students, this solution might have been avoided if the transition to university had been smoother.

While the transition to university, like all transitions, involves stress upon the individual, it is distinguished from some other transitions in adolescence by the extent of change in social support it also entails. In the following sections, the concepts of stress and social support are explained, and their role in the transition to university is examined. A possible cognitive component of the transition to university, integrative complexity of reasoning, is also explained. Then, the importance of intervention for adolescents' transition to university is highlighted, with a review of previous intervention research. Based on the format and results of these studies, a new social support-based intervention program is proposed, and the purpose of the present study, being the implementation and evaluation of the proposed model, is outlined.

Stress and the Transition to University

The stress experienced while adjusting to a transition can have profound effects on an individual's health. Physically, the endocrinological and immunological systems can be affected by stressful life transitions, leading to a greater susceptibility towards infectious diseases (Kieckolt-Glaser, Fisher, Ogrocki, Stout, Speicher, & Glaser, 1987; Dura & Kieckolt-Glaser, 1991). The psychological effects of stress can certainly be detrimental to an individual's health, as has been established by an extensive body of literature, including studies on daily hassles, the "little stresses" that are a part of everyday life. It is thus essential that individuals undergoing transitions have the capabilities necessary to handle this stress.

Folkman and Lazarus's (1980) model of appraisal and coping (or "cognitive-transactional theory of stress") is considered the definitive explanation of how people deal with stress. When faced with a new or changing situation, an individual will appraise it for any potential harm, threat, or challenge. If any such aspects are perceived, the individual will then examine what coping strategies are available to deal with these aspects. The amount of stress felt by the individual will be determined by the levels of perceived harm, threat, and/or challenge, and the perceived utility of available coping strategies for dealing with them. In an attempt to reduce this stress, the individual will rely on various cognitive and/or behavioral means; these strategies are collectively known as coping (Folkman, 1984; Folkman & Lazarus, 1980).

The choice of a particular coping strategy will depend, in part, on the coping resources available to the individual. Coping resources can be internal or external;

they help moderate the severity of the stress by influencing how stressful a situation will be perceived as being. Internal resources might consist of individual coping styles, prior experience, and personality variables. External resources may include time, money, and social support (Taylor, 1986).

Both internal and external resources come into play in dealing with the stress an individual feels during the transition to university, especially coping style and social support. Coping style is typically regarded as a stable trait in individuals (e.g., Carver & Scheier, 1994; Endler & Parker, 1990). Although many coping styles have been documented in the literature, three emerge as being the most relevant and measurable styles: task- or problem-focused, emotion-focused, and avoidance-focused coping (Endler & Parker, 1990). Using task-focused coping, an individual will concentrate directly on the stressful issue, perhaps using techniques such as time management and information seeking, with the intention of actively changing the situation for the better. An individual who relies on emotion-focused coping will tend to deal with the negative feelings associated with the stressful issue, without dealing with the issue itself, for example, by daydreaming. Typically, task-focused coping is best when the issue is important or lasting, whereas emotion-focused coping works best when the issue is perceived as minor or will not remain stressful for long. In avoidance-focused coping, the individual relies on distracting tasks to avoid focusing on the stress. In other words, the individual deals with the stress by not dealing with it, for example, by watching television the night before an exam (Endler & Parker, 1990). Measures of these coping styles reflect their nature as personality traits; scores on such self-report

measures are taken to represent a stable index of an individual's coping style (Endler & Parker, 1990).

A large segment of the coping literature has focused on the external resource of social support. Social support plays a key role in adjusting to university, as it does in other transitions (e.g., Brammer & Abrego, 1981; Compas, Wagner, Slavin, & Vannatta, 1986; Robbins, Lese, & Herrick, 1993). However, research on social support has not been limited to studies on stress and coping. As will be seen, interest in social support has been shown across many disciplines.

Social Support and the Transition to University

In the late 1950s, a nationwide survey on attitudes towards mental health and distress resolution was conducted by the Joint Commission on Mental Illness and Health (1961, as cited in Gottlieb, 1983). This research revealed that the majority of people typically turn more to family and friends than to trained professionals, for help in a distressing situation. This landmark study launched an enormous body of literature on what would be called social support.

Throughout the years, the term "social support" has been accorded multiple definitions, usually focused on either the source, function, or effectiveness of this coping resource. Cohen and Syme (1985) provide a simple explanation of social support, defining it as "the resources provided by other persons" (Cohen & Syme, 1985, p. 4). However, this basic definition would include any persons providing any resources, even trained professionals. Gottlieb (1987b) further refines this definition

by adding the qualification that such support involves exchange, or mutual aid, thus excluding persons from professional fields.

Social support in this view is thus defined as help from persons who make up a mutually assisting relationship, such as family, friends, neighbors, and other relatives, in other words, members of an individual's community. As such, early research on social support was conducted primarily through the field of community psychology (Gottlieb, 1983). Only in the early 1970s did other fields of psychology turn towards the study of social support, thanks mostly to three significant publications.

The first two of these were review articles, both focusing on stress moderators (Cassel, 1974; Cobb, 1976). Both these authors suggested that the presence of social support protects people from psychological distress when faced with stressful life events. These studies gave researchers a new direction in the examination of social support: how social support moderates stress. This query has been the topic of much speculation in the last twenty years, most notably the hypothesis that social support acts as a "buffer" to protect the individual from the effects of stress (e.g., Cohen & Wills, 1985). According to this model, social support is particularly operative in promoting well-being for individuals currently experiencing a stressful situation, such as a life transition. This "buffering" function can, however, be seriously hampered when the transition affects an individual's social support, as will be seen shortly.

The third study of interest to researchers in the field of social support was Caplan's (1974) study on the nature of primary group ties. Following Cassel's lead, he postulated that there were health-protective functions of social support. He also took

this reasoning one step further, and suggested a number of ways to enhance the development of social support and supportive attachments (Caplan, 1974). In essence, Caplan expanded the field of interest on social support, to include applied research and primary prevention. Since then, researchers have examined various strategies to promote social support among individuals faced with potentially stressful situations (e.g., Cowan & Cowan, 1992; Gottlieb, 1987b).

Realizing that social support can have an effect on stress, and that this effect can be monitored, even manipulated, to assess individuals' adjustment to stress, many researchers began to dissect the concept of social support, in an attempt to determine what aspects of social support are most effective in dealing with stress. One such study was Weiss's identification of six provisions of social support (Weiss, 1974, as cited in Cutrona, 1984). As explained by Cutrona (1984), these are:

> (a) attachment, provided by intimate relationships where the person receives a sense of security and safety; (b) social integration, provided by a network of relationships in which individuals share interests and concerns; (c) opportunity for nurturance, derived from relationships where the person is responsible for the well-being of another; (d) reassurance of worth, provided by relationships where the person's skills and abilities are acknowledged; (e) reliable alliance, derived from relationships where the person can count on others for assistance under any circumstances; and (f) guidance, provided by relationships with trustworthy and authoritative individuals who can provide advice (Cutrona, 1984, p. 379).

When faced with stress, an individual may rely on any or all of these components of social support, or on other functions of social support (such as social comparison, discussed below), to better cope with the stress.

Major life transitions can, however, tax this coping resource of social support itself. This is certainly true for the transition to university, as all aspects of an incoming student's life are affected by this change (e.g., Shaver, Furman, & Buhrmester, 1985). In particular, this transition may involve loss of sources of social support (for example, moving from home, forming interests different from those of friends), thus reducing the individual's ability to cope with transition stress (Albert, 1988; Kenny, 1987). As stress increases, aspects of an individual's life will suffer, including the ability to create new friendships and to form a new social support system. Such new social networks, if formed, could serve preventive, as well as adaptive, functions. For example, such social interactions may help incoming students become familiar with the university environment and their role as students (Hays & Oxley, 1986).

Thus the absence of social support can affect an incoming first-year student's ability to deal with transition stress and adapt to university. Similarly, the presence of social support is related to a more secure transition to university. In a previous investigation of the transition to university at Wilfrid Laurier University, more social support (as measured in August prior to university entrance) was a very good predictor of better adjustment for first-year students six months later (Hunsberger, Pancer, Pratt, & Alisat, in press). Also in this study, social support was related to better preparation

for university (i.e., thinking about university life, access to information, discussion of university issues). Furthermore, social support has been shown to be positively correlated with subsequent adjustment and self-esteem, and negatively correlated with later scores of depression, stress, and hassles (Hunsberger et al., in press).

One further function attributed to social support is the presence of social comparison (Gottlieb, 1987a). An individual facing the transition to university will be, by definition, experiencing new challenges and hassles. If the individual feels particularly isolated and alone in facing these challenges, he/she might reason that the solution to these problems must come from within the individual. This could easily increase the stress felt about the hassles. However, if this individual were to seek social support, he/she might discover that others feel and have felt very similar to him/her, and that others have dealt with these hassles, and can offer practical solutions. It is this concept of social comparison which allows an individual to grasp the commonality of his/her problems, and the different possible solutions to these problems.

Integrative Complexity and the Transition to University

In addition to social support, there is a cognitive index of thinking about the transition to university that has been researched, albeit only in a limited way. It is useful to study this component, the construct of integrative complexity, as it might be hypothesized to have an impact on students' adjustment to university.

The construct of integrative complexity refers to the degree of complexity of an individual's thought processes. As such, research on integrative complexity has focused on the structure of ideas, rather than on their content (Suedfeld, Tetlock, & Streufert, 1992). An individual's thought processes on a topic are considered complex if they contain certain degrees of differentiation and integration. Differentiation refers to the tolerance for different, sometimes opposite, perspectives or dimensions of judgment (Baker-Brown, Ballard, Bluck, De Vries, Suedfeld, & Tetlock, 1992; Suedfeld et al., 1992). For example, an individual who thinks that taxes are both a nuisance to the public, and a necessary component of economic stability, is expressing differentiation. Integration refers to the union of different perspectives, sometimes producing a new perspective (Baker-Brown et al., 1992; Suedfeld et al., 1992). For example, an individual who acknowledges both the management's position and the union's position in salary negotiations, and states that a compromise will be necessary before any agreement is met, is expressing integration. Differentiation is thus a necessary component of integration; higher levels of integrative complexity involve first differentiation, then integration (see Measures). Integrative complexity is scored on a scale of 1 (low) to 7 (high), based on an individual's oral or written responses to an interview or a sentence/paragraph completion test, as well as on sections of dialogues or speeches (Tetlock, 1986).

A few studies have examined the relationship between integrative complexity and amount of social consultation, that is, the number of times an individual seeks social guidance for dealing with a stressful situation, one component of social support

(Pratt, 1992; Pratt, Diessner, Hunsberger, & Pancer, 1994). These studies have demonstrated that greater levels of consultation may provide different views of a particular problem, which might eventually be internalized to produce more complex representations of this problem (Pratt, 1992; Pratt et al., 1994). Thus it could be expected that increased levels of social consultation would lead to more complex thinking, and that enhancing social support in individuals experiencing a stressful life event would lead to more complex representations of that event. In fact, there is evidence consistent with this position for the university transition. Lamothe (1994) found that consulting with adults on a career-related issue was positively related to integrative complexity of thinking about the issue, as well as satisfaction of coping with the issue, for first-year university students.

Most importantly, there is evidence that a relationship exists between integrative complexity and the transition to university. Pancer and colleagues have shown that greater complexity of reasoning about university is linked to more success in coping with high levels of transition stress (Pancer, Pratt, Hunsberger, & Alisat, 1995); this, in turn, might improve one's adjustment to university. It is therefore reasonable to conclude that integrative complexity and university adjustment may be linked, and that experimentally increasing incoming students' level of integrative complexity could positively affect their adjustment to university.

Thus, integrative complexity, social support, and the transition to university are linked together. In the following section, previous intervention programs on the transition to university are reviewed, followed by a description of the present study's

intervention program. This includes a model for treating social support and integrative complexity as mediating variables in adjustment to university.

The Need for Intervention

As explained earlier, the transition to university is a particularly stressful period for many students; some students fail to respond positively to this stress, and drop out of university. In response to this difficulty in adjustment to university life, many researchers and university administrations have developed intervention programs designed to facilitate the transition to university (e.g., Baker & Siryk, 1986; Birkeland, 1989; Bloom, 1971; Fondacaro, Heller, & Reilly, 1984; Oppenheimer, 1984; Scherer & Wygant, 1982). These will be examined next, followed by a proposed new intervention model.

One of the earliest university transition intervention studies was conducted by Bloom (1971) in the early 1970s. He mailed questionnaires to a sample group of incoming first-year students (the "cohort" group), asking them for their thoughts in anticipation of starting university. He then sent the results of the questionnaires to the members of the "cohort" group. A second larger group (the "comparison" group) was not sent any questionnaires, nor given feedback on the results. He then compared both groups on survival rate, academic involvement, and academic achievement. Although the "cohort" group had significantly higher survival rates (i.e., fewer members dropping out) and had more "overachievers" (as measured by comparing earned grade point ratio during first year and predicted grade point ratio based on SAT scores and

graduating class percentile rank) than the "comparison" group, these differences were not large, and the "overachievers" difference was non-significant (Bloom 1971). While not directly an intervention program, Bloom did provide information to some incoming students; this information had a significant, though small, effect on their adjustment to university, as measured by survival rate. Also, Bloom's use of a comparison group allowed for more control in the experiment, and higher validity in the interpretation of these results.

Baker and Siryk (1986) also used a control group in their intervention, which was based on their adjustment to university questionnaire, the Student Adaptation to College Questionnaire (SACQ; Baker, McNeil, & Siryk, 1985). Participants were given the SACQ, then placed into one of two groups, well adjusted or less well adjusted, depending on whether their scores were high or low. These groups were further divided into interview and non-interview groups, equivalent in subscale scores, gender, and size. The authors then met each participant of the interview groups individually for 1-2 hours, to discuss strategies for adjusting to university, based on the four subscales of the SACQ. These are: academic adjustment, dealing with educational demands; social adjustment, dealing with interpersonal-societal demands; personal/emotional adjustment, dealing with psychological distress; and goal commitment/institutional attachment, dealing with feelings about being in college. For interview participants with low scores in a particular subscale, the authors offered specific advice or information on bettering their adjustment. Results showed a significantly greater increase in SACQ scores, thus a greater improvement in

adjustment, for the less well adjusted interview participants than for the less well adjusted non-interview participants. Such findings much be approached with caution, however, as the SACQ scores were the main topic of discussion in the intervention; as such, interview participants may have been directly trained to score higher than their comparison group counterparts on the outcome measure.

Other programs specifically included social support from peers in their planning. For example, Scherer and Wygant (1982) developed a volunteer summer program for students concerned about their transition to university. This "Summer Transition Quarter" involved multiple components, such as a diagnosis of achievement levels, tutorial services, and individual counseling sessions, as well as planned social activities. Essentially, this program was an elaborate summer course designed to introduce participants to university life. Slightly more than half of participants showed good academic standing with a mean grade point average above C, three terms after the intervention. However, it was difficult to ascertain what led to this success, due to the many aspects of the program and the lack of a comparison group which did not receive an intervention program.

Similar problems were present in the study by Birkeland (1989). In an attempt to target depression, suicide ideation, and separation from family in college students undergoing the transition to university, Birkeland developed a multi-faceted program, combining such diverse therapies as Rational Emotive training, empathy training, and assertiveness training. The program was designed to be facilitated by residence hall staff members, who encouraged group cohesiveness and trust. Fourteen women

volunteered to meet for sixteen 2-hour semi-weekly sessions. The program's effectiveness with students cannot be determined, however, as the lack of any comparison group made it impossible to evaluate the outcome of the program.

Fondacaro, Heller, and Reilly (1984) also focused on depression and suicide ideation. In response to suicide attempts at a high-rise graduate student dormitory, they developed a series of four seminars directed at dormitory leaders, to reduce loneliness among resident students and to promote social interaction. The immediacy and severity of the problem at hand precluded the use of a comparison group. Although there were no reported subsequent suicide attempts during the academic year, no evaluation was performed to determine if loneliness and social interaction were affected by the intervention.

Apparently, only one other study examined social support directly. Oppenheimer (1984) examined specifically the social comparison, or "universality" aspect of social support. He pre-tested 133 volunteer first year students on life satisfaction, social anxiety, and self-esteem, and placed them into either "vulnerable" or "nonvulnerable" categories, depending on whether they scored below or above the median respectively on a social life satisfaction measure. Thirty-nine members of each category were randomly assigned to same-sex groups of 4 to 6 members, to participate in a six-week intervention program, whereby they met weekly for 1 hour, from mid-October to late November. The intervention program focused on problem solving, open expression of concerns, and group cohesiveness (Oppenheimer, 1984). The remaining 21 participants (34 from the original 133 had dropped out due to the study's

time commitment) were not given any treatment. All participants were then given post-test (one week after intervention) and follow-up (five months after intervention) questionnaires on social life satisfaction, social anxiety, anxiety, self-esteem, help seeking, problem seeking, and attributions and expectations about university life. Results showed a significant intervention effect on social adjustment, but only for the "vulnerable" students, and only in follow-up analyses. Oppenheimer reasoned that the intervention had a "sleeper effect" on the measures, as no differences were found in the immediate post-test, but a significant difference was found in the follow-up. Oppenheimer's results suggest the need to study the impact of such transition interventions over a larger time period.

The above review indicates that few studies designed to facilitate the transition to university have included social support in their interventions, and only one had examined social support directly (i.e., Oppenheimer, 1984). However, research has demonstrated a connection between social support and the transition to university, as shown by the previous literature review. It would seem that any study looking at improving university adjustment should concentrate on social support. Specifically, any intervention focused on mutual social support, and its evaluation, should follow a number of important principles.

First, it should involve discussion groups and interactions with other transition participants, and not be limited to individual counselling sessions or lectures. This group format would better facilitate social support, and allow for greater exposure to different perspectives on university issues.

Second, the intervention discussions themselves could usefully focus on the importance of social support in adjusting to university. Increasing the sophistication and complexity of students' thinking about and understanding of support and adjustment issues should be beneficial in terms of providing them with more resources for coping.

Third, there should be a treatment comparison group in order to adequately assess the effectiveness of the intervention. In some studies reviewed (e.g., Birkeland, 1989; Scherer & Wygant, 1982), it was difficult to ascertain the effectiveness of the proposed intervention because there were no controls with which to compare the participants' results.

Fourth, the intervention should take place soon after first-year classes have begun, ideally within the first two weeks of classes, when students are most vulnerable to transition stress (Compas, Wagner, Slavin, & Vannatta, 1986). In this way, intervention participants could be shown to develop and maintain social ties early in the academic year, and this in turn might improve their university adjustment later in the year.

Finally, participants should be measured throughout the school year--prior to the intervention, immediately following the intervention, and some months after the intervention--in order to determine if the intervention has a "sleeper effect," or if any immediate effects of the intervention are robust over time. Otherwise, any long-lasting effects (or delayed effects, as in the study by Oppenheimer, 1984) may remain unknown to the investigators.

Purpose of the Study

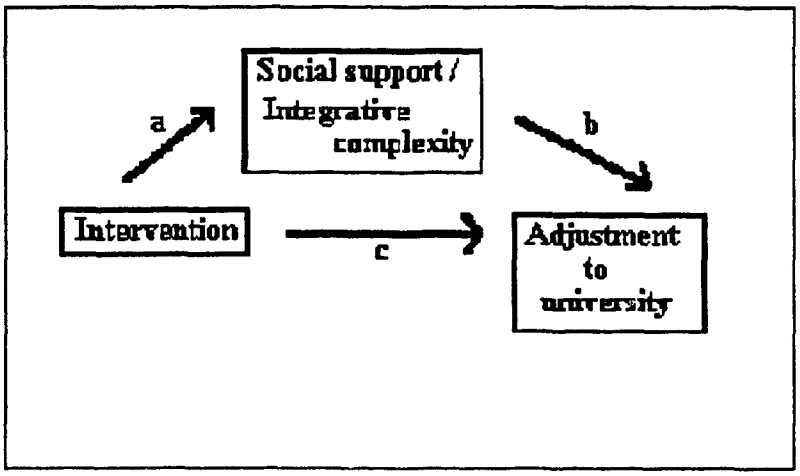
The present investigation involved a program with the components described above. As such, it was designed to: (a) implement a six-week intervention program, focusing on social support, for a group of incoming university students; and (b) assess the effectiveness of such a program on students' perceived social support and complexity of thinking about the issues of university transition, and on their adjustment to university and feelings of well-being.

It was hypothesized that after the intervention: (1) participants' post-test scores on social support, self-esteem and integrative complexity regarding transition issues would be significantly higher than their pretest scores; (2) participants' post-test scores on stress and depression would be significantly lower than their pretest scores; (3) participants would score significantly higher on post-test measures of social support, adjustment to university, self-esteem and integrative complexity than would the non-intervention control group; and (4) participants would score significantly lower on post-test measures of stress, depression, and daily hassles than would the non-intervention control group.

The immediate goal of the intervention was to increase levels of perceived social support, through both direct instruction in the importance of social networks, and indirect exposure to the group as a specific social network. Also, it was expected that intervention participants' level of complexity of reasoning about university issues would be increased, because they would be exposed to different perspectives and problem-solving techniques within the group on academic and social issues in

university adjustment. The overall purpose of the intervention was to ease students' adjustment to university. Thus, changes in both perceived social support and integrative complexity could be seen as mediating the intervention's impact on the outcome measure, adjustment to university, as shown in Figure 1.

Figure 1. Proposed Model of Social Support and Integrative Complexity as Mediators



The arrows represent effects of one variable on another: a represents the effect of the intervention on the mediator (social support / integrative complexity); b, the effect of the mediator on university adjustment; and c, the effect of the intervention on university adjustment. Following Baron and Kenny's (1986) procedure for testing mediation, the effect of c must be lessened when effect b is controlled for, in order to say that one variable has a mediating effect on another. In the present study, it was hypothesized that higher scores in (a) perceived social support, and (b) integrative

complexity, would lead to higher adjustment to university scores. It was further expected that any significant effect of the intervention on adjustment to university would be lessened when these mediating variable effects were controlled in appropriate analyses.

Method

Participants

From the 1994 Wilfrid Laurier University incoming first-year student list, comprised of students entering university directly from secondary school, 347 students (approximately 33%) were randomly sampled from 1040 students and mailed an introductory letter and initial questionnaire (see below). Of these 347 students, 55 (35 females; 20 males) volunteered their participation. Participants ranged in age from 17 to 20 years ($\underline{M}$ = 18.6). No honorarium was offered, although those students enrolled in introductory psychology courses, as members of the Psychology Research Participant Pool, were accorded two bonus credits for their study participation.

Measures

All participants were asked to complete three questionnaires, one in mid-August, one in early November, and one in early March (see Procedure). According to the time of testing, the questionnaire asked for demographic information, and included measures of integrative complexity of reasoning about the transition to university, social support, self-esteem, depression, stress, coping style, daily hassles,

adjustment to university, and perceived effectiveness of the study. The components of each questionnaire are listed in Table 1. All measures are discussed below, and appear in Appendix C (August questionnaire), K (November questionnaire) and N (March questionnaire).

Table 1

Components of August, November, and March Questionnaires

Measure	August	November	March
Demographics	*	*	
Integrative complexity of reasoning	*	*	*
SPS (Cutrona, 1984)	*	*	*
Checklist of supportive people	*	*	*
Self-esteem (Rosenberg, 1965)	*	*	*
CES-D (Radloff, 1977)	*	*	*
PSS (Cohen, 1986)	*	*	*
MCI (Endler & Parker, 1990)	*		
BCSHS (Blankstein et al., 1991)		*	*
SACQ (Baker & Siryk, 1984)		*	*
Intervention evaluation		*	
Perceived effectiveness of the study			*

Note. SPS = Social Provisions Scale; CES-D = Centre for Epidemiologic Study of Depression; PSS = Perceived Stress Scale; MCI = Multidimensional Coping Inventory; BCSHS = Brief College Student Hassles Scale; SACQ = Student Adaptation to College Questionnaire.

Demographic variables

In the August questionnaire, participants were asked their gender, age, languages spoken at home, and grade average on Ontario Academic Credit courses (OACs). They were also asked to indicate where they would be living during university (residence; off campus (but not at home); at home; or other), and if they had been offered a scholarship at Wilfrid Laurier University. The November questionnaire asked participants to indicate their department of study and the highest level of education attained by each parent.

Mediating variables

Social support. The 24-item Social Provisions Scale (Cutrona, 1984) was used in all three questionnaires to assess students' perceived social support. Participants were asked to indicate agreement or disagreement with each item using a 9-point response format which ranged from -4 (very strongly disagree) to +4 (very strongly agree; 0 = neutral). Items included "If something went wrong, no one would come to my assistance," and "I feel a strong emotional bond with at least one other person," and assessed the six provisions outlined by Weiss (1974, as cited by Cutrona, 1984), described earlier. Scores for all items were re-coded for data analysis into a 1-9 response format (with con-trait items reverse-scored). Adjusted total scores could therefore range from 24 to 216, with higher scores indicating greater perceived social support. This measure has reasonable psychometric properties of reliability (test-retest

over a six-month period = .55) and validity (correlations of appropriate sign from .28 to .31 with measures of life satisfaction, loneliness, and depression; Cutrona, 1984).

Integrative complexity. For all three questionnaires, participants were asked to write "some thoughts about university life" by responding to three open-ended questions (of the form "What do you expect X to be like?" for the August questionnaire, and "What has X been like?" for the November and March questionnaires) on university life in general, classes and school work, and university social life. A fourth open-ended question asked participants to indicate "in what ways do you think personal relationships [will] play a part in adjustment to university". Participants were instructed to respond "as fully as you can" and in complete sentences. Individual responses to each question were scored for integrative complexity of reasoning on a scale from 1 to 7, with a score of 1 indicating no differentiation/no integration, 3 indicating high differentiation but no integration, 5 indicating high differentiation/moderate integration, and 7 indicating both high differentiation and high integration. Scores of 2, 4, and 6 indicate transition points between levels of differentiation and integration (Baker-Brown et al., 1992). Individual item scores were aggregated into an average complexity score per questionnaire for each participant. Thirty responses (10 per questionnaire administration time; 19.35% of total sample) were scored independently by the author and an associate; inter-rater reliability of the averaged index was adequate ($r = .84$, $p < .01$).

Outcome variables

Adjustment to university. The 67-item Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1984) was used to measure university adjustment. Participants were asked to indicate how well each statement applied to them "at the present time (within the last few days)," using a 9-point response format (1 = doesn't apply to me at all; 9 = applies very closely to me). The SACQ contains four subscales to measure different dimensions of university adjustment (a few items are double-scored): academic adjustment (24 items; e.g., "Recently I have had trouble concentrating when I try to study"), social adjustment (20 items; e.g., "I feel that I have enough social skills to get along well in the university setting"), personal emotional adjustment (15 items, e.g., "I have been getting angry too easily lately"), and attachment to the school (15 items; e.g., "I expect to stay at this university for a bachelor's degree"). Subscale and overall scores were generated by summing scores on relevant items (con-trait items were reverse-scored). For the present study, only the overall SACQ score was used. Higher scores indicate better university adjustment; overall scores can range from 67 to 603. Reliability of the total SACQ is high; Cronbach's alpha was between .92 and .94 for six administrations of the SACQ (Baker & Siryk, 1984). Criterion validity correlations for the SACQ with university attrition rates were consistent and in the low to moderate range (-.13 to -.34) over three years, indicating lower drop-out rates for those with higher scores (Baker & Siryk, 1984).

Self-esteem. This measure (Rosenberg, 1965) consisted of 10 items about the self. Participants at each time of testing were asked to indicate their agreement or

disagreement with each statement on a 9-point scale from -4 (very strongly disagree), to +4 (very strongly agree; 0 = precisely neutral). Items include "I am able to do things as well as most other people," and "I feel I do not have much to be proud of". Items were re-scored on a 1 to 9 response format (con-trait items were reverse-scored), and totalled to produce an overall score. Higher scores indicate higher levels of self-esteem; overall adjusted scores could range from 10 to 90. Rosenberg's scale has shown very high reliability (Guttman coefficient of .92) with a sample of high school juniors and seniors (Battle, 1991). Concurrent validity correlations have shown a high relationship (r = .76) between Rosenberg's scale and the Global Self-Worth subscale of the Self-Perception Profile for Adolescents (Hagborg, 1993).

Depression. At each assessment, participants were asked to complete the Centre for Epidemiologic Study of Depression Scale (CES-D; Radloff, 1977), a 20-item measure of depressed and non-depressed feelings and behaviors, such as "My sleep was restless," and "I felt hopeful about the future." Participants were asked to indicate "how often you have felt this way in the past week," using a 4-point scale, where 1 = rarely or none of the time (less than 1 day) and 4 = most or all of the time (5-7 days). A total score was determined by summing all responses (con-trait items were reverse-scored). Total scores could range from 20 to 80, with higher scores reflecting higher levels of depression. The CES-D has high internal consistency across patient and general population samples (coefficient alpha = .84 to .90; split-halves = .76 to .85), as well as moderate correlations (.44 to .54) with the Hamilton Clinician's Rating scale and the Raskin Rating scale (Radloff, 1977).

Stress. Participants at each assessment were asked to rate stressful feelings and thoughts they had "during the last month" on a 5-point scale (1 = never; 5 = very often). This 14-item measure was taken from the Perceived Stress Scale (PSS), long version (Cohen, 1986), and includes statements such as "[In the last month, how often have you] Felt that things were going your way?," and "[...] Been upset because of something that happened unexpectedly?" Summing all item responses (after con-trait items were reverse-scored) produced overall scores which could range from 14 to 70; higher scores indicated greater levels of stress. This measure has moderate correlations (.55) with the CES-D (Cohen, 1986). Coefficient alpha reliability for the PSS was .84 and .85 in two separate college student samples (Cohen, Kamarck, & Mermelstein, 1983).

Daily hassles. The Brief College Student Hassles Scale (Blankstein, Flett, & Koledin, 1991) listed 20 areas of potential hassles (e.g., academic deadlines; family expectations), and asked participants to indicate "how often have each of these areas been a hassle or a problem for you". Within the November and March questionnaires, participants rated each area using a 5-point scale, where 1 equals never and 5 equals very often. Total scores for this measure (after con-trait items were reverse-scored) could range from 20 to 100, with higher scores reflecting greater levels of daily hassles or problems. This measure has high internal consistency (alpha = .81), despite the diversity of item topics (Blankstein et al., 1991). It also has moderate correlations (.52 for males; .33 for females) with the Beck Depression Inventory (Blankstein & Flett, 1992).

Secondary variables

Coping style. This 44-item measure, included in the August questionnaire only, was excerpted from The Multidimensional Coping Inventory (MCI), a 70-item measure in its current form (Endler & Parker, 1990). This shortened measure included only items which belong to the Task-oriented (MCI-T; 19 items), Emotion-oriented (MCI-E; 12 items), and Avoidance-oriented (MCI-A; 13 items) Coping Scales (Endler & Parker, 1990). Participants were asked to indicate, on a 5-point response format (1 = not at all; 5 = very much), "how much you engage in each type of activity when you encounter a difficult, stressful, or upsetting situation". Each item identified one type of activity, such as "Schedule my time better" (MCI-T), "Take it out on other people" (MCI-E), and "Treat myself to a favorite food or snack" (MCI-A). A total score for each scale was calculated by summing responses of pertinent items. Total scores could range from 19 to 95 for the MCI-T, from 12 to 60 for the MCI-E, and from 13 to 65 for the MCI-A, with higher scores indicating greater use of the appropriate coping style. In construct validity analyses, the MCI subscales correlated highly with matching Ways of Coping Questionnaire subscales (Endler & Parker, 1990). Test-retest reliabilities for MCI-T, MCI-E, and MCI-A were calculated, over an eight-week period, at .74, .66, and .68 respectively (Endler & Parker, 1990).

Checklist of supportive people. Participants were asked to list, by initials, "the people who are available to provide you with help and support" (up to 15 people), as well as "their relationship to you", including family members or relatives, friends, co-workers, teachers, and professionals. For each person given, participants were asked

to rate "how satisfied you are with the support you receive from this person," on a 7-point response format from -3 (very dissatisfied) to +3 (very satisfied), where 0 equals neither satisfied nor dissatisfied. The total number of people listed for each questionnaire, and their overall satisfaction rating, were both entered for data analysis. In the November and March questionnaires, participants were also asked to indicate any new supportive people since the previous questionnaire with an asterisk (*). The total number of new people, and their average satisfaction rating, were entered separately for November and March.

Grade point average. Within the March questionnaire, participants were asked for their overall average grade point average (GPA) for all first term courses. Any letter grades given were converted into the 0-12 grading system at Wilfrid Laurier University, prior to data entry. Participants were also asked if this grade was much better, better, about the same, worse, or much worse than they expected when first arriving at university; this question was scored on a 1 (much worse) to 5 (much better) response format.

Intervention evaluation. For the November questionnaire, intervention participants only were asked for their input on the intervention through three questions. The first two were open-ended questions: "What were some of the things you got out of the group meetings?" and "What do you think should be changed about the meetings?" The third question listed six benefits that intervention participants might have experienced as a result of their participation in the group, such as getting a different perspective on issues, and getting ideas on balancing their academic and

social lives. These participants were asked to rate the extent to which they experienced each of the six benefits, on a 5-point response format (1 = not at all; 3 = moderately; 5 = a great deal).

Perceived effectiveness of the study. All participants in the study were asked for their input in the March questionnaire. Specifically, they responded to two open-ended questions: "Looking back on your first year at university, what would you say were the most successful aspects of your adjustment? What were the most challenging or difficult aspects?" and "Do you have any further comments you would like to mention regarding any aspects of the study?" Intervention participants only were given two additional questions based on their group experience. The first was an open-ended question, "Looking back on your transition group experience in the fall, what would you say are the most important things you got out of it?" The second was a multiple-choice answer (never; less than monthly; monthly; weekly or more) to the question "How often have you had any contact with other group members, since the group ended?"

Procedure

Pre-intervention

Prior to contacting the participants, approval was given to the project by the departmental ethics review committee. Early in August, 1994, one month prior to the beginning of classes and the intervention period, students were sent an introductory letter (see Appendix A), a consent form (see Appendix B), and the August

questionnaire (see Appendix C) by mail. The letter described the purpose of the study and explained that participants would be placed in either a discussion or a questionnaire-only group. Interested students were asked to complete and return the questionnaire and consent form within two weeks of receipt.

During this period, two graduate students, one M.A. graduate, and a senior undergraduate student were trained as facilitators for the discussion groups by three faculty members overseeing the project. Although the facilitators were not clinically trained, their training involved information and exercises on active listening, paraphrasing, role-playing, and leading discussions. The facilitators and supervising faculty members also developed the structure of each week's meeting, taking into account information gathered from multiple sources at Wilfrid Laurier University, including Admissions, Counselling Services, and the Student Life Coordinator. Facilitators participated in mock sessions prior to the actual structured meetings, with faculty members role-playing first-year students. Throughout the intervention, facilitators were encouraged to discuss their concerns with the faculty members involved.

After the August questionnaires and consent forms had been returned, the 55 volunteer participants were contacted by phone to determine their availability for the discussion groups. If they were moving, they also indicated their upcoming address and phone number. Within a week, time periods for three group meetings were determined for the discussion groups, and participants were assigned to either a discussion or the questionnaire-only comparison group, according to their availability,

with the provision that all groups would be as gender-balanced as possible. All participants were then re-contacted and informed about the group in which they had been placed. Discussion participants were told where and when their first meeting would be held. Questionnaire-only participants were informed about their role in the study. They were not contacted again until the November mail-out, in the post-intervention phase. They were given the telephone number of a contact person to call if they had difficulties adjusting to university life, or had questions or concerns about the study. However, no non-intervention participants called during this period.

Intervention

During the first week of classes (mid-September, 1994), each of the three discussion groups had its first meeting. Subsequent meetings were held at the same time and place for the next five weeks. Weekly attendance varied throughout the program for each of Group 1 ($\underline{M}$ = 8.2), Group 2 ($\underline{M}$ = 5.3), and Group 3 ($\underline{M}$ = 6.8). Group 2's average attendance was quite low, and only five of their six intervention meetings were held (Week 4 was cancelled at participants' request due to exams). Also, this group was not fully constituted until Week 2, due to the fact that two of the three males in the group did not attend the first meeting, and had to be replaced. This problem will be discussed later.

Each meeting lasted approximately ninety minutes, and was facilitated by one male and one female facilitator. The three groups had different pairs of facilitators (F1-M1; F1-M2; F2-M1), whose role was to initiate discussion, keep discussions

relatively on-topic, and ensure balanced participation from all group members. With the exception of the first meeting, all meetings began with a 20-minute "check-in" period, giving participants the chance to talk about feelings and concerns from the previous week at university. This was followed by various exercises related to the weekly focus. Also, with the exception of the final meeting, all meetings ended with a 30-minute general discussion on the topics raised during the meeting. All meetings were audio-taped (with the knowledge and consent of participants), so that sessions could be monitored by the researchers as needed.

The format of these meetings was loosely based on the transition to parenthood intervention described by Cowan and Cowan (1992). The format of each meeting is summarized below, and was meant to be flexible and dependent on the group's interests and needs each week. The "check-in" period generally took priority over any structured exercises. Detailed descriptions of each meeting, as well as any hand-outs and evaluation sheets, are reproduced in Appendices D (week one) through I (week six).

Week 1. The initial meeting began with two icebreakers involving participants and facilitators. The first, "line-forming", had everyone line up from shortest to longest distance of move to the university, allowing for some initial conversation and disclosure. For the second icebreaker, "dual interviews," the group split up into pairs for mutual introductions; the group then reconvened and each pair member introduced the other to the group. At this time, everyone was assigned name cards which were used at subsequent meetings. Facilitators then briefly explained the rationale for the

study, and indicated the importance of following guidelines of respect, equal time, punctuality, and confidentiality within the meetings. The remainder of the first meeting included an orienteering exercise using a projected map of the campus, a brief explanation of topics in the meetings to come, and ended with a general discussion of impressions and expectations of university life, and of the campus orientation experiences so far.

Week 2. The second meeting focused on new social ties. Following the check-in period, participants wrote down the names of people they had met during their first two weeks at university, indicating how and where they had met. Each participant then chose one person from his or her list and briefly talked about what happened when they met. This activity allowed the group to recognize different strategies and locales for meeting people. These strategies and locales were then covered in a brainstorming session, with the facilitators writing ideas down on an overhead projector. The general discussion then focused on these and other issues related to meeting new people, such as dating and peer pressures.

Week 3. Residential issues were the focus of the third meeting. After check-in, participants wrote down the advantages and disadvantages of their present living situations; facilitators listed these on an overhead. After a comparative discussion on parents and residence dons/supervisors, the general discussion focused on issues related to residential life, including housework, independence, privacy, and other topics mentioned in the brainstorming sessions.

Week 4. With the exception of check-in, the entire fourth meeting was a general discussion of academic issues, as participants in all groups were concerned about upcoming mid-term exams. Facilitators introduced material from Counselling Services as an aid to studying, note-taking, and time management. Discussion then focused on such issues as balancing academic and social life, strategies for getting academic help (such as contacting teaching assistants), and grade expectations.

Week 5. At the fifth meeting, check-in was followed by a look at previous social ties. Participants indicated in writing the names of people they had turned to for help with problems in the past. This was followed by a discussion on whether their support networks had changed since starting university, and how to maintain previous ties. The general discussion also touched on these issues, as well as homesickness, holidays, and long-distance romantic relationships.

Week 6. The final session did not focus on any particular aspect of university life. Following a check-in discussion, facilitators reviewed what was discussed in previous weeks, and related this to the study. Participants were asked for their impressions of the meetings. They were then introduced to other members of the research team. This meeting ended with a pizza party.

Immediately after each meeting, facilitators evaluated the delivery, reception, and effectiveness of the materials and discussion for that week. As well, for each activity planned (e.g., check-in, general discussion), the facilitators made detailed notes concerning effectiveness and student response. These evaluations were examined at weekly research team meetings held throughout the intervention phase. Useful ideas

or procedures from any of the three groups were incorporated into future discussion meetings. For example, the order and content of activities were considered by the research team, leading to changes in subsequent group sessions.

Post-intervention

Approximately two weeks after the final discussion meeting (held in late October, 1994), a second letter (see Appendix J) and the November questionnaire (see Appendix K) were mailed to all participants to complete and return. Each person in this study also received a key chain, in appreciation for their participation. Non-intervention participants were also sent a participant pool sheet to complete (see Appendix L); intervention participants had previously provided the necessary information during the intervention meetings. Return rate for the intervention groups was 100% for this questionnaire; for the non-intervention group it was 93% (2 females dropped out of the study at this point, leaving 15 females and 11 males in the non-intervention group).

Four months after this mailing, all participants received a third letter (see Appendix M) and the March questionnaire to complete (see Appendix N). The March return rate for the intervention groups was 85%; 2 males and 2 females dropped out, leaving 16 females and 7 males in the intervention groups. For the non-intervention group, the return rate for this questionnaire was 82% of total non-intervention participants; 1 female and 2 males dropped out of the study, leaving 14 females and 9 males in the non-intervention group. In early July, a short summary of the results of

the study was mailed to all participants, and posted on the Research Feedback bulletin board in the Psychology Department at Wilfrid Laurier University (see Appendix O).

Results

This section starts with a demographic description of the sample. Then, the participants' evaluation of the intervention is examined; one of the three intervention groups is found to have received the intervention differently than the other two groups, and is removed from further analyses. Multiple analyses are then performed to determine the intervention's effects on the two remaining groups, following the proposed hypotheses.

First, multivariate and univariate analyses of variance are conducted, to assess the intervention's impact on the seven outcome measures of interest: social support, self-esteem, depression, stress, integrative complexity of reasoning, adjustment to university, and daily hassles. (It should be noted here that Cutrona's Social Provisions Scale is the social support measure used in these analyses. The checklist of supportive people, another measure of social support, is examined in a later section.) Pretest scores are then included as covariates in a second set of analyses, to firmly establish any effects on post-test scores.

Second, regression analyses are used to determine if social support and integrative complexity of reasoning play a mediating role in the intervention's effect on adjustment to university. These analyses follow the model described by Baron and Kenny (1986) for testing mediation.

Subsequent analyses focus on the relationship between the intervention and other variables collected during the implementation stage of the study. First, a set of regression analyses examines whether the three types of coping style (task-oriented, emotion-oriented, and avoidance-oriented) have an interactive effect with the intervention on the outcome measures. Second, the impact of the intervention on secondary variables (the checklist of supportive people and grade point average) is assessed.

Demographics

Across the sample, there were more females (n = 35; 63.6%) than males (n = 20; 36.4%). Most respondents (n = 42; 76.4%) indicated English as the language they speak at home exclusively; the remainder (n = 13; 23.6%) indicated English and another language (including Asian and European languages). The majority of participants lived in residence (n = 47; 85.5%), although 6 students (10.9%) lived off campus, and 2 others (3.6%) remained at home One-fifth of the sample had received a scholarship from the University (n = 11).

The following demographic information was collected in November, with 53 total responses. This sample represented many departments at the University, including Arts (n = 15; 28.3%), Sciences (n = 10; 18.9%), Business/Economics (n = 19; 35.8%), Psychology (n = 7; 13.2%), and Physical Education (n = 2; 3.8%). There was also a wide variation in their parents' education level. Four mothers (7.5%) did not finish high school, 18 (34.0%) completed high school, 9 (17.0%) took some college or university studies, 14 (26.4%) completed college or university degrees, and

7 (13.2%) received some post graduate training (1 respondent did not answer this question). A similar pattern was found for fathers' education level, although more fathers took some college or university courses: Five fathers (9.4%) did not finish high school, 11 (20.8%) completed high school, 15 (28.3%) completed some college or university, 15 (28.3%) finished a college or university degree, and 6 (11.3%) received some post graduate training (again, one respondent did not answer this question). Table 2 shows a breakdown of all demographics by group.

Table 2

Frequencies of Demographic Variables Across Groups

Variable	Intervention	Non-Intervention
Gender		
male	30 8%	40 0%
female	69 2%	60 0%
Languages spoken at home		
English	73 1%	80 0%
English + other	26 9%	20 0%
Living situation		
residence	92 3%	80 0%
off campus (but not at home)	--	20 0%
at home	7 7%	--
Received WLU scholarship		
yes	30.8%	12 0%
no	69 2%	88 0%
Major of study		
Business / Economics	38.5%	32 0%
Arts	30.8%	24 0%

(table continues)

Variable	Intervention	Non-Intervention
Sciences	15.4%	24.0%
Psychology	15.4%	12.0%
Physical Education	--	8.0%
Mother's education level		
did not finish high school	7.7%	8.0%
completed high school	38.5%	28.0%
some college or university	11 5%	24.0%
completed college or university degree	23.1%	32.0%
some post graduate training	19.2%	8.0%
Father's education level		
did not finish high school	7.7%	12.0%
completed high school	19.2%	20.0%
some college or university	26.9%	32.0%
completed college or university degree	26.9%	32.0%
some post graduate training	19.2%	4.0%

Intervention Evaluation

All but one of the 27 discussion participants responded to the open-ended evaluation questions in the November questionnaire (the non-respondent was in Group 2). In response to the question that asked participants what benefits they had received from the intervention, several points were made by many of the students. Fourteen students mentioned meeting new people and making friends in the group Nineteen participants mentioned learning that other people had similar problems, and 9 indicated that the meetings gave them the chance to talk about their problems.

Participants did. however, suggest that the intervention might be improved in some ways as well. Nine people wanted more meetings, and four suggested continuing the meetings into the next term. These participants felt that an extended intervention would be more productive in dealing with ongoing stress. As one participant wrote, "Everybody has become very tense and stressed out in the past couple of weeks, and it would have been nice to go somewhere to 'unload'." Other participants suggested shorter meetings, a more central location, and the option of rescheduling meetings during exam conflicts. Two participants indicated satisfaction with the intervention, and offered no suggestions for improvement.

All 27 intervention participants responded to the six structured intervention benefit questions. The responses were generally quite positive. Total scores ranged from 14 to 27 ($\underline{M}$ = 22.52, possible range was 6 to 30), where higher scores indicate a greater extent of experienced benefits from the intervention. However, participants in Group 2 scored significantly lower on two of the items, "I got to know some people

with whom I feel I can talk if I need to," (M = 2.67), $F(2, 21) = 5.93$, $p < .01$, and "It helped make the transition to university easier for me," (M = 3.00), $F(2, 21) = 5.27$, $p < .05$, compared with Groups 1 and 3 (combined Ms for these two items were 3.61 and 3.83, respectively). The overall evaluation means across the 6 items for Group 2 were significantly lower than those of Group 1, but not those of Group 3.

In the March questionnaire, intervention participants indicated how often they had had contact with other group members since the fall. Most participants indicated "weekly or more" (n = 14), a few answered "monthly" (n = 5) or "less than monthly" (n = 3), and no participants chose "never." (One participant checked both "monthly" and "weekly or more"; this was entered as 3.5.) The overall mean was thus 3.5 (n = 23), with comparable individual means for Group 1 (M = 3.56, n = 8), Group 2 (M = 3.25, n = 8), and Group 3 (M = 3.71, n = 7). Although Group 2 was lowest, these means were not significantly different from each other.

Intervention participants' views about their group experience were more varied in March than they were in November. In response to the question "Looking back on your transition group experience in the fall, what would you say are the most important things you got out of it?", the comment "knowing that others were going through the same thing" was the most frequently mentioned (19 of 23 respondents). Other common views included "meeting people" (11) and "discussing adjustment with others" (4). The experiences of venting frustrations and getting advice within the group were each mentioned twice. As in November, it was suggested (by 2 respondents) that the intervention be extended; one participant in particular wrote: "A

lot of my adjustment took place after Christmas and I feel everyone could have added a lot more insight had the study group sessions continued into Term II." One participant felt the questionnaires were too long.

Because of initial participant absence in Group 2, its lower average weekly attendance, and a missed discussion meeting, the investigators felt that Group 2 did not receive the intervention the way it was designed. These logistical problems were probably reflected in the fact that this group reported significantly lower scores on some intervention benefits than did Groups 1 and 3. As a result of these problems, Group 2 was removed from the comparative analyses reported below, and only Intervention Groups 1 and 3 were compared with the non-intervention group. (However, comparative analyses including Group 2 are provided in Appendix P).

Group means across times of testing for the seven outcome measures are presented in Tables 3 - 9. These means represent the total sample of respondents. Means reported in upcoming analyses represent those participants who responded at all times of testing (with the exception of the analysis on pretest scores).

Table 3

Group Means (Standard Deviations) Across Time for Social Support

Group	August	November	March
Intervention	190.81 (19.37)	194.33 (11.44)	195.60 (10.27)
Non-Intervention	184.69 (24.70)	182.31 (20.22)	184.00 (23.12)

Note. Social support measured by Cutrona's Social Provisions Scale. Higher scores reflect higher levels of perceived social support. Possible scores range from 24 to 216.

Table 4

Group Means (Standard Deviations) Across Time for Self-Esteem

Group	August	November	March
Intervention	75.61 (8.77)	76.78 (9.10)	80.13 (9.08)
Non-Intervention	71.93 (11.57)	71.50 (13.44)	73.35 (13.86)

Note. Higher scores reflect higher levels of self-esteem. Possible scores range from 10 to 90.

Table 5

Group Means (Standard Deviations) Across Time for Depression

Group	August	November	March
Intervention	30.45 (5.66)	37.44 (11.04)	31.33 (8.57)
Non-Intervention	33.93 (10.03)	38.08 (11.80)	35.39 (10.76)

Note. Higher scores reflect higher levels of depression. Possible scores range from 20 to 80.

Table 6

Group Means (Standard Deviations) Across Time for Stress

Group	August	November	March
Intervention	33.67 (4.99)	40.11 (9.54)	33.87 (6.10)
Non-Intervention	36.07 (8.83)	39.93 (7.87)	39.26 (8.26)

Note. Higher scores reflect higher levels of perceived stress. Possible scores range from 14 to 70.

Table 7

Group Means (Standard Deviations) Across Time for Integrative Complexity

Group	August	November	March
Intervention	2.79 (0.36)	2.50 (0.31)	2.47 (0.34)
Non-Intervention	2.68 (0.40)	2.61 (0.43)	2.30 (0.61)

Note. Higher scores reflect more complex reasoning about university life issues. Possible scores range from 1 to 7.

Table 8

Group Means (Standard Deviations) Across Time for Adjustment to University

Group	November	March
Intervention	434.37 (47.16)	466.09 (50.51)
Non-Intervention	400.98 (57.27)	417.94 (57.43)

Note. Higher scores reflect higher levels of adjustment to university. Possible scores range from 67 to 603.

Table 9

Group Means (Standard Deviations) Across Time for Daily Hassles

Group	November	March
Intervention	41.39 (11.22)	37.10 (10.09)
Non-Intervention	47.17 (10.76)	46.33 (7.08)

Note. Higher scores reflect greater frequencies of daily hassles. Possible scores range from 20 to 100.

Testing of Hypotheses

A series of analyses was performed to determine whether intervention participants, compared to non-intervention students, scored higher on social support (based on scores from the Social Provisions Scale), self-esteem, and integrative complexity, and lower on stress and depression, on their post-test scores compared with pre-test scores. A significant Group X Time interaction (or significant group effect in the case of adjustment to university and daily hassles) in the appropriate direction would support this hypothesis. A significant interaction (or group effect) in the appropriate direction would also be consistent with the hypothesis that intervention participants' post-test scores were higher than non-intervention participants' scores on social support, adjustment to university, self-esteem, and integrative complexity, and

lower on stress, depression, and daily hassles. For all analyses, Group was entered as a between variable, comparing the intervention groups with the comparison group. Gender was also examined as a between variable, because some previous studies had demonstrated gender differences in certain of these measures (e.g., Belle, 1987). Because of the longitudinal nature of the study, Time was included as a within variable, with either three or two levels, depending on whether or not the variable of interest was measured at the pretest in August, as well as at post-tests in November and March. This characteristic of the Time variable led to multiple sets of analyses reported below, Set 1 for the variables measured at all three times (social support, self-esteem, stress, depression, and integrative complexity), and Set 2 for the variables measured only in November and March (adjustment to university and daily hassles).

Intervention hypothesis analyses

Set 1 analyses. A multivariate Group (2) X Gender (2) X Time (3) analysis was conducted on these five variables which had all been measured in August. No significant interaction effects were found. There were also no significant group or gender effects. Time showed a significant main effect, Wilk's $\lambda = .46$, $p < .05$.

Separate univariate analyses were performed on the variables of interest. For social support, no significant interaction or time effects were found. There was a significant group effect, $F(1, 34) = 4.15$, $p < .05$, with intervention participants reporting higher levels of social support ($M = 194.08$) than non-intervention participants ($M = 182.22$). Gender was also significant, $F(1, 34) = 6.09$, $p < .05$;

females indicated greater levels of perceived social support (M = 194.44) than did males (M = 177.41).

For self-esteem, the univariate analysis showed no significant interaction effects. There were also no main effects for time, group, or gender.

The results of the analysis on depression were very similar to those reported in the above multivariate analysis. There were no significant interaction effects. Time was significant, $F(2, 66) = 6.04$, $p < .005$. Subsequent post hoc comparisons, using the Least Significant Difference test (LSD), revealed that depression scores increased significantly from August (M = 32.87) to November (M = 38.51; $p < .05$), then dropped significantly back to baseline levels in March (M = 33.59; $p < .05$). There were no significant group or gender effects.

Similar results were found in the analysis of stress. There were no significant interaction, group, or gender effects. Time was significant, $F(2, 68) = 8.20$, $p < .005$; subsequent LSD tests showed that reported levels of perceived stress increased significantly from August (M = 35.66) to November (M = 40.19; $p < .05$), then decreased significantly in March (M = 37.13; $p < .05$).

There was a significant Group X Gender effect on integrative complexity, $F(1, 34) = 4.87$, $p < .05$. Subsequent LSD test found no significant difference between the males and females in the intervention group, or between groups for either gender; however, the non-intervention group showed a greater spread, with females (M = 2.70) scoring significantly higher in integrative complexity than males (M = 2.31; $p < .05$; see Table 10). No other significant interaction effects were found. Time was

significant, $F(2, 68) = 8.72$, $p < .001$; subsequent LSD tests found that significantly lower levels of integrative complexity were reported across time, from August ($M = 2.74$) to November ($M = 2.56$; $p < .05$), and from November to March ($M = 2.37$; $p < .05$); the August-March mean difference was also significant ($p < .05$). There were no significant group or gender effects.

Table 10

Group Means (Standard Deviations) Across Gender for Integrative Complexity

Group	Males	Females
Intervention	2.63 (0.24)	2.58 (0.41)
Non-Intervention	2.31 (0.62)	2.70 (0.32)

Set 2 analyses. A second multivariate Group (2) X Gender (2) X Time (2) analysis of variance was performed on the variables of interest in Set 2. There were significant group (Wilk's $\lambda = .76$, $p < .05$) and time (Wilk's $\lambda = .78$, $p < .05$) effects. No significant interaction or gender effects were found.

There were also no significant interaction effects found throughout the follow-up univariate analyses of adjustment to university and daily hassles. For adjustment to university, the pattern closely matched the results in the above multivariate analysis.

Time was significant, $F(1, 34) = 8.66$, $p < .01$, with higher levels of adjustment to university reported in March ($M = 436.95$) than in November ($M = 414.67$). There was also a significant group effect, $F(1, 34) = 6.53$, $p < .05$; intervention participants reported higher scores on adjustment to university ($M = 452.83$) than non-intervention participants ($M = 408.18$). There was no significant gender effect.

The analyses of daily hassles revealed a slightly different pattern. As above, the univariate analysis showed a significant group effect, $F(1, 33) = 8.06$, $p < .01$, with non-intervention participants reporting higher levels of daily hassles ($M = 47.20$) than intervention participants ($M = 38.72$). There was no significant gender effect. However, there was no significant time effect, in contrast to the results for the adjustment variable.

Summary. With regards to the study's hypotheses, all significant group effects were in the predicted direction; that is, intervention participants scored higher than non-intervention participants on social support and adjustment to university, and lower on daily hassles. However, the specifically predicted interactions of time and group for social support did not occur. There was also a non-hypothesized gender difference on social support, with females scoring higher than males. Females also scored higher than males on integrative complexity, but only in the non-intervention group. Significant time effects were also found; scores on depression, stress, and integrative complexity decreased over time, while scores on adjustment to university increased. Although not predicted, these effects generally suggested improving adjustment among all students across this first year period.

However, some expected effects were not significant. Most notable was the lack of any significant Group X Time effects in the ANOVAs. It would appear that the intervention had no significant impact on participants' scores over time, particularly with regards to social support. This may have been due to the already quite high pretest scores on some of the measures, indicating the possibility of ceiling effects (i.e., social support and self-esteem; see Tables 3 - 4). Similarly, the already quite low pretest scores on depression indicate the possibility of a floor effect (see Table 5). However, another problem is the non-randomized nature of group assignment. Although random group assignment had been the ideal early in the study, it became necessary to place students into groups based on their time schedules, in order to ensure sufficient participants in each intervention group. Thus, there may have been pre-existing differences between intervention and control groups, prior to the intervention, which interfered with appropriate tests of the hypotheses. Before continuing with the mediating analysis to test the second hypothesis, it was necessary to determine whether or not the groups were equivalent at the pretest assessment.

Analysis of pretest scores

In order to better gauge the expected pre-intervention equivalence of groups, separate Group (2) X Gender (2) analyses of variance were performed on each of the variables in Set 1. Only the analysis on integrative complexity showed any significant result, a marginal gender effect, $F(1, 42) = 3.92$, $p < .06$; females reported higher baseline levels of integrative complexity ($M = 2.82$) than did males ($M = 2.59$). Most

relevant here was the lack of any significant group effects for all measures, thus showing evidence for both groups being statistically equivalent on the pretest questionnaire.

Although these differences were non-significant, there was a consistent tendency for the control group to score somewhat less favourably on the various life adjustment measures. We wanted to ensure that even this modest difference between groups in the pretest scores had no impact on analyses of the intervention's effectiveness. To this end, an analysis of variance was run on each variable of Set 1, with that variable's pretest score entered as a covariate. Because variables in Set 2 had no pretest measure (i.e., adjustment to university and daily hassles), and because social support was the primary focus of the intervention, a separate series of analyses was performed on these variables, using individuals' August Social Provisions (social support) total score as covariate.

Set 1 analyses with August scores as covariate. A Group (2) X Gender (2) X Time (2) design was used in these analyses, whereby time included the levels of November and March. For each variable, the appropriate August score was entered as covariate.

For social support, no significant interaction or main effects were found; only the covariate was significant, $F(1, 33) = 19.17$, $p < .001$ ($B = .40$), indicating that those high in social support initially remained higher over time. However, there was a marginally significant group effect, $F(1, 33) = 3.20$, $p < .09$. Consistent with the hypotheses, intervention participants tended to report greater levels of perceived social

support at post-testing (M = 195.07) than did non-intervention participants (M = 182.52).

There were no significant interaction, group, or gender effects on self-esteem. However, time was significant, $F(1, 34) = 4.19$, $p < .05$, with higher levels of self-esteem reported in March (M = 76.03) than in November (M = 73.21). There was also a significant covariate effect, $F(1, 33) = 46.73$, $p < .001$ (B = .82), indicating that participants with high initial levels of self-esteem remained higher over time.

As with the analysis on self-esteem, no significant interaction, group, or gender effects were found on depression. However, there was a significant time effect, $F(1, 33) = 8.23$, $p < .01$; reported levels of depression decreased significantly from November (M = 38.51) to March (M = 33.59). Again, the covariate was significant, $F(1, 32) = 10.71$, $p < .005$ (B = .56); this positive coefficient indicates that those reporting high initial levels of depression reported higher depression overall.

Time was significant on stress, $F(1, 34) = 11.74$, $p < .005$; reported levels of perceived stress decreased from November (M = 40.19) to March (M = 37.13). No other significant group or gender effects were found. The covariate was also significant, $F(1, 33) = 8.19$, $p < .01$ (B = .47), again indicating that those with high initial levels of stress reported higher stress levels overall. The overall time effect was qualified by a significant Group X Time interaction effect on stress, $F(1, 34) = 4.46$, $p < .05$. Subsequent LSD tests showed that both groups reported statistically equivalent high scores on perceived stress in November; however, intervention participants' scores decreased significantly in March ($p < .05$), while non-intervention participants' mean

scores remained the same from November to March (see Table 6). Also, intervention participants reported significantly lower levels of stress in March than did their non-intervention counterparts ($p < .05$; see Table 6). No other significant interaction effects were found.

There was a marginally significant Group X Gender interaction effect on integrative complexity, $F(1, 33) = 3.85$, $p < .06$ (see Table 10). Time also had a significant effect, $F(1, 34) = 4.52$, $p < .05$, with integrative complexity showing a decrease from November ($M = 2.56$) to March ($M = 2.37$). No other effects were significant.

For the most part, the pretest score was significant as a covariate; consistently, participants with high initial levels of the outcome measures in Set 1 reported higher levels across time. Also of interest was the marginally significant group effect on social support, showing that some change did occur in this variable, controlling for the non-significant pre-existing group difference. The intervention also seemed to have more impact on participants later in the year for one of the measures, as seen by the pattern of the Group X Time interaction effect on stress. Non-intervention participants reported similar stress levels in November and March, whereas the stress level of intervention participants dropped back to baseline levels from November to March.

Set 2 analyses with August social support as covariate. A multivariate Group (2) X Gender (2) X Time (2) analysis of covariance was run on the Set 2 variables of interest, with August social support as covariate (as social support was the primary focus of the intervention). There were no significant interaction effects. There were

significant time (Wilk's $\lambda = .78$, $p < .05$) and group effects (Wilk's $\lambda = .74$, $p < .05$), but no significant gender effect. The covariate effect was not significant.

Parallel univariate analyses of covariance were performed on both adjustment to university and daily hassles. The analysis on adjustment to university revealed similar findings as those reported above. There were no significant interaction or covariate effects. Group was significant, $F(1, 33) = 5.76$, $p < .05$, with intervention participants reporting higher levels of adjustment ($M = 452.83$) than non-intervention participants ($M = 408.18$). Time was also significant, $F(1, 34) = 8.66$, $p < .01$, with higher levels of adjustment to university reported in March ($M = 436.95$) than in November ($M = 414.67$). There was no significant gender effect.

No significant interaction effects were found in the analysis on daily hassles. There was a significant group effect, $F(1, 32) = 9.63$, $p < .005$, with higher scores reported for non-intervention participants ($M = 47.20$) than intervention participants ($M = 38.72$). Gender was also significant, $F(1, 32) = 4.67$, $p < .05$; males reported higher levels of daily hassles ($M = 47.36$) than females ($M = 41.94$). There were no significant time or covariate effects.

Overall, then, the covariate was not significant in these analyses. Significant group effects were in the predicted direction, with intervention participants scoring higher in adjustment to university, and lower in daily hassles, than non-intervention participants. Females also scored significantly lower than males on daily hassles. Finally, there was a significant time effect on adjustment to university, with adjustment scores showing increases over time.

Mediating hypothesis analyses

Following the procedure for testing mediation suggested by Baron and Kenny (1986), two sets of regression analyses were performed, one for social support as mediating variable, and one for integrative complexity. To determine if a given variable functions as a mediator between the independent and dependent variables, four conditions must be met: (1) the independent variable (in this case, the intervention) must significantly affect the mediator (social support or integrative complexity); (2) the independent variable must significantly affect the dependent variable (adjustment to university); (3) the mediator must significantly affect the dependent variable in a regression equation where the dependent variable is regressed on both the independent variable and on the mediator; and (4) the effect of the independent variable on the dependent variable must be less in the third condition than in the second (Baron & Kenny, 1986). For the present study, regression analyses were conducted to determine: (1) if group (the intervention) significantly affected social support / integrative complexity; (2) if group significantly affected adjustment to university; and (3) if social support / integrative complexity significantly affected adjustment to university. Each set contained many regressions, as both the mediator and dependent variables were measured at two times (i.e., November and March).

Social support. Concerning the first condition, group did not significantly affect the March reading of social support; therefore, this analysis was not taken any further. However, group did have a significant effect on November social support, $t(42) = -2.28$, $p < .05$; as group increased from 0 (intervention group) to 1 (non-

intervention group), social support in November decreased 12.03 units, consistent with the hypotheses. Further regression analyses dealing with the second condition showed that group significantly affected both November ($t(42) = -2.04$, $p < .05$) and March ($t(36) = -2.65$, $p < .05$) readings of adjustment to university, with changes in the predicted direction (B = -33.39 and -48.14, respectively). Also, in regressions concerning the third condition, with both group and social support terms entered as predictors, social support (November) significantly affected both November ($t(41) = 3.66$, $p < .001$) and March ($t(35) = 2.35$, $p < .05$) readings of adjustment to university; as social support increased, so did adjustment to university (1.54 and 1.15 units, respectively). An examination of the fourth condition revealed that, in the third equation (with both independent and mediator variables entered), group's effect on adjustment to university was now non-significant. In other words, group had no effect on adjustment to university (at either November or March) when social support (in November) was controlled; this is known as "perfect mediation" (Baron & Kenny, 1986). Thus, the intervention's effect on adjustment to university (both in November and in March) was perfectly mediated by social support levels as measured in November, according to the Baron and Kenny procedure.

Integrative complexity. Group had no significant effect on either of the two readings of integrative complexity (in November and in March). As this set of analyses failed to meet the first condition, no further analyses were run; integrative complexity thus did not act as a mediating variable between the intervention and subsequent adjustment to university.

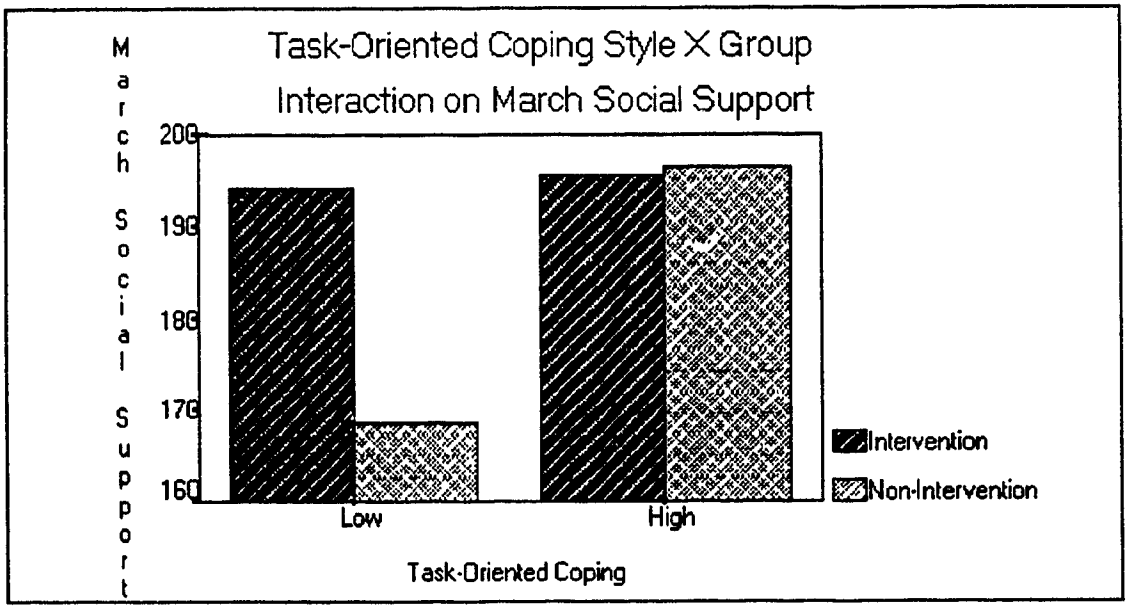
Coping Style Analysis

As coping style is viewed as a stable trait dealing with stress, it was thought that coping style might come into play during the intervention phase to deal with the stress of the transition to university. Coping style might then have an interactive effect with the intervention on the outcome measures. To measure this, a set of regression analyses was performed, with group, coping style, and Group X Coping Style interaction terms entered as independent variables. The interaction term assessed the impact of the intervention on the variables of interest, according to participants' coping style. Three regressions (one for each coping style) were run for each of the two post-intervention readings of social support, self-esteem, depression, stress, integrative complexity, adjustment to university, and daily hassles, resulting in a total of 42 regressions. Of these, only 5 showed significant interaction term effects. Task-oriented coping had a significant interaction effect with group on March social support ($t(34) = 2.21$, $p < .05$), March self-esteem ($t(34) = 2.95$, $p < .01$), March depression ($t(34) = -3.49$, $p < .005$), and March stress ($t(34) = -2.73$, $p < .05$). Emotion-oriented coping had a significant interaction effect with group on March daily hassles only, $t(34) = 2.22$, $p < .05$. There were no significant interaction effects involving avoidance-oriented coping. Therefore, for the most part, only task-oriented coping had a differential effect on the variables of interest when combined with the intervention; these interaction effects appeared only for the March measures.

In order to interpret these interaction effects, a median split was performed on coping style; scores below the median were identified as low coping style, while

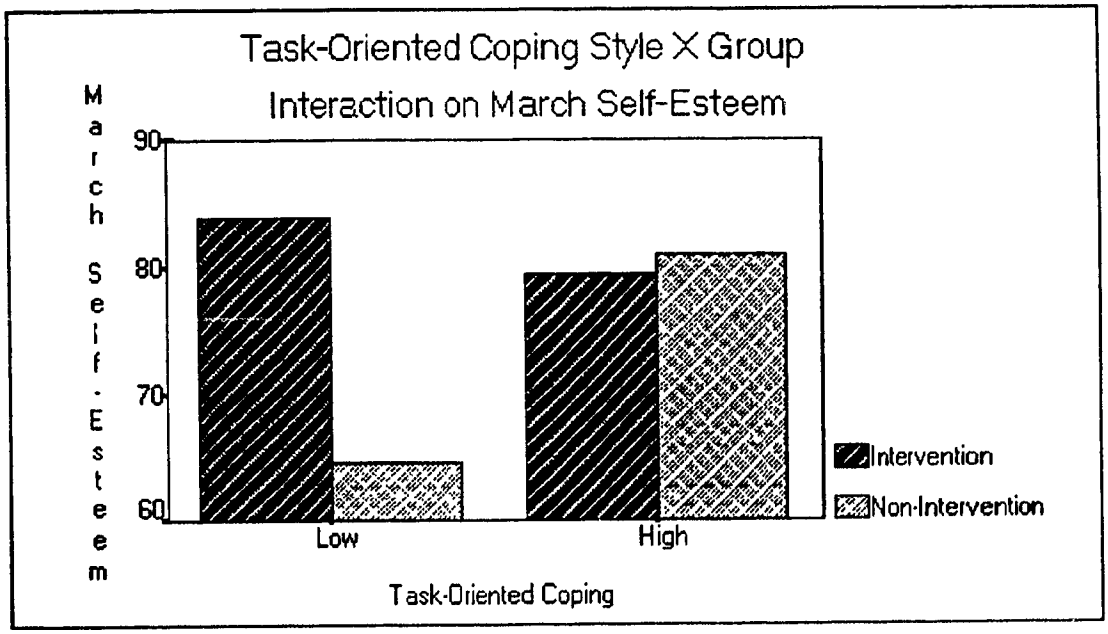
scores above the median were identified as high coping style.[1] Post hoc comparisons, using the Least Significant Difference test (LSD), were calculated to determine which means in each interaction were significantly different. With regards to March social support, the non-intervention participants with low task-oriented coping ($\underline{M}$ = 168.80) scored significantly lower than the other three groups ($\underline{p} < .05$), suggesting that students who are low on task-oriented coping might particularly benefit from the intervention (see Figure 2). The intervention participants with low ($\underline{M}$ = 194.17) and high ($\underline{M}$ = 195.71) task-oriented coping, and the non-intervention participants with high task-oriented coping ($\underline{M}$ = 196.67), were not significantly different from each other.

Figure 2.



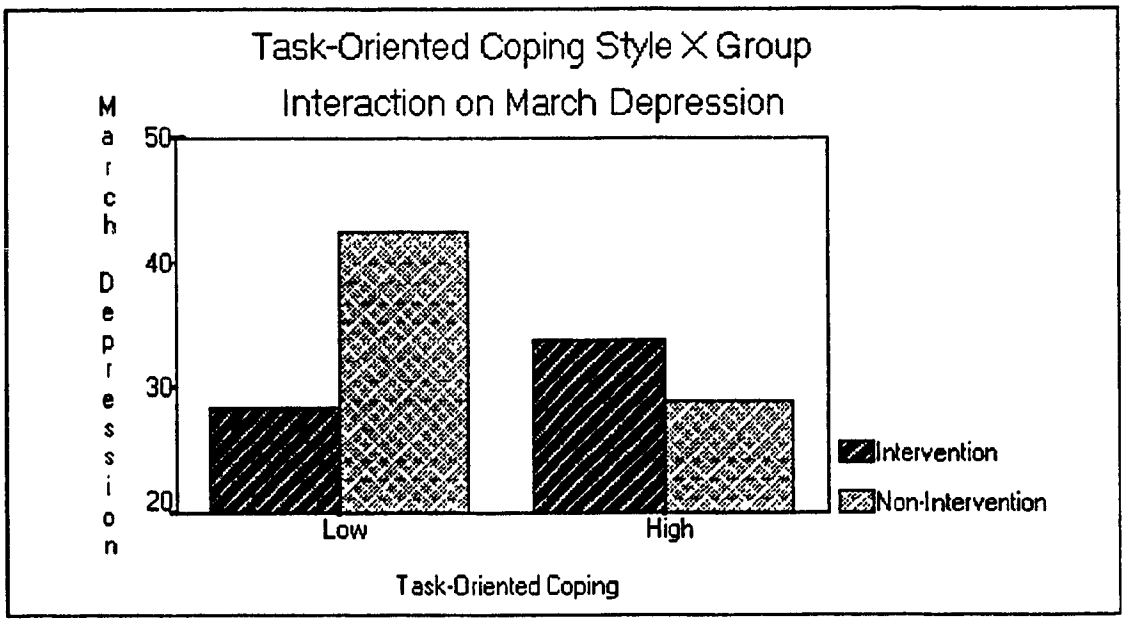
This same pattern was found in the Task-oriented Coping X Group interaction on March self-esteem; non-intervention participants with low task-oriented coping ($\underline{M}$ = 64.50) scored significantly lower than the other three groups ($\underline{p} < .05$). Again, intervention participants with low ($\underline{M}$ = 84.00) and high ($\underline{M}$ = 79.43) task-oriented coping, and non-intervention with high task-oriented coping ($\underline{M}$ = 80.92), were statistically equivalent (see Figure 3).

Figure 3.



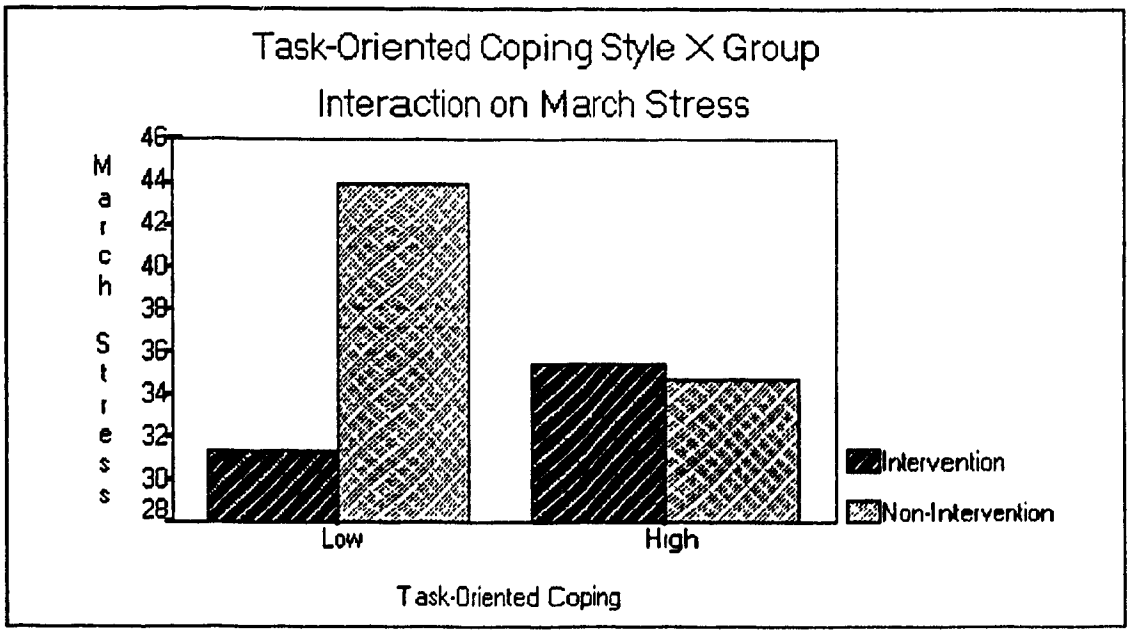
For March depression, the intervention had no significant effect on participants with high task-oriented coping, when compared with their non-intervention counterparts (M = 33.86 for intervention participants, M = 28.83 for non-intervention participants). However, the intervention apparently helped prevent high levels of depression in March for participants with low task-oriented coping (M = 28.33 for intervention participants, M = 42.60 for non-intervention participants); low task-oriented non-intervention participants reported significantly higher levels of depression in March than did the other three groups ($p < .05$; see Figure 4).

Figure 4.



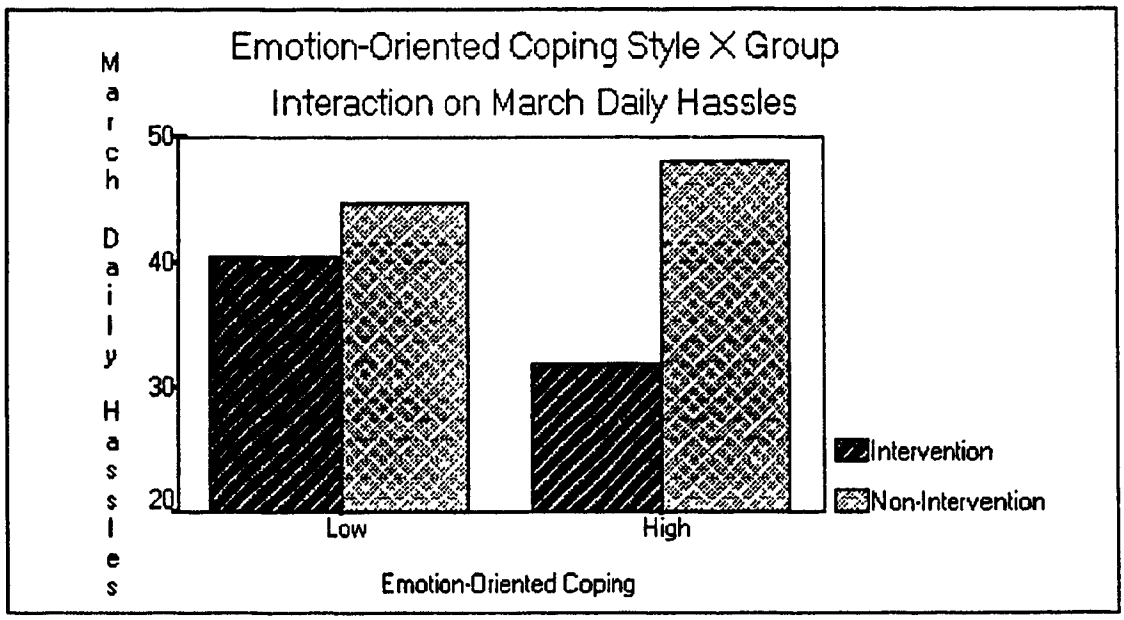
This pattern was also found for March stress, whereby non-intervention participants low on task-oriented coping scored significantly higher (M = 44.00) than intervention participants (M = 31.33; $p < .05$), while both groups high on task-oriented coping were statistically equivalent (M = 34.67 and 35.43, respectively). Again, the intervention seemed to prevent higher levels of stress for participants low on task-oriented coping, as their non-intervention counterparts reported significantly higher levels of stress than the other three groups ($p < .05$; see Figure 5).

Figure 5.



Finally, emotion-oriented coping had an opposite, but consistent, effect on March daily hassles. Regardless of group, participants low on emotion-oriented coping reported similar levels of daily hassles in March ($\underline{M}$ = 40.50 for intervention participants, $\underline{M}$ = 44.78 for non-intervention participants). However, intervention participants high on emotion-oriented coping reported fewer daily hassles ($\underline{M}$ = 31.86) than non-intervention participants ($\underline{M}$ = 48.06; $\underline{p} < .05$). This time, intervention participants high on emotion-oriented coping scored significantly lower on daily hassles than the other three groups ($\underline{p} < .05$), suggesting that the intervention might have reduced the amount of daily hassles for them (see Figure 6).

Figure 6.



Summary. The regression analyses showed that coping style, in particular task-oriented coping style, had a complex impact on the intervention's level of effectiveness. The intervention was particularly associated with increased social support and self-esteem, and decreased depression and stress, in individuals who were low on task-oriented coping, although these effects were only found at the March follow-up assessment. Individuals high on emotion-oriented coping also appeared to benefit from the intervention, in that it apparently helped decrease their March levels of daily hassles. Finally, avoidance-oriented coping had no significant interactions with the intervention's effectiveness.

Analysis of Secondary Variables

Some final varied analyses were run on variables that were not mentioned in the initial hypotheses, but which might have been affected by the intervention. These included respondents' checklist of supportive people and their grade point averages.

Checklist of supportive people

The total number of people listed for intervention participants fluctuated slightly during the three times of testing (M = 11.67, 12.72, 12.20, respectively); however, this number remained stable across time for the non-intervention group (M = 12.57, 12.46, 12.43, respectively). A Group (2) X Gender (2) X Time (3) analysis showed only a significant gender effect, $F(1, 34) = 14.55$, $p < .005$; females listed more supportive people (M = 13.67) than did males (M = 10.55). There were no

significant interaction, group, or time effects. Total satisfaction ratings followed a slightly different pattern; there was stability across time for both intervention participants' (M = 6.04, 6.20, 6.19, respectively) and non-intervention participants' satisfaction scores (M = 5.91, 5.79, 5.89, respectively). However, there were no significant interaction, group, gender, or time effects with the same three-way ANOVA design as above (Group X Gender X Time).

The number of new people on the list (as indicated by an asterisk in November and March) dropped from November to March for both groups, but more so for the non-intervention participants (from 4.95 to 3.32) than for the intervention participants (from 4.06 to 3.86). However, there were no significant differences between these means, as reported in a Group (2) X Gender (2) X Time (2) analysis. Satisfaction ratings with new people increased for both intervention (from 6.12 to 6.28) and non-intervention participants (from 5.99 to 6.22). Again, however, these means were statistically equivalent, as no significant interaction, group, gender, or time effects were found.

Grade point average

An analysis of variance was performed to determine if the intervention had any effect on participants' reported GPA levels from the first term of university, controlling for their OAC grades from high school. A Group (2) X Gender (2) ANOVA with OAC as covariate failed to show any significant interaction or main effect; however,

the covariate was significant, $F(1, 32) = 4.73$, $p < .05$ ($B = .14$), indicating that higher OAC grades were related to higher GPA at university.

A second analysis of variance was run to see if there were any effects on participants' expectations about their GPA. A Group (2) X Gender (2) ANOVA failed to yield any significant effects. Finally, GPA was correlated with expectations. The correlation was marginally significant, $r(37)^2 = .29$, $p < 09$, indicating that a higher GPA tended to be correlated with more positive expectations about grades

Discussion

Review

The present study described the implementation of a six-week, social support-based intervention program, aimed at increasing the adjustment to university of incoming students. Two of the three intervention groups (a third group was removed from analyses) were compared with a non-intervention group on several measures related to the transition to university life (social support, self-esteem, depression, stress, integrative complexity, adjustment to university, and daily hassles) Data were collected throughout the first year of university.

It was predicted that intervention participants would score higher than non-intervention participants on social support, self-esteem, integrative complexity, and adjustment to university, and lower on depression and daily hassles. To test this, sets of multivariate and univariate analyses were performed, which showed that the

intervention had some impact on certain variables, most notably university adjustment, daily hassles, and stress.

It was also predicted that social support and integrative complexity would mediate the intervention's effect on adjustment to university. To test this, a set of regression analyses was conducted; these showed that feelings of social support, but not integrative complexity of reasoning, had a mediating effect on both concurrent and subsequent adjustment to university.

As coping style was believed to have some influence on the transition to university, it was entered into regression analyses, along with the intervention, to predict the various outcome measures. It was thought that coping style and the intervention might interact in these analyses. In fact, only task-oriented coping interacted consistently with the intervention to have some impact on the variables of interest; intervention participants low on task-oriented coping benefitted from the intervention, in measures of social support, self-esteem, depression, and stress.

Hypotheses

Two sets of hypotheses were postulated: (1) that the intervention would lead to a significant change in both intervention participants' post-test versus pretest scores, and that intervention participants' post-test scores would differ from non-intervention participants' post-test scores; and (2) that both social support and integrative complexity would have mediating effects on students' adjustment to university.

Multivariate and separate univariate analyses of variance examined the first set of hypotheses, whereas a mediation regression analysis tested the second set.

For the hypotheses dealing with time differences, it was predicted that the participants in intervention discussion groups would show gains in their post-test levels of perceived social support, self-esteem, and integrative complexity compared with pretest levels, while non-intervention participants would not. This would be shown by a significant Group X Time interaction in the desired direction. However, this hypothesis was not supported, as this interaction was not significant for these variables in any of the above analyses. It was also expected that intervention participants would score lower on post-test measures of depression and stress than pretest measures. Again, this hypothesis was not supported by significant Group X Time interactions

As mentioned previously, one possible influence on these non-significant findings was the non-random assignment of participants into intervention and non-intervention groups. Originally, it was intended that participants be randomly allocated to one group, and that no one factor would determine group eligibility or placement. However, time restrictions and the difficulty of settling on one mutually agreeable meeting time led to a compromise: Students were identified who were available at certain times for the intervention, so that there was a large enough group present to form a social network.

This decision may have facilitated the implementation of the intervention, but it also might have hampered the experimental procedure. Because group membership was ultimately based on some criterion (i.e., time scheduling), and not random

assignment, other related factors might have entered into the design. Perhaps those students who readily participated were more cooperative, and more willing to gather socially at convenient times. Another factor might be personality or program differences in time management. The intervention meetings were held in late afternoon, and not all students scheduled their classes to be free at that time, perhaps because of their own characteristics, or the requirements of their department. Generally, such a problem of non-random assignment, though essential in efficiently starting the intervention, might have led to some modest, non-significant group differences on the pretest scores observed here. Additionally, group differences due to non-randomization might have weakened some predicted effects, particularly the Group X Time interactions, which would otherwise have appeared more consistently in the analyses. Some follow-up with a more completely randomized study is certainly needed here.

For the hypotheses concerned with group differences, it was also expected that intervention participants would score higher than non-intervention participants on post-test measures of social support, self-esteem, integrative complexity, and adjustment to university. Again, a significant Group X Time interaction in the desired direction would support this for measures with pretest data, although a significant group effect would be sufficient for the adjustment to university variable. As before, there was no significant Group X Time interaction for these outcome variables. However, there was a significant group effect on university adjustment across all analyses; as predicted, intervention participants reported higher levels of university adjustment than did non-

intervention participants at both times of post-testing. It was also predicted that intervention participants would score lower than non-intervention participants on measures of depression, stress, and daily hassles, as reflected in a significant Group X Time interaction for depression and stress, and a significant group effect for daily hassles. There was a significant Group X Time effect for stress, though its form was slightly different than predicted. There was a consistent significant group effect for daily hassles across all analyses; as expected, intervention participants reported fewer daily hassles than did non-intervention participants at both post-tests.

Thus, the intervention group-specific hypotheses were generally supported for the outcome measures of university adjustment, daily hassles, and stress. With regards to stress, the pattern of change can be seen in Table 6. Both intervention and non-intervention groups reported increased levels of stress from August to November, and there were no group differences at the November period of testing. This testing coincided with the mid-term exam period; this could explain the heightened sense of stress experienced by all participants. Most noteworthy, however, was the significant trend from November to March. Intervention participants reported decreased levels of perceived stress, returning to pre-intervention levels, whereas the stress levels of the non-intervention group stayed at their November levels. This suggests that the intervention may have helped intervention participants deal more effectively with stress following their first high period of stress (i.e. mid-term exams), and throughout the remainder of the school year.

The significant finding for daily hassles lends further support to this notion. Daily hassles are closely related to stress; they are the "little stresses" that are a part of everyday life, but they are stressful nonetheless. In the present study, intervention participants reported significantly lower levels of daily hassles at both post-tests than did non-intervention participants. These students also reported decreasing levels of stress, as reported above. These two findings suggest that the intervention helped students deal with the stress of university life, perhaps through increased social support levels. However, it is also possible that these findings were due to the pre-existing differences mentioned earlier, although the statistically equivalent November stress scores between groups might provide evidence against this point. Further research is needed to determine the nature of this change and how it operated.

The findings on university adjustment are particularly important, in that the main purpose of the intervention was to improve students' adjustment to university. It would appear that this goal was reached, even after controlling for pre-existing individual differences in perceived social support. We believe such differences in adjustment at the outset of students' university careers could have important and lasting impact across their university experience. The question of the longer-term impact of this intervention deserves careful study.

Finally, despite the fact that the hypothesized gain over time in social support for the intervention groups from pre- to post-tests was not differentially significant in the repeated measures analysis compared with controls, there was a modest trend in this direction. A follow-up analysis which controlled for August differences in social

support indicated a borderline ($p < .10$) effect of the intervention for November and March readings of support in the predicted direction. Intervention participants tended to score higher than controls at each post-test. As well, the pretest social support total scores on the Social Provisions Scale were already high for the intervention participants ($M = 190.81$, of a possible 216), perhaps leaving only modest opportunity for further increases on this measure of social support. It may in fact be the case that this intervention is more appropriate for those with less satisfactory initial support networks. However, more systematic research on such a "targeting" issue would be needed to clarify this point.

A second set of hypotheses tested the prediction that social support and integrative complexity mediated the intervention's effects on adjustment to university Mediation regression analyses following the procedures of Baron and Kenny (1986) showed that reported social support in November was a perfect mediator of the intervention's effect on both November and March readings of adjustment to university. Thus, the intervention had no significant effect on university adjustment when social support was removed from the analysis, and so social support was a necessary component of the significant effect. This finding provides evidence for the "social support as mediator" hypothesis, and reinforces the importance of including social support in studies on university adjustment. This finding also provides evidence that the intervention reached its primary goal of increasing adjustment to university through an increase in social support (at least at the November period of testing)

However, this finding did not persist over time, as the March assessment of social support was not significantly affected by the intervention. Perhaps, as many intervention participants suggested, a longer intervention period would be preferable, if only to stress throughout the first year at university the importance of forming and maintaining social ties. Then, perhaps, the effects of the intervention on social support would last throughout the year. This scenario might prove unnecessary, however, in light of the mediating effect that social support (November) had on the March reading of adjustment to university. This finding suggests that, although the intervention's effect on social support was not persistent, social support itself may have a more lasting mediating effect on university adjustment. Perhaps, then, a brief intervention period is sufficient, providing it stresses the importance of social support enough to have a long-lasting impact on the participants, particularly during the critical first year at university. Nevertheless, follow-up data on these students at a later point in their university careers would be most helpful in examining this question more precisely.

Although the mediation analyses provided support for the "social support as mediator" hypothesis, they failed to do so for integrative complexity. This finding may be explained by the fact that the intervention was not originally designed specifically to increase one's integrative complexity. It was expected that, as a result of being exposed to different perspectives on university issues, intervention participants would have an increased level of complexity of reasoning about those issues. However, the univariate analyses and analyses of covariance showed that this was not the case; in fact, integrative complexity actually decreased over time for

participants in both intervention and non-intervention groups. Perhaps, as students prepare for university life, their expectations are such that they are considering many possible scenarios surrounding their first year at university. Then, as the year progresses, these hypothetical conditions give way to the reality of their current situation. In this sense, they might be differentiating less about university issues, as their experience takes the place of their expectations. Nonetheless, a positive relationship has been found to exist between individual differences in integrative complexity of anticipation of school at university entry and later university adjustment (Pancer, Pratt, Hunsberger, & Alisat, 1995). Perhaps a future intervention could focus more specifically on increasing integrative complexity, through cognitively-oriented exercises (e.g., role-playing, debates), to further study the impact that integrative complexity of reasoning might have on subsequent adjustment to university.

In the process of testing the proposed hypotheses, several other significant findings were obtained, most notably in the areas of coping style and gender differences. For coping style, regression analyses showed that task-oriented coping style consistently interacted with the intervention to affect most variables of interest from Set 1 at the March testing, with the exception of integrative complexity. This effect was consistent in that the intervention seemed particularly helpful for those intervention participants with low task-oriented coping; they scored significantly higher on social support and self-esteem, and lower on depression and stress, than their non-intervention counterparts, when measured in March (see Figures 2 - 5). In contrast, there was no significant difference in March scores between intervention and non-

intervention participants high on task-oriented coping style. This suggests that the intervention might be particularly helpful to certain populations of incoming students (specifically, those low on task-oriented coping).

It is possible that, for students in the present study, the intervention's focus on social support compensated for low task-oriented coping skills, in changing their scores on the variables of interest. Alternatively, the intervention's effect on November university adjustment may have had an impact on intervention participants' March scores on these variables (social support, self-esteem, depression, and stress), giving them an advantage over their non-intervention counterparts. Either way, this finding suggests two things: First, task-oriented coping style should be an important component of any future research on the topic of university adjustment interventions; second, planners of future interventions might consider targeting them to "special needs" students, such as those low on task-oriented coping, to help them deal more effectively with the possible pressures of university adjustment.

Gender differences were found for the overall social support and daily hassles scores. When task-oriented coping was controlled, women scored significantly higher than men on perceived social support across time. This finding is consistent with previous evidence on gender differences and social support (see Belle, 1987, for a review). In times of stress, women tend to seek out support more than men, and female college students rate other people as more helpful in solving problems than do male students (Belle, 1987). For daily hassles, men scored significantly higher than women across time, when pretest scores of social support were controlled. This

finding runs counter to an earlier study by Blankstein and Flett (1992), in which females gave higher severity ratings to their life hassles than did males. Replication of this finding is certainly needed. Most important to the present research, however, the lack of any gender by group interactions in the main analyses suggests that our intervention was comparably effective on social support and daily hassles for both the men and women in our sample. One problem with this conclusion is the small cell sizes, particularly for males, in some comparisons; this issue will be dealt with later

There was, however, one significant Gender X Group interaction, on integrative complexity. Non-intervention males were significantly less complex in reasoning about university issues than their female counterparts across all three times of testing (see Table 10). Interestingly, there were no differences between intervention and non-intervention males, no differences between intervention and non-intervention females, and no differences between males and females in the intervention group. One interpretation of this finding is that perhaps the females in the study were generally more complex in their reasoning about university issues than were the males. However, the males in the intervention groups were exposed to different perspectives about university issues, particularly from females (who outnumbered males 2 to 1). It is possible that this exposure might have led to an increase in the intervention males' integrative complexity scores, so that their complexity of reasoning about university issues was similar to females in both intervention and non-intervention groups. Thus, the intervention might have contributed to a change in integrative complexity, albeit for intervention males only. However, this interpretation is only speculative; more

research is needed on this topic, particularly in light of the significant gender difference observed.

Qualitative Comments

These quantitative findings for the outcome measures were reinforced by the positive comments students made in the intervention evaluation section of the November post-intervention questionnaire, in particular to the question "What were some of the things you got out of the group meetings?" For example, one participant "learned how to deal with various situations in a productive manner," whereas another discovered "how to blend into university life - socially and academically - which was really important." A third participant described the intervention as "a social support network in its own right, making my transition much easier." Other students seemed to have a clear sense of the intervention's purpose. One student mentioned that the intervention "gave me a chance to discuss my adjustment with other people that are going through it," while another appreciated "knowing that the stress I was feeling was the same with other people, I was not alone in my feelings." To these students, the intervention was a success, if only because it gave them an opportunity to talk, to listen, and to make new friends.

These thoughts and feelings were echoed in the contact question and written comments from the March questionnaire. First, all intervention participants reported having some amount of contact with other group members, with the majority indicating "weekly or more" contact. This suggests that the groups did come to

function as networks. Second, participants' written comments to the questions "Looking back on your transition group experience in the fall, what would you say are the most important things you got out of it?" and "Do you have any further comments you would like to mention regarding any aspects of the study?" reflected the overall usefulness of the intervention. Many participants reinforced the importance of such an intervention; as one student indicated, the experience was "something that can be potentially good for 1st years!" Others expressed their own concerns about the intervention, and about university life in general. One participant wrote: "In the beginning, I didn't think [the intervention] would be useful. I thought coming to university would be pretty easy but after I got here I was glad I had participated. I liked the group sessions and got a lot of useful information from it." Another student expressed similar views: "I got to see that everyone else was in the same situation as me and had similar feelings. This was good, because at first I felt like the only one who felt the way I did --> SCARED, LOST & CONFUSED." Overall, intervention participants felt that the group sessions were worthwhile and helpful. One final comment expressed this viewpoint very well: "I had a really enjoyable time meeting with the group members and [it] was a good learning experience in that we all gained advice and ideas about how to cope with first year university's many challenges."

Interestingly, non-intervention participants also had many positive comments about the study, even though their role was limited to completing questionnaires In response to the question "Do you have any further comments you would like to mention regarding any aspects of the study?" in the March questionnaire, many non-

intervention participants were thankful for the chance to participate in the study. One respondent indicated that the study "allowed me to reflect on my transition into university and I would like to thank you for this." Similarly, another student wrote: "It made me evaluate my 1st year and realize I had a great time. It also helped me deal with some of my thoughts by writting [sic] them down." Others were hopeful that the information they provided would be useful to other students entering university life. Finally, one student offered some advice that reflected some themes from the intervention: "Becoming more involved in the University makes adjustment easier. Many 1st year students feel that it is very difficult to become involved, as well many are not informed about events and often feel left out."

Limitations

While the results for this support group program are thus encouraging overall, we must acknowledge that there are several important issues of internal validity and generalizability that need to be taken into account. The problem of non-random assignment, which was previously discussed, is one issue of internal validity. Also, this was a volunteer sample, and represents those incoming students most willing to devote 90 minutes of their time per week to such a discussion group experience. Generally, this would have limited the number of potential participants, and created constraints on the sample size. Obviously, then, volunteering biases are an important constraint on the interpretation of these results. Follow-up studies with a wider range of participants are needed to address these issues directly.

A methodological limitation involves the cell sizes in certain analyses, especially those in which gender was entered as a variable. The number of male intervention participants is particularly problematic. With the three males from Group 2 removed, and with one other intervention male dropping out of the study, this cell was comprised of only five participants. Such a low n would surely affect the power of testing, and may have contributed to some of the non-significant findings with regards to the hypotheses. Although sample size is an important component of any study, it should be noted that this study, as with many others in a university setting, relied on the participation of volunteers; as such, it is difficult to attempt any control over desired sample size.

The fact that most of the participants were staying in residence is important in interpreting the findings as well. Many of these people were living away from home for the first time; in addition to university life, they were also adjusting to independent living. The onset of new responsibilities and freedoms in living situations may present as many stressors as the demands specific to university attendance Further, participants not living in residence may undergo different changes in their social support networks than those who do. For instance, those living at home may have been more likely to maintain old support networks simply because they were more available, and those living off campus may have had a more difficult time developing new social ties. Because most of these first year students at Wilfrid Laurier University were living in residence (about 85% of our sample), it was not possible to evaluate systematically the role that specific living arrangements played in adjustment to

university or development of social ties; however, it would be useful to keep these issues in mind for further research.

Observations of the discussions and ongoing problems with participant attendance had led us to be concerned about the effectiveness of one of our intervention groups. This group had lower attendance than the others, chose to meet fewer times, and required the replacement of two members after the initial meeting. In the main analyses reported above, this group was therefore eliminated.

We subsequently re-ran the analyses reported here including Group 2, thus comparing Groups 1, 2, and 3 (combined) with the controls. As expected based on our observations of the group's problems, several significant differences between the two effective intervention groups and the control group were attenuated with the addition of Group 2, including the significant group effect on university adjustment, and the mediating effect of social support, though not the effect on daily hassles (see Appendix P).

Thus, Group 2 was evidently less affected by the intervention overall than the other two discussion groups. Additionally, this group reported a (non-significantly) lower follow-up level of group contacts than did the other two intervention groups. Given the nature of these attendance problems, which seemed to disrupt the sense of cohesiveness that this group felt, it seems likely that initial group cohesion is an important factor that should be attended to carefully in order to strengthen the impact of this intervention in facilitating the transition to university.

Future Research

The results of the present study must be interpreted with caution, given the limitations just mentioned. Nevertheless, this study indicates the potential role that a support group can play in the transition to university. As one discussion participant put it in the intervention evaluation, "I think this is a very positive exercise for first-year students. More students should have the opportunity to participate in organized sessions. I think it would help many people." For these students the present intervention was beneficial to their feelings of adjustment to university, and our evidence suggests the value of a relatively brief group support program during this important life transition.

As such, the present study has a place in the university adjustment literature. As stated earlier, social support is positively related to university adjustment, and the stress of the university transition is linked to attrition rates. Therefore, a reasonable procedure for lowering attrition rates and improving academic performance would be a program that enhances students' levels of perceived social support. The present study, although preliminary, has shown that a social support-based intervention program apparently can successfully improve university adjustment and lower feelings of daily stress and hassles.

The next step for future research would be to determine if this heightened university adjustment positively affects academic performance and decreases the likelihood of dropping out. To this end, a similar study could be implemented, including access to students' academic records, in order to determine if those

participants with higher university adjustment actually performed better academically than students who did not adjust as well. Participants' progress could also be followed longitudinally, to determine which students, if any, are dropping out, and the connection between university adjustment and attrition rates. Such a study could then track the long-term effects of the intervention and, through examination of attrition rates, determine which students would benefit most from the intervention.

There is some indication in the present data that a social support-based intervention might better target some students than others (i.e , those students with low task-oriented coping skills). Future intervention studies might also consider altering the procedure outlined in the present study, to address some issues mentioned here. For example, students with low self-esteem or high depression scores prior to attending university could be encouraged to attend the intervention program, to clarify the intervention's relationship with these constructs. The structure of the intervention is also a topic of possible change; a longer intervention period and an earlier focus on solidifying group composition are some structural issues that might be considered, based on the experiences of the present study.

Overall, future research can follow many routes, only a few of which have been suggested above. It is essential, however, that such research on the topic of university adjustment continue, particularly considering the usefulness of developing an intervention that could ease an incoming student's transition to university, and help make the university experience a more positive and less stressful one.

Suggestions for Practice

The preceding section outlined various suggestions for future research in the transition to university area, based on the findings and limitations of the present study. One hopeful consequence of this future research is the development of a social support-based intervention program within the regular framework of university programming. Keeping this end in mind, future policy-makers should consider the following specific suggestions for practice.

First, it might be advantageous to limit the intervention to a subset of incoming students. This study has suggested that a social support-based intervention might particularly benefit certain groups of students, such as those with a low task-oriented coping style. Also, it might prove too complicated and costly to organize intervention groups for the entire incoming class.

Second, the intervention might be modified by adding more weekly meetings to the structure. This increase in the intervention's total length might help students cope with problems as they arise later in the term. It might also serve to introduce related topics, such as social support during final exams, that were not covered in the present study. Adding more weeks might also lessen the impact of a cancelled meeting, and allow for more group cohesion to develop.

Third, as mentioned above, there should be a greater focus on group cohesion. The problems surrounding intervention Group 2 in this study might be lessened by stating to the group the importance of attendance to the intervention's success, and by focusing more time during the initial meeting on group cohesion. Additionally, any

future evaluation of the intervention should include specific criteria for excluding groups from analyses, groups that would not have met certain standards for group cohesion.

Finally, alternative programming should be provided for control group participants, in future evaluative designs of the intervention. It would be unethical to consciously deprive these students of a program that has been shown to successfully improve their adjustment to university. One possibility might be to offer the intervention to this group during the second term, after the main intervention has run its course. Alternatively, the control group could participate in a different intervention, one not focused on social support and run concurrently with the main intervention Either way, it would be important not to deny the control group access to a program that might ease their transition to university.

Conclusion

Overall, this study has an important place in the transition to university literature for two reasons: First, it reinforces the importance of examining social support in the context of university adjustment; and second, it offers evidence that it is possible to ease the transition to university of incoming students. The intervention in this study helped increase students' adjustment to university through increasing their levels of perceived social support. The intervention apparently also helped to reduce the number of reported daily hassles, and had a long-term effect on decreasing participants' stress levels. During a potentially hectic period such as the transition to

university, such effects could make the difference between a positive first year university experience and a negative one, perhaps even between academic success and withdrawal from university. These effects should certainly be pursued further, with the ultimate goal being a process that would facilitate the transition to university for all incoming students

Footnotes

[1]Three participants scored on the median for task-oriented coping style (median = 68.0), and five participants scored on the median for emotion-oriented coping style (median = 34.0). These participants were removed from the analysis of mean differences, and the accompanying figures.

[2]n = 37 because 36 participants (excluding Intervention Group 2) responded to the March questionnaire, and one respondent left the GPA question blank

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Appendices

August 1, 1994

Dear Incoming Laurier Student,

Congratulations on your admission to Wilfrid Laurier University. As part of university life you may be asked to participate in various research projects. We are writing at this time to ask for your assistance in a study of student adjustment to university. Your name was randomly selected from a list of incoming students as a potential participant in our research.

For several years, a research team of three faculty and a number of students from the Psychology Department of Wilfrid Laurier University has been conducting a study on the transition to university for students. This ongoing study has been supported by the Social Sciences and Humanities Research Council of Canada. Last year, several hundred members of the entering class participated in this research, and helped us learn a good deal about some of the factors that influence how this important transition works. Based on these findings and other research, we want this year to study some possible ways to assist first-year students in their adjustment to university life. We are looking for volunteers among this year's incoming class to participate in an important follow-up study.

Please recognize that this project is part of a research study, and not an official program of Wilfrid Laurier University. If you agree to participate in this research, you will be asked to complete three questionnaires. Each questionnaire should take approximately one hour to complete. The first is included with this letter, and focuses on your expectations regarding university, your feelings about yourself, and your current social relationships. The second and third questionnaires will be sent to you in October and March, respectively, and will look at how you are adjusting to a number of aspects of university life.

In addition, volunteers will be asked to participate in two different types of groups, in order to study adjustment differences for those with different kinds of experiences. One type of program to which you may be assigned will be a 5 to 6 week series of small group discussion meetings on various aspects of this transition. Each weekly meeting will involve a short workshop on one aspect of your new experiences, as well as an opportunity for discussion among group members. The topics of these meetings will be somewhat flexible, so that participants' concerns can be dealt with as they arise. You will find this an opportunity to discuss academics, living situations, social relations, and other daily life concerns. It is also an opportunity to make new acquaintances in the incoming class. Each discussion group will consist of eight to ten volunteer first-year students, both men and women, and two advanced-level student facilitators, one man and one woman, who will present the workshops and help with the discussions. However, the facilitators are <u>not</u> trained counsellors; it is therefore not expected that these meetings will provide direct counselling. Each weekly meeting should last around 90 minutes and will probably be scheduled in the early evening. The groups will begin in the first week of classes (Sept. 12 -16) and will end the week of October 17 - 21. These weekly meetings will be audio-taped in order to better monitor the content of the discussions. These tapes will only be heard by members of the research team, and will be erased once we have finished collecting all the data. As part of our research, we will be assessing the extent to which participation in

such groups helps students get along better in their first year at university.

A second type of experience to which you may be assigned is a questionnaire-only condition. Individuals in this group will be followed over the first couple of months of university, and asked periodically to complete a series of brief questionnaires by our project staff. The staff will be available to provide information to members of this group on an individual basis if that is requested.

Incoming students will be assigned to these different experiences in our study on a random (chance) basis. This is an important part of the research, so that we can tell if these types of experiences make any difference to how the transition works.

We ask that you complete the enclosed questionnaire so that we may understand how incoming students are thinking and feeling about the transition to university now. As such, we ask that you fill it out independently, in order to get your opinions. We will need to assign you a number so that we can keep track of your information. However, your name will not appear on any questionnaire, and all information that you provide to us will be treated anonymously and confidentially. We are asking that you return your completed consent form and questionnaire, in order to determine which students are participating in our study. Your consent form will be kept separate from the initial questionnaires, and all subsequent questionnaires, thus ensuring the anonymity of your responses. No one reading your answers will be aware of your name, and all materials will be kept in locked files and will be destroyed at the completion of the research.

If you are interested in participating in our study, please complete and return the enclosed consent form and questionnaire no later than **Friday, August 26**. When we have received your consent form and questionnaire, we will contact you to indicate in which program you will be participating.

If you have any questions about our study, please do not hesitate to call Susan Alisat, 519-884-1970, x 6520, for more information. We thank you for your time, and hope that your summer holiday is a pleasant one. Thanks for your help!

Best wishes,

Daniel Lamothe
Researcher

Bruce Hunsberger
Professor of Psychology

S. Mark Pancer
Professor of Psychology

Michael W. Pratt
Professor of Psychology

August, 1994

CONSENT LETTER

I understand that I am being asked to participate in a research study which is being conducted by Daniel Lamothe, a Masters candidate, his supervisors, Dr. Michael Pratt, Dr. Mark Pancer, and Dr. Bruce Hunsberger, and the Psychology Department of Wilfrid Laurier University.

The purpose of this study is to determine adjustment differences between incoming university students. As a participant in this study, I understand that I will be assigned either to a discussion condition or to a questionnaire condition. The data collected will be used to study any differences between these conditions.

The procedures of this study include responding to three questionnaires, one in August, one in October, and one in March. Responses will be recorded on rating scales and in written form. I understand that each questionnaire should take about 40 minutes to complete.

If I am assigned to the discussion condition, I understand that I will meet with other students and two facilitators, on a weekly basis, from Sept. 12 - 16 to Oct. 17 - 21, 1994 (six weeks), for ninety minutes per week. I understand that these meetings will not provide direct counselling, as the facilitators are not trained counsellors. I give my permission for the audio-taping of these meetings.

I understand that I am free to contact the faculty supervisor at the telephone number below if I have any questions.

I understand that by participating in this study, I may learn first-hand about research in psychology, and about different ways of adjusting to university life.

I understand that my participation is voluntary. I may refuse to participate in this study without penalty to me. I may also withdraw from the study at any time without penalty. I may omit the answer to any question in responding to questionnaires.

I understand that my research records will be anonymous and thus entirely confidential. I also understand that I have a right to have all questions answered by the investigator in sufficient detail to clearly understand the answers.

I understand that I can receive feedback on the overall results of this research by letter or posting on the Psychology Department bulletin board, and that this will be made available to me by May 1, 1995.

If I have any questions about the research, the procedures employed, my rights, or any other research-related concerns, I may contact the investigator, Daniel Lamothe, his supervisor, Dr. Michael Pratt, or Paul Davock, the Field Placement Supervisor, who supervises the use of humans in research at Wilfrid Laurier University.

I acknowledge receiving a copy of this informed consent.

_____ _____

Investigator (signed) Participant (signed)

Home Phone #:_____

_____

Supervisor (signed)

Supervisor: Dr. Michael Pratt, 519-884-1970, x 6824

ID Number: _____

Background Information

1. Sex (circle one): M F

2. Age: _____

3. Languages spoken at home: _____

4. What is the highest level that your parents completed in high school?

mother	father	
☐	☐	less than high school (highest grade completed: (m)____(f)____)
☐	☐	completed high school
☐	☐	some college or university
☐	☐	completed college program
☐	☐	completed undergraduate university degree
☐	☐	some post graduate training

5. Where will you be living while you attend WLU in September?
   - ☐ residence
   - ☐ off campus (but not at home)
   - ☐ at home
   - ☐ other (specify): _____

6. What was your grade average on your OACs? _____%

7. Have you been offered a scholarship by WLU? ☐ yes ☐ no

Thoughts about University Life - Part I

1. How often have you <u>thought about</u> the following issues:

1	2	3	4	5
never	almost never	sometimes	fairly often	very often

a. _____ what university life will be like
b. _____ what classes will be like
c. _____ what social life at university will be like
d. _____ (if you will be moving away from home) what it will be like living on your own
e. _____ how you are going to finance your education and living expenses

2. Using the above scale, please indicate how often you have <u>discussed</u> these issues with:

Parents	Friends	Teachers/Counsellors	Others	
_____	_____	_____	_____	a. university life
_____	_____	_____	_____	b. classes
_____	_____	_____	_____	c. social life at university
_____	_____	_____	_____	d. living on your own
_____	_____	_____	_____	e. finance

Thoughts about University Life - Part II

In the next section, you will be asked to describe some thoughts about university life. It is important that you respond to the written questions as fully as you can, i.e., complete sentences. Take your time and reflect on each question. Answer each question as thoroughly as possible.

1. In general, what do you expect university life to be like?

2. What do you expect classes and school work to be like at university?

3. What do you think university social life will be like?

4. In what ways do you think personal relationships will play a part in adjustment to university?

Social Relationships

Below you will find a number of statements about relationships with other people. Please indicate your agreement or disagreement with each statement using the following scale:

-4 = very strongly disagree	+4 = very strongly agree
-3 = strongly disagree	+3 = strongly agree
-2 = moderately disagree	+2 = moderately agree
-1 = slightly disagree	+1 = slightly agree
0 = neutral	

1. _____ There are people I can depend on to help me if I really need it.
2. _____ I feel that I do not have any close personal relationships with other people.
3. _____ There is no one I can turn to for guidance in times of stress.
4. _____ There are people who depend on me for help.
5. _____ There are people who enjoy the same social activities I do.
6. _____ Other people do not view me as competent.
7. _____ I feel personally responsible for the well-being of another person.
8. _____ I feel part of a group of people who share my attitudes and beliefs.
9. _____ I do not think other people respect my skills and abilities.
10. _____ If something went wrong, no one would come to my assistance.
11. _____ I have close relationships that provide me with a sense of emotional security and well-being.
12. _____ There is someone I could talk to about important decisions in my life.
13. _____ I have relationships where my competence and skill are recognized.
14. _____ There is no one who shares my interests and concerns.
15. _____ There is no one who really relies on me for their well-being.
16. _____ There is a trustworthy person I could turn to for advice if I were having problems.
17. _____ I feel a strong emotional bond with at least one other person.
18. _____ There is no one I can depend on for aid if I really need it.
19. _____ There is no one I feel comfortable talking about problems with.
20. _____ There are people who admire my talents and abilities.
21. _____ I lack a feeling of intimacy with another person.
22. _____ There is no one who likes to do the things I do.
23. _____ There are people I can count on in an emergency.
24. _____ No one needs me to care for them any more.

Social Support

This section of the questionnaire asks you to list the people who are available to provide you with help and support. People can be supportive in many ways: they can help you do things, provide guidance and advice, listen to your problems, or just give you some company and consolation when you need it. On the page below, please list all the people you know whom you can count on for help or support. Give the person's initials and their relationship to you (e.g. TM -- Brother). You should include anyone who might be able to provide some support -- family members or relatives, friends, co-workers, teachers, professionals or others. In addition, please indicate how satisfied you are with the support you receive from this person.

-3 = very dissatisfied
-2 = dissatisfied
-1 = slightly dissatisfied
0 = neither satisfied nor dissatisfied
+1 = slightly satisfied
+2 = satisfied
+3 = very satisfied

	Initials	Relationship	Satisfaction Rating
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____

Social and Personal Attitudes

Below you will find a variety of statements related to your attitudes and personal beliefs. Please use the following scale to indicate your agreement or disagreement with each statement:

-4 = ***very strongly disagree***	**+4** = ***very strongly agree***	
-3 = ***strongly disagree***	**+3** = ***strongly agree***	**0** = ***precisely neutral***
-2 = ***moderately disagree***	**+2** = ***moderately agree***	
-1 = ***slightly disagree***	**+1** = ***slightly agree***	

1. _____ I feel that I am a person of worth, at least on an equal basis with others.
2. _____ I feel that I have a number of good qualities.
3. _____ All in all, I am inclined to feel that I am a failure.
4. _____ I am able to do things as well as most other people.
5. _____ I feel I do not have much to be proud of.
6. _____ I take a positive attitude toward myself.
7. _____ On the whole, I am satisfied with myself.
8. _____ I wish I could have more respect for myself.
9. _____ I certainly feel useless at times.
10. _____ At times I think I am no good at all.

Feelings and Thoughts - Part I

Below is a list of the ways you might have felt or behaved recently. Please indicate how often you have felt this way during the past week. Use the scale provided for your responses.

1	2	3	4
rarely or none of the time (less than 1 day)	**some or a little of the time (1-2 days)**	**occasionally or a moderate amount of time (3-4 days)**	**most or all of the time (5-7 days)**

During the past week:

1. _____ I was bothered by things that usually don't bother me.
2. _____ I did not feel like eating; my appetite was poor.
3. _____ I felt that I could not shake off the blues even with help from my family or friends.
4. _____ I felt that I was just as good as other people.
5. _____ I had trouble keeping my mind on what I was doing.
6. _____ I felt depressed.
7. _____ I felt that everything I did was an effort.
8. _____ I felt hopeful about the future.
9. _____ I thought my life had been a failure.
10. _____ I felt fearful.
11. _____ My sleep was restless.
12. _____ I was happy.
13. _____ I talked less than usual.
14. _____ I felt lonely.
15. _____ People were unfriendly.
16. _____ I enjoyed life.
17. _____ I had crying spells.
18. _____ I felt sad.
19. _____ I felt that people dislike me.
20. _____ I could not get "going".

Feelings and Thoughts - Part II

The questions in this scale ask you about your feelings and thoughts *during the last month.* In each case, you will be asked to indicate *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate. Use the following scale to record your answers:

1	2	3	4	5
never	almost never	sometimes	fairly often	very often

In the last month, how often have you:

1. _____ Been upset because of something that happened unexpectedly?
2. _____ Felt that you were unable to control the important things in your life?
3. _____ Felt nervous or "stressed"?
4. _____ Dealt successfully with irritating life hassles?
5. _____ Felt that you were effectively coping with important changes that were occurring in your life?
6. _____ Felt confident about your ability to handle your personal problems?
7. _____ Felt that things were going your way?
8. _____ Found that you could not cope with all the things that you had to do?
9. _____ Been able to control the irritations in your life?
10. _____ Felt that you were on top of things?
11. _____ Been angered because of things that happened that were outside of your control?
12. _____ Found yourself thinking about things that you have to accomplish?
13. _____ Been able to control the way you spend your time?
14. _____ Felt difficulties were piling up so high that you could not overcome them?

Reactions to Situations

The following are ways of reacting to various difficult, stressful, or upsetting situations. Please indicate, on the corresponding line, how much you engage in each type of activity when you encounter a difficult, stressful, or upsetting situation.

1 2 3 4 5
<———— ————>
Not At All Very Much

1. _____ Schedule my time better.
2. _____ Focus on the problem and see how I can solve it.
3. _____ Blame myself for procrastinating.
4. _____ Do what I think is best.
5. _____ Take a vacation.
6. _____ Think how I might use the situation to my advantage.
7. _____ Talk to others and find out how they react to the situation.
8. _____ Outline my priorities.

1 2 3 4 5

<———— ————>

Not At All Very Much

9. _____ Treat myself to a favorite food or snack.
10. _____ Think about the positive aspects of the situation.
11. _____ Become very tense.
12. _____ Think about how I have solved similar problems.
13. _____ Take a warm bath.
14. _____ Blame myself for being too emotional about the situation.
15. _____ Daydream about a better time or place.
16. _____ Determine a course of action and follow it.
17. _____ Go to a party.
18. _____ Work to understand the situation.
19. _____ Take corrective action immediately.
20. _____ Think about the event and learn from my mistakes.
21. _____ Wish that I could change what had happened or how I felt.
22. _____ Visit a friend.
23. _____ Shout or yell.
24. _____ Spend time with a special person.
25. _____ Go for a walk.
26. _____ Tell myself that it will never happen again.
27. _____ Talk to someone whose advice I value.
28. _____ Analyze the problem before reacting.
29. _____ Phone a friend.
30. _____ Get angry.
31. _____ Adjust my priorities.
32. _____ Cry.
33. _____ See a movie.
34. _____ Get control of the situation.
35. _____ Make an extra effort to get things done.
36. _____ Come up with several different solutions to the problem.
37. _____ Take time off and get away from the situation.
38. _____ Fantasize about how things might turn out.
39. _____ Go over in my mind what I need to say or do.
40. _____ Take it out on other people.
41. _____ Use the situation to prove that I can do it.
42. _____ Try to be organized so I can be on top of the situation.
43. _____ Watch T.V.
44. _____ Make plans to use my time more wisely.

- WEEK ONE -

Greetings (05 min.)
- welcome from facilitators
- Timbits & drinks
- name tags

Icebreakers (25 min.)
- line-forming *: everyone lines up from shortest to longest distance of move to university (e.g., Waterloo - Windsor - Wawa)
- dual interviews: group splits into pairs; mutual introductions; pair member introduces other to group

Guidelines (10 min.)
- facilitators briefly explain rationale of the study [see page 2]
- procedure guidelines (e.g., confidentiality) are read and handed out, with discussion on each [see page 3]

Map (10 min.)
- campus map is projected onto white-board; participants indicate with markers what areas they have visited
- facilitators locate points of interest not visited

Outline (10 min.)
- participants receive hand-out on future topics [current outline]
- discussion on topics: relevance, ordering, suggestions

Discussion (30 min.)
- facilitators open floor with anecdotes of their own first-year experiences
- participants give their impressions of first week here
- general discussion on expectations: university life, classes and school work, social life, this discussion group (introduce open-ended questions if discussion grinds down)

Evaluation (05-10 min.)
- after session is over, facilitators fill out evaluation form [see page 6]

Next week: **New social ties**

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* Highlighted items are optional; include if time permits

"TRANSITION TO UNIVERSITY" STUDY

Rationale of the Study

Thank you all again for participating in our study. As you might already be aware, the transition from high school to university can create hassles; you're leaving behind family and friends, and entering a completely different atmosphere. As we've seen, some of you have moved to come here. You'll be meeting new people, studying new subjects, and experiencing higher levels of independence and responsibility, all in a matter of weeks. That's a lot to take in, in so short a time.

Most universities offer seminars to help incoming students adjust better to university life. However, these sessions involve a large number of students, and focus mostly on initial orientation. We wanted to put together sessions that involved a very small group of students, and whose focus would be on social support; that is, the people you turn to when dealing with issues. Why this focus? Because getting feedback from others is one way of dealing with certain types of issues, like the hassle from starting university. During this time, however, your social ties are also under transition; you're in the middle between old friends and new friends, and this affects the social support you might be getting. We're hoping that discussion groups that focus on social support will help strengthen your social ties, and in the process give you feedback as you adjust to university life.

We're also hoping that a small group setting will make this easier than would a large group of students. However, to make this work, certain guidelines should be followed. We want each of you to feel as relaxed and comfortable as possible, and we want the discussions to go as smoothly as possible. On the next page are some guidelines that will help make this happen.

GUIDELINES

Respect: You will have many opportunities to give your opinion on different topics. Others may have viewpoints different than your own. Sharing these will help all of us see each topic more globally, and will allow different perspectives to come up. To this end, we ask that you respect everyone's opinion, and support anyone who wishes to speak.

Equal time: As this is a small group, everyone should be given a chance to speak out on any given topic. It is therefore important that each person be given equal time to offer their thoughts. Try to keep this in mind whenever you speak out.

Punctuality: We understand that the next few weeks will be filled with many tasks and activities. We hope not to take too much time from your schedules; only 90 minutes a session. However, each session will cover many topics, and we hope to get a lot done each week. It is important, then, that everyone arrive on time for each session, so that we can get under way, be done 90 minutes later, and let you get back to your schedules. If, for any reason, you think you will be late at a session, please call the study's office at 884-1970 x6520, and let us know. This also applies if you cannot make it to a session; we would much rather you call, than spend the first few minutes waiting for a no-show.

Confidentiality: We hope that you can feel comfortable enough to speak out openly and honestly, and say whatever is on your mind. To ensure this, we must all agree that whatever is said during the discussions stays within the group, and that nothing personal leaves this room.

Audio-taping: Having said this, we now turn to the taping equipment. In the letters and consent forms you received, it was written that these sessions would be audio-taped. This is to give us a detailed idea of what topics were discussed. In keeping with our commitment to confidentiality, only members of the research group will listen to these tapes. The tapes will be kept in a secure place, and will be destroyed once the study is finished.

TRANSITION INTERVENTION

Intervention Outline

WEEK ONE
- introductory session
- ice breakers
- set guidelines (rules of order)
- map of university (services & resources)
- hand out list of future topics
- general chat session

WEEK TWO
- check-in discussion time
- focus on: new social ties
- exercise on who you spent time with during first week at university
- talk about clubs on campus
- volunteer work around the city
- work and study groups
- intervention group as social group

WEEK THREE
- check-in discussion time
- focus on: residential issues
- exercise on the pros and cons of independent living
- possibility of new social ties
- talk about role of residence dons

WEEK FOUR
- check-in discussion time
- focus on: academic support
- talk about role of T.A.s and peer tutoring
- exercise on time management
- combining academic and social life

WEEK FIVE
- check-in discussion time
- focus on: previous social ties
- importance of keeping previous ties
- exercise on knowing one's support networks
- tie-in with week three (exposure to support networks for residence versus non-residence)
- mention other sources of support (e.g., relatives, coach, teacher, religious figure)

WEEK SIX
- check-in discussion time
- wrap-up
- encourage social ties outside of intervention
- closing party (e.g., barbecue)

DISCUSSION CHECKLIST

(check if discussed)

anecdotes - female facilitator _____

- male facilitator _____

impressions of first week here _____

expectations - university life _____

- classes and school work _____

- social life _____

- this discussion group _____

Questions to facilitate general discussion
(check if used)

_____ What do you expect university life will be like here?

_____ What do you think classes and school work will be like?

_____ What do you expect social life at WLU will be like?

_____ What do you expect out of this discussion group?

_____ What do you think we [facilitators] will do here?

_____ What has your first week at university been like?

_____ What are your impressions of WLU so far?

Evaluation - Week One

Note: For all scales, 1 = "not at all"; 5 = "very"

Icebreakers

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Guidelines

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Map

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Outline

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Discussion

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

- WEEK TWO -

MATERIALS NEEDED

- paper and pencil for all participants
- flipchart & tape (or whiteboard if unavailable) & thick markers
- list of campus clubs (copy for all participants)
- discussion checklist [page 6]
- evaluation sheet for each facilitator [page 7]

Check-in (15 min.)

everyone indicates their chosen major & what courses they are taking
comments from group about introductory session and first week of classes
any thoughts that people want to bring up now

Exercise (10 min.)

facilitators hand out paper and pencils
participants write down people they met in their first two weeks at university, indicating how and where they met (excluding last week's discussion meeting)

Response (15 min.)

individually, participants choose one person from their list, and briefly talk about what happened when they met
this allows the group to recognize different methods of meeting people, as well as different meeting places (discussed later as Strategies and Venues)

Strategies (15 min.)

from exercise and response, group brainstorms methods of meeting people (e.g., going to a social event; getting involved in clubs)
facilitators write down these strategies (on a flipchart); discussion

Venues (05 min.)

from exercise and response, group brainstorms venues for meeting people (e.g., volunteer work; study groups)
again, facilitators write down these venues; discussion

Discussion (30 min.)

facilitators preface discussion with issue of diversity: quality, not quantity, of social contacts is important
general discussion on new social ties [discussion topics on page 6]

Evaluation (05-10 min.)

after session is over, facilitators fill out evaluation form [see page 7]

Next week: **Residential issues**

CAMPUS CLUBS

AIESEC: AIESEC is an international student association with something for everyone. We host international job exchanges, a multicultural festival, conferences, parties, and more.

Accounting Association

Adult/Mature Students Association (AMSA): AMSA strives to provide support for adult students at Laurier. This is accomplished through seminars, general meetings, and social events.

African Students Association: The aim of the African Students Assoc. is to portray the cultural identity of African students to the university community and the wider Canadian society.

Amnesty International: Amnesty International is a global grass-roots organization concerned with exposing and ending human rights abuses around the world. Meetings are held every Monday evening at 5:30 in the Niobe Lounge.

Anthropology Club: The aim of this group is to enable the members to "experience" the different lifestyles and customs of cultures other than our own. This is to be an opportunity to learn more and to interact with others.

Archaeology Club

Badminton Club: Currently, we play Monday, Tuesday, and Thursday from 6:30 - 8:00 pm. Come on out for fun & exercise & all that.

Biology Club

Chinese Students' Association: The main objective of the club is to promote and enhance Chinese culture within Laurier's campus. All students are encouraged to join the association.

Communications Club: This club provides students an opportunity to explore activities and potential careers in the communications fields. Excitement provided by tours, videos, seminars, and other forthcoming surprises.

Croatian Students Association

Cycling Club: The WLU Cycling Club will be planning weekly rides for all those interested. All skill levels welcome.

Debating Society: We debate. Among other things. We party. We travel. We yell.

We are for everyone. We'll tell you how to debate. We'll give you confidence. And we'll party some more.

Economics Association: We combine social events for students as well as joint ventures with the economics department. The club organizes the exam bank where members can sign out previous Bus. and Eco. exams.

English Club: The English Club plans various literary-based activities such as parties and film nights for people interested in English stuff, and also presents numerous opportunities to suck up to your profs.

Environmental Club: Learn about you and the Earth, then spread the knowledge on campus and off. Initiate and participate in conferences, movie nights, trips, speakers, group discussions, and specific campaigns.

Equestrian Club: The Laurier Equestrian Club is here for everyone to join, rider or not. The events for the year include hay rides/sleigh rides, trail rides, a little gambling at the races, and a show circuit in the States. Come out and horse around with them.

French and Spanish Club: Come join in the great time!! The first event will be a wine and cheese party on October 4. Look out for upcoming information on other events as well!!

GLOBAL (Gays, Lesbians, and Bi-sexuals At Laurier)

German Klub: Get involved in the K-W culture! Events such as Oktoberfest (of course), Christmas dinner, movie nights, games nights, and the end of the year bash.

Greek Council: Promoting the presence of Greek life on campus is this club's purpose. Members will participate in Winter Carnival, charity events, and be kept informed of the activities of Sigma Chi and Delta Gamma.

History Club: The History Club plans activities for people interested in history and encourages social interaction between students and faculty. They meet, the travel, they party, they have fun!!

Italian Club

Lacrosse Club: The Lacrosse Club features a competitive team that plays an inter-university schedule during the fall. All players experienced or not are invited to join!

Laurier Christian Fellowship: Welcome to Laurier! LCF is glad you're here! Well...who is LCF anyway?? Put simply, we are followers of Jesus Christ. We meet weekly and are here to serve you and our campus!!

Laurier International Students Association

Marketing Association: Students with an interest in marketing should join this association and be prepared for the most socially and academically fulfilling year possible. Full of guest speakers and fun events such as the upcoming Softball Tournament.

Monty Python Appreciation Club: Pretty self-explanatory.

Music Association: The Music Assoc. is organized to promote a fun environment for the students and faculty of the music department as well as promoting the educational betterment of all involved.

Music Therapy Student Association: MTSA is generally concerned with promoting and representing the field of music therapy both on and off campus. Activities include both educational and social events. The highlight this year is the Joint International Music Therapy Conference from Oct. 28-31.

Musicians' Network: The Musicians' Network offers a chance to participate in the live music scene at Laurier. This year's events include live music in the Turret every month and a CD release.

P. C. Club: This club provides an opportunity to learn about issues and politics in a social way. There are many social events within the riding and with other clubs from across Ontario.

Philosophy Club: Anyone with a philosophical interest, taking a philosophy course, or interested in taking one is encouraged to join. The club plans on organizing discussions, informal tutorials, information for people interested in philosophy, guest speakers, and of course fun!!!

Physics and Computing Club: Interested in physics or computing?? Got any classes in physics or computing?? If so, come on out and join this club!!

Poli Sci Association: All sorts of events such as meet the prof. nights, a semi-formal, guest speakers, round table discussions, and much much more!!!! Come out and get involved!

Psychology Society: This club tries to fulfill the need for social and academic interaction among students and faculty within the psychology department and other interested individuals. A typical event held is Meet the Prof. night.

Reform Party Club: Attention all concerned Canadians! This club's goal is to support and assist our local candidates. This is accomplished through many interesting events on and off campus.

Religion and Culture Club: Care to open your mind?? The Religion and Culture Club will expose you to a diverse multicultural society... your world. Have you experienced

it??

SALSA (Indian Students Association): Be a part of Laurier's history and join the first Indian Student Assoc. here! It's an excellent way to explore all the great things the South Asian community has to offer WLU and meet other South Asians who want to share in this experience.

SHAPE

SPESH (Students Providing Extra Special Help): Students Providing Extra Special Help for Laurier students with special needs provides a network for special needs students to meet each other and discuss concerns and issues. SPESH works in conjunction with the Special Needs Office in providing this aid.

Sci Fi/Fantasy Club: Lovers of Sci-Fi and Fantasy in its many forms can enjoy movie nights, Star Trek nights, role-playing, genuine medieval style feasts, meet with sci-fi authors and more. Members get discounts at book and gaming stores and get into most events for free.

Sea Hawks

Ski Club: When the snow falls, look for this club on campus to hit its stride. The Ski Club is offering more trips, more vacations and more events than ever before. Skiing and snow boarding have never been this easy, inexpensive and FUN!! Join us this season.

Sociology Club

Squash Club

TAMIAE: TAMIAE is associated with the School of Business and Economics. It is both a social and academic club on campus providing students relief from classroom activities.

Waterbuffalos: The Waterbuffalos are a charitable social club which organizes and presents kick-ass party events for all WLU students. Memberships, t-shirts, and horns available. Yabba dabba doo... we want you!!

World Affairs Society

Writers Club

Young Liberals Club: In the words of the great Sir Wilfrid Laurier, Liberals are people "who think that every-where in human things there are new abuses to be reformed, new horizons to be opened up, and new forces to be developed".

DISCUSSION CHECKLIST

Strategies for meeting people	(check if discussed)
information from mutual acquaintance	_____
the dry approach ("Hi, my name is ...")	_____
attending a social event	_____
becoming a member of a group or club	_____
waiting for someone to approach you	_____

Venues for meeting people	(check if discussed)
campus clubs	_____
volunteer work	_____
study groups	_____
classes	_____
this discussion group	_____

General discussion topics	(check if discussed)
social events	_____
pressures of being social (e.g., drinking)	_____
dating issues	_____
individual strategies	_____
diversity of groups (e.g., ethnic, religious)	_____
room-mates (also covered in Week Three)	_____

Evaluation - Week Two

Note: For all scales, 1 = "not at all"; 5 = "very"

Exercise

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Response

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Strategies

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Venues

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Discussion

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

- WEEK THREE -

MATERIALS NEEDED

- paper and pencil for all participants
- flipchart & tape (or whiteboard if unavailable) & thick markers
- information from "The Resident's Handbook" and "The Don's Handbook"
- discussion checklist [page 2]
- evaluation sheet for each facilitator [page 3]

Check-in (15 min.)

everyone mentions their living situation
comments from group about previous week (classes & discussion meeting)
any thoughts that people want to bring up now

Exercise (15 min.)

facilitators hand out paper and pencils
participants write down the advantages and disadvantages of their living situation
facilitators write these down on flipchart, divided into living situations
these comments will become topics for general discussion (e.g., individual differences in pros and cons; living at home vs. living in residence; meeting people)

"Room-mates" (15 min.)

[this exercise should be generalizable to all living conditions; use "house-mate", "sibling", "companion" in conjunction with "room-mate"]
participants brainstorm the "perfect room-mate"; facilitators use flipchart
participants then brainstorm the "room-mate from hell"; facilitators ...
discussion comparing "Oscar" and "Felix"

Moms & Dons (15 min.)

facilitators explain the role of residence dons (esp. to those not in res.)
comparative analysis between parents and dons
how social life is affected by each

Discussion (30 min.)

general discussion on residential issues [discussion topics on page 2]

Evaluation (05-10 min.)

after session is over, facilitators fill out evaluation form [see page 3]

Next week: **Academic issues**

DISCUSSION CHECKLIST

Note: Most of the topics discussed will come from "Pros and Cons" exercise; write these down in the space below (and check if discussed in general discussion)

food	_____
housework	_____
independence	_____
responsibility	_____
room-mates	_____
space/privacy	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____
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	_____
	_____
	_____
	_____
	_____
	_____

Evaluation - Week Three

Note: For all scales, 1 = "not at all"; 5 = "very"

Exercise

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

"Room-mates"

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Moms & Dons

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Discussion

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

- WEEK FOUR -

MATERIALS NEEDED

- paper and pencil for all participants
- flipchart & tape (or whiteboard if unavailable) & thick markers
- material on Study Skills Workshops (Counselling Services)
- discussion checklist [page 2]
- evaluation sheet for each facilitator [page 3]

Check-in (15 min.)

participants indicate any mid-terms coming up
comments from group about previous week (classes & discussion meeting)
any thoughts that people want to bring up now

Note: This week's meeting has the structure of a general discussion throughout.

Balance (15 min.)

brief discussion on balancing academic and social life
participants mention problems with keeping a balance, and how they deal with it
this leads right into "Strategies"

Strategies (15 min.)

participants brainstorm different strategies for keeping academic and social life balanced, and for effective academic skills
facilitators mark these strategies on flipchart
facilitators discuss study skills; hand out material from Counselling Services
discussion on strategies brought up, such as time management, studying, note-taking, and "Getting help"

Getting help (15 min.)

continuing discussion on "Strategies", the focus is on getting academic help
discussion on the role of T.A.s; facilitators talk about their own T.A. experience
peer tutoring: getting help from each other
office hours: help from professors on a one-to-one basis

Discussion (30 min.)

general discussion on academic issues [discussion topics on page 2]

Evaluation (05-10 min.)

after session is over, facilitators fill out evaluation form [see page 3]

Next week: Previous social ties

DISCUSSION CHECKLIST

Note: This meeting will most likely carry itself as one big general discussion. As such, all topics mentioned in the outline above are also listed here (check if discussed at all)

balance academic & social life	_____
time management	_____
studying techniques	_____
note-taking strategies	_____
efficient textbook reading	_____
essay-writing	_____
Teaching Assistants	_____
peer tutoring	_____
professor's office hours	_____
expectation of grades	_____
"the bell-curve shocker"	_____
differences between departments	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____
	_____

Evaluation - Week Four

Note: For all scales, 1 = "not at all"; 5 = "very"

Balance

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Strategies

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Getting help

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Discussion

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

- WEEK FIVE -

MATERIALS NEEDED

- paper and pencil for all participants
- discussion checklist [page 2]
- evaluation sheet for each facilitator [page 3]

Check-in (15 min.)

people mention their experiences during Thanksgiving weekend
comments from group about previous week (classes & discussion meeting)
any thoughts that people want to bring up now

Exercise (10 min.)

paper and pencil are passed out to participants
everyone lists their previous support network (people they turned to for help regarding a recent problem - previous to start of university)
facilitators explain "previous support network" (as above), indicating that list is not specific to friends and family; could include relatives, teachers, religious figures, pets

Maintenance (20 min.)

participants mention whether their previous support network has changed since start of university
this leads to a discussion on how to maintain previous ties
facilitators discuss their own experience (maintaining ties over long term)
consequences (good and bad) of "losing touch"
serves as normalizing exercise; participants realize they're not alone in their feelings and fears
[do not focus on family only]

Discussion (30 min.)

general discussion on previous social ties [discussion topics on page 2]

Evaluation (05-10 min.)

after session is over, facilitators fill out evaluation form [see page 3]

Next week: **Final wrap-up**

DISCUSSION CHECKLIST

	(check if discussed)
homesickness	_____
moving	_____
holidays	_____
phone bill	_____
long-distance relationships	_____
living at home	_____
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	_____
	_____

Evaluation - Week Five

Note: For all scales, 1 = "not at all"; 5 = "very"

Exercise

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Maintenance

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

Discussion

Was this well received by the group?	1 2 3 4 5	Comments:
How effective was this?	1 2 3 4 5	
Was this presented smoothly?	1 2 3 4 5	

- WEEK SIX -

MATERIALS NEEDED
- PIZZA and drinks

Check-in (15 min.)
participants give their thoughts about "check-in"
comments from group about previous week (classes & discussion meeting)
any thoughts that people want to bring up now

Wrap-up (15 min.)
facilitators give a brief run-down of previous meetings and what was accomplished
participants give feedback on the intervention
facilitators mention October and March questionnaires
research team arrives; introductions

Party (60 min.)
'nuff said!

October 28, 1994

Dear Student,

Well, here we are already halfway through the Fall term. We hope you're enjoying your classes so far at Wilfrid Laurier, and that things are going well. We have greatly appreciated your help in our research so far. As we mentioned in the August letter, we're now sending out a second questionnaire to the participants of our transition study. As before, we ask that you take some time to read over each question, and to answer as honestly and completely as you can. Remember that we will be sending you another questionnaire, but not until March 1995!

You'll notice that some parts of this questionnaire are very similar to those of the August questionnaire. This is to compare your responses across time, so don't be surprised at this similarity. You will see that we are again interested in your opinions and feelings about many social and personal experience issues. There are no right and wrong answers to any of the questions. We simply need to gather some information about your attitudes and experiences on these issues. Remember, all information collected in this survey is strictly confidential, your participation is voluntary, and you may withdraw from the study any time. Please carefully read the instructions for each section of the attached survey, and return your completed questionnaire to us **as soon as possible** in the enclosed envelope. A summary of the results of our "transition to university" study will be mailed to you at your home address in May 1995.

You can send your completed questionnaire either in regular mail or through campus mail. Either way, we would like you to return your completed questionnaire in the enclosed envelope by **Monday, November 14**.

...2

We thank you again for your time and commitment. As we indicated before, your participation makes it possible for us to find out how we can help students adjust during this important transition, and hopefuily provide some benefits for future new students at university. As a small token of our appreciation, we've enclosed a key chain which we hoped you might find useful as a souvenir of our "Trans2U" project and your own participation. We look forward to receiving your completed survey soon!

Best wishes,

Dr. Bruce Hunsberger | Dr. Mark Pancer | Dr. Michael Pratt

P.S. from your facilitators:

We really appreciated you taking some time out of your Tuesdays/Wednesdays to come to the meetings. Your presence and input were greatly welcomed. We wish you all the best in upcoming years, and hope to see you around campus.

Thanks again,

Fiona / Susan | Daniel / Trevor

OCTOBER QUESTIONNAIRE ID Number: _____

Background Information

1. Please indicate your major: _____

2. What is the highest level of education that your parents completed?

mother	father	
☐	☐	did not finish high school
☐	☐	completed high school
☐	☐	some college or university
☐	☐	completed college or university degree
☐	☐	some post graduate training

Social Relationships

Below you will find a number of statements about relationships with other people. Please indicate your agreement or disagreement with each statement using the following scale:

-4 = very strongly disagree	+4 = very strongly agree
-3 = strongly disagree	+3 = strongly agree
-2 = moderately disagree	+2 = moderately agree
-1 = slightly disagree	+1 = slightly agree

0 = neutral

1. _____ There are people I can depend on to help me if I really need it.
2. _____ I feel that I do not have any close personal relationships with other people.
3. _____ There is no one I can turn to for guidance in times of stress.
4. _____ There are people who depend on me for help.
5. _____ There are people who enjoy the same social activities I do.
6. _____ Other people do not view me as competent.
7. _____ I feel personally responsible for the well-being of another person.
8. _____ I feel part of a group of people who share my attitudes and beliefs.
9. _____ I do not think other people respect my skills and abilities.
10. _____ If something went wrong, no one would come to my assistance.
11. _____ I have close relationships that provide me with a sense of emotional security and well-being.
12. _____ There is someone I could talk to about important decisions in my life.
13. _____ I have relationships where my competence and skill are recognized.
14. _____ There is no one who shares my interests and concerns.
15. _____ There is no one who really relies on me for their well-being.
16. _____ There is a trustworthy person I could turn to for advice if I were having problems.
17. _____ I feel a strong emotional bond with at least one other person.
18. _____ There is no one I can depend on for aid if I really need it.
19. _____ There is no one I feel comfortable talking about problems with.
20. _____ There are people who admire my talents and abilities.
21. _____ I lack a feeling of intimacy with another person.
22. _____ There is no one who likes to do the things I do.
23. _____ There are people I can count on in an emergency.
24. _____ No one needs me to care for them any more.

Social Support

Below, please list the people who are available to provide you with help and support. People can be supportive in many ways: they can help you do things, provide guidance and advice, listen to your problems, or just give you some company and consolation when you need it. On the page below, please list all the people you know whom you can count on for help or support. Give the person's initials and their relationship to you (e.g., TM -- Brother). You should include anyone who might be able to provide some support -- family members or relatives, friends, co-workers, teachers, professionals or others. In addition, please indicate how satisfied you are with the support you receive from this person.

SATISFACTION
-3 = very dissatisfied
-2 = dissatisfied
-1 = slightly dissatisfied
0 = neither satisfied nor dissatisfied
+1 = slightly satisfied
+2 = satisfied
+3 = very satisfied

	Initials	Relationship	Satisfaction
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____

Note: Please indicate people you have met since August by putting an asterisk (*) beside their initials.

Thoughts about University Life

In the next section, you will be asked to describe some thoughts about university life. It is important that you respond to the written questions as fully as you can, i.e., complete sentences. Take your time and reflect on each question. Answer each question as thoroughly as possible.

1. In general, what has university life been like?

2. What have classes and school work been like at university?

3. What has university social life been like?

4. In what ways do you think personal relationships play a part in adjustment to university?

Social and Personal Attitudes

Below you will find a variety of statements related to your attitudes and personal beliefs. Please use the following scale to indicate your agreement or disagreement with each statement:

-4 = ***very strongly disagree***	**+4** = ***very strongly agree***	
-3 = ***strongly disagree***	**+3** = ***strongly agree***	**0** = ***precisely neutral***
-2 = ***moderately disagree***	**+2** = ***moderately agree***	
-1 = ***slightly disagree***	**+1** = ***slightly agree***	

1. _____ I feel that I am a person of worth, at least on an equal basis with others.
2. _____ I feel that I have a number of good qualities.
3. _____ All in all, I am inclined to feel that I am a failure.
4. _____ I am able to do things as well as most other people.
5. _____ I feel I do not have much to be proud of.
6. _____ I take a positive attitude toward myself.
7. _____ On the whole, I am satisfied with myself.
8. _____ I wish I could have more respect for myself.
9. _____ I certainly feel useless at times.
10. _____ At times I think I am no good at all.

Feelings and Thoughts - Part I

Below is a list of the ways you might have felt or behaved recently. Please indicate how often you have felt this way *during the past week.* Use the scale provided for your responses.

1	2	3	4
rarely or none of the time (less than 1 day)	**some or a little of the time (1-2 days)**	**occasionally or a moderate amount of time (3-4 days)**	**most or all of the time (5-7 days)**

During the past week:

1. _____ I was bothered by things that usually don't bother me.
2. _____ I did not feel like eating; my appetite was poor.
3. _____ I felt that I could not shake off the blues even with help from my family or friends.
4. _____ I felt that I was just as good as other people.
5. _____ I had trouble keeping my mind on what I was doing.
6. _____ I felt depressed.
7. _____ I felt that everything I did was an effort.
8. _____ I felt hopeful about the future.
9. _____ I thought my life had been a failure.
10. _____ I felt fearful.
11. _____ My sleep was restless.
12. _____ I was happy.
13. _____ I talked less than usual.
14. _____ I felt lonely.
15. _____ People were unfriendly.
16. _____ I enjoyed life.
17. _____ I had crying spells.
18. _____ I felt sad.
19. _____ I felt that people dislike me.
20. _____ I could not get "going".

Feelings and Thoughts - Part II

The questions in this scale ask you about your feelings and thoughts *during the last month*. In each case, you will be asked to indicate *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate. Use the following scale to record your answers:

1	2	3	4	5
never	almost never	sometimes	fairly often	very often

A. In the last month, how often have you:

1. _____ Been upset because of something that happened unexpectedly?
2. _____ Felt that you were unable to control the important things in your life?
3. _____ Felt nervous or "stressed"?
4. _____ Dealt successfully with irritating life hassles?
5. _____ Felt that you were effectively coping with important changes that were occurring in your life?
6. _____ Felt confident about your ability to handle your personal problems?
7. _____ Felt that things were going your way?
8. _____ Found that you could not cope with all the things that you had to do?
9. _____ Been able to control the irritations in your life?
10. _____ Felt that you were on top of things?
11. _____ Been angered because of things that happened that were outside of your control?
12. _____ Found yourself thinking about things that you have to accomplish?
13. _____ Been able to control the way you spend your time?
14. _____ Felt difficulties were piling up so high that you could not overcome them?

B. In the last month, how often have each of these areas been a hassle or a problem for you?

1. _____ Academic deadlines
2. _____ Contact with girlfriend/boyfriend
3. _____ Future job prospects
4. _____ Relationship with people at work
5. _____ Money for necessary expenses
6. _____ Noise
7. _____ Organization of time
8. _____ Weight
9. _____ Household chores
10. _____ Family expectations
11. _____ Relationship with mother and/or father
12. _____ Academic bureaucracy
13. _____ Preparing meals
14. _____ Exercise
15. _____ Owing money
16. _____ Job satisfaction
17. _____ Financial security
18. _____ Relationship with girlfriend/boyfriend
19. _____ Relationship with brother/sister
20. _____ University program requirements

Experiences at University

The 67 items included in this survey are statements that describe university experiences. Read each one and decide how well it applies to you at the present time (within the last few days). For each item, record the appropriate number in the space next to that item.

1 2 3 4 5 6 7 8 9

<——————————————————————————————>

Doesn't apply to me at all — Applies very closely to me

1. _____ I feel that I fit in well as part of the university environment.
2. _____ I have been feeling tense or nervous lately.
3. _____ I have been keeping up to date on my academic work.
4. _____ I am meeting as many people, and making as many friends as I would like at university.
5. _____ I know why I'm in university and what I want out of it.
6. _____ I am finding academic work at university difficult.
7. _____ Lately I have been feeling blue and moody a lot.
8. _____ I am very involved with social activities in university.
9. _____ I am adjusting well to university.
10. _____ I have not been functioning well during examinations.
11. _____ I have felt tired much of the time lately.
12. _____ Being on my own, taking responsibility for myself, has not been easy.
13. _____ I am satisfied with the level at which I am performing academically.
14. _____ I have had informal, personal contacts with university professors.
15. _____ I am pleased now about my decision to go to university.
16. _____ I am pleased now about my decision to attend this university in particular.
17. _____ I'm not working as hard as I should at my course work.
18. _____ I have several close social ties at university.
19. _____ My academic goals and purposes are well defined.
20. _____ I haven't been able to control my emotions very well lately.
21. _____ I'm not really smart enough for the academic work I am expected to be doing now.
22. _____ Lonesomeness for home is a source of difficulty for me now.
23. _____ Getting a university degree is very important to me.
24. _____ My appetite has been good lately.
25. _____ I haven't been very efficient in the use of study time lately.
26. _____ I enjoy living in a university residence. (Please omit if you do not live in a residence; any university housing should be regarded as a residence.)
27. _____ I enjoy writing papers for courses.
28. _____ I have been having a lot of headaches lately.
29. _____ I really haven't had much motivation for studying lately.
30. _____ I am satisfied with the extracurricular activities available at university.
31. _____ I've given a lot of thought lately to whether I should ask for help from the Psychological/Counselling Services Centre or from a counsellor outside of university.
32. _____ Lately I have been having doubts regarding the value of a university education.

1 2 3 4 5 6 7 8 9

<———— ————>

Doesn't apply to me at all — Applies very closely to me

33. _____ I am getting along very well with my roommate(s) at university. (Please omit if you do not have a roommate.)
34. _____ I wish I were at another university.
35. _____ I've put on (or lost) too much weight recently.
36. _____ I am satisfied with the number and variety of courses available at university.
37. _____ I feel that I have enough social skills to get along well in the university setting.
38. _____ I have been getting angry too easily lately.
39. _____ Recently I have had trouble concentrating when I try to study.
40. _____ I haven't been sleeping very well.
41. _____ I'm not doing well enough academically for the amount of work I put in.
42. _____ I am having difficulty feeling at ease with other people at university.
43. _____ I am satisfied with the quality or calibre of courses available at university.
44. _____ I am attending classes regularly.
45. _____ Sometimes my thinking gets muddled up too easily.
46. _____ I am satisfied with the extent to which I am participating in social activities at university.
47. _____ I expect to stay at this university for a bachelor's degree.
48. _____ I haven't been mixing too well with the opposite sex lately.
49. _____ I worry a lot about my university expenses.
50. _____ I am enjoying my academic work at university.
51. _____ I have been feeling lonely a lot at university lately.
52. _____ I am having a lot of trouble getting started on homework assignments.
53. _____ I feel I have good control over my life situation at university.
54. _____ I am satisfied with my program of courses for this term.
55. _____ I have been feeling in good health lately.
56. _____ I feel I am very different from other students at university in ways that I don't like.
57. _____ On balance, I would rather be home than here.
58. _____ Most of the things I am interested in are not related to any of my course work at university.
59. _____ Lately I have been giving a lot of thought to transferring to another university.
60. _____ Lately I have been giving a lot of thought to dropping out of university altogether and for good.
61. _____ I find myself giving considerable thought to taking time off from university and finishing later.
62. _____ I am very satisfied with the professors I have now in my courses.
63. _____ I have some good friends or acquaintances at university with whom I can talk about any problems I may have.
64. _____ I am experiencing a lot of difficulty coping with the stresses imposed on me in university.
65. _____ I am quite satisfied with my social life at university.
66. _____ I am quite satisfied with my academic situation at university.
67. _____ I feel confident that I will be able to deal in a satisfactory manner with future challenges here at university.

Issues about University Life

For each topic listed down the side of this table, indicate your response to each of the three questions listed at the top by writing in a rating from the scale below that best expresses your view.

1 2 3 4 5

Not At All Moderately A Great Deal

Over the past six weeks, how much have you:	Thought about..	Talked with others about..	Felt satisfied with..
1. Relations with those you live with			
2. Making new friends at school			
3. Joining new social organizations			
4. How to manage schoolwork			
5. Financial problems			
6. Personal exercise and health			
7. Relations with boyfriend/girlfriend			
8. Balancing academic and social life			
9. Relations with people you knew before university			
10. How other people view university life			

Social Consultation

In this section, we want you to think about a personal issue that you experienced within the last four weeks, that you have been able to resolve. It could be a personal conflict you have had at university, a problem in your studies, something that happened with a parent or boyfriend/girlfriend, and so on. The following questions deal with this now-resolved problem. It is important that you respond to the written questions as fully as you can, i.e., complete sentences. Take your time and reflect on each question. Answer each question as thoroughly as possible.

1. What was the problem? Why was this a problem for you?

2. **What issues were involved? Why were these important issues?**

3. **What did you decide to do about the problem? Why did you decide this?**

4. **On a scale of 1 to 7, indicate how satisfied you were with this decision (1 = not at all satisfied; 4 = neither satisfied nor dissatisfied; 7 = very satisfied) :**

1 2 3 4 5 6 7

5. On a scale of 1 to 7, indicate how difficult this problem was for you to handle (1 = not at all difficult; 4 = neutral; 7 = very difficult) :

1 2 3 4 5 6 7

6. Please identify **by initials only** the people in your **peer** social network (i.e., people roughly your own age) with whom you discussed this problem. For each person, please further indicate:

a) when you discussed with this person - **before** the problem was resolved (while you were trying to solve it), **after** the problem was resolved, or **both** (check where appropriate);

b) to what extent this person saw the problem differently than you (1 = not at all differently; 5 = very differently);

c) to what extent you were satisfied with this person's support (1 = not at all satisfied; 5 = very satisfied).

	a) When?		b) Problem seen	c) Satisfaction
	Before	After	differently?	of support
PEERS				
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5

7. Now please do the same for the people in your **older people** social network (e.g., parents, teachers, religious figures, relatives) with whom you discussed this problem.

OLDER PEOPLE

_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5
_____	____	____	1 2 3 4 5	1 2 3 4 5

Your Comments

Please fill out these general questions on the discussion meetings you participated in.

1. **What were some of the things you got out of the group meetings?**

_____

_____

_____

_____

_____

2. **What do you think should be changed about the meetings?**

_____

_____

_____

_____

_____

3. **Please indicate the extent to which you experienced each of the following as a result of your participation in the group:**

1	2	3	4	5
Not At All		Moderately		A Great Deal

_____ **It helped me realize that I wasn't the only one who was experiencing some of the problems that I faced.**

_____ **It gave me a chance to "unload" some of my problems.**

_____ **It helped give me a different perspective on things.**

_____ **It gave me ideas about how to balance my academic and social life at university.**

_____ **I got to know some people with whom I feel I can talk to if I need to.**

_____ **It helped make the transition to university easier for me.**

Hello again! You might be aware that the Psychology Department has a research participation system set up, which acknowledges students' participation in research studies on campus, and offers them bonus credits for this participation. However, this only applies for students who are presently taking the Introductory Psychology course. If you are enrolled in Introductory Psychology, then you are eligible to receive two bonus credits for your participation in this research study. To get your first bonus credit, please print your name in the space below, as well as your student I. D. number and the section of the Introductory Psychology course you are taking.

Name (please print): _____

Student I. D. number: _____

PS 100 section: ____

Please return this sheet with your completed questionnaire. To ensure confidentiality and anonymity of responses, we will follow the same procedure with this sheet as with the consent form you filled out in August. That is, once we receive your envelope, we will keep this sheet separate from your completed questionnaire. Thank you once again for your time. When you respond to our final questionnaire in early March, you will then receive your second bonus credit in the same fashion.

February 27, 1995

Dear student :

Greetings again from the "transition to university" research team. We hope that your first year at WLU is going well and that you were able to get a bit of a breather during study week. When we last contacted you in November 1994, we mentioned that we would be asking you to complete another survey during second term, as a follow-up to your participation in the fall. That survey is included with this letter. We would greatly appreciate it if you could find the time to complete this questionnaire and return it to us within the next week or so.

Your continued participation in our investigation is very important to the success of our study. Through your responses, we hope to better understand students' adjustment to university life over the course of the first year. It is hoped that our findings will ultimately help to facilitate this transition. You may be interested to know that this study will be presented as part of a symposium discussing the transition to university for students, at this year's annual conference of the Canadiar Psychological Association, to be held in Charlottetown, P.E.I, in mid-June. We will mail you information about our findings, some time in May.

As before, participation is voluntary. You may withdraw at any time, or omit any question. Responses are confidential; no one outside the study will see your responses. Please answer each question as honestly as possible. As before, you can mail the completed survey back to us, or drop it off at the Psychology Department, now located on the second floor of the new Science Building. If you have any questions, you can still contact our Research Coordinator, Susan Alisat, now at extension 3520.

Next year we will be contacting some of this year's participants in order to follow them further into their university education. If you are contacted, we would be very appreciative of your continued support of this project. For now, we look forward to receiving the attached survey within the next week or two, **by March 15, 1995**. We wish you the best of success in completing your first year at WLU. Thank you for your continuing participation.

Sincerely,

Dr. Bruce Hunsberger Dr. Mark Pancer Dr. Michael Pratt

MARCH 1995 QUESTIONNAIRE Survey Number: _____

Social Relationships

Below you will find a number of statements about relationships with other people. Please indicate your agreement or disagreement with each statement using the following scale:

-4 = very strongly disagree	+4 = very strongly agree
-3 = strongly disagree	+3 = strongly agree
-2 = moderately disagree	+2 = moderately agree
-1 = slightly disagree	+1 = slightly agree
0 = neutral	

1. _____ There are people I can depend on to help me if I really need it.
2. _____ I feel that I do not have any close personal relationships with other people.
3. _____ There is no one I can turn to for guidance in times of stress.
4. _____ There are people who depend on me for help.
5. _____ There are people who enjoy the same social activities I do.
6. _____ Other people do not view me as competent.
7. _____ I feel personally responsible for the well-being of another person.
8. _____ I feel part of a group of people who share my attitudes and beliefs.
9. _____ I do not think other people respect my skills and abilities.
10. _____ If something went wrong, no one would come to my assistance.
11. _____ I have close relationships that provide me with a sense of emotional security and well-being.
12. _____ There is someone I could talk to about important decisions in my life.
13. _____ I have relationships where my competence and skill are recognized.
14. _____ There is no one who shares my interests and concerns.
15. _____ There is no one who really relies on me for their well-being.
16. _____ There is a trustworthy person I could turn to for advice if I were having problems.
17. _____ I feel a strong emotional bond with at least one other person.
18. _____ There is no one I can depend on for aid if I really need it.
19. _____ There is no one I feel comfortable talking about problems with.
20. _____ There are people who admire my talents and abilities.
21. _____ I lack a feeling of intimacy with another person.
22. _____ There is no one who likes to do the things I do.
23. _____ There are people I can count on in an emergency.
24. _____ No one needs me to care for them any more.

Background Information

1. What would you say your overall average GPA was in all your courses in first term this year? _____

2. Compared to what you expected when you first came to WLU, is this:
   - ☐ *much better* than you expected?
   - ☐ *better* than you expected?
   - ☐ *about the same* as you expected?
   - ☐ *worse* than you expected?
   - ☐ *much worse* than you expected?

Social Support

Below, please list the people who are available to provide you with help and support. People can be supportive in many ways: they can help you do things, provide guidance and advice, listen to your problems, or just give you some company and consolation when you need it. On the page below, please list all the people you know whom you can count on for help or support. Give the person's initials and their relationship to you (e.g., TM -- Brother). You should include anyone who might be able to provide some support -- family members or relatives, friends, co-workers, teachers, professionals or others. In addition, please indicate how satisfied you are with the support you receive from this person.

SATISFACTION
-3 = very dissatisfied
-2 = dissatisfied
-1 = slightly dissatisfied
0 = neither satisfied nor dissatisfied
+1 = slightly satisfied
+2 = satisfied
+3 = very satisfied

	Initials	Relationship	Satisfaction
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____

Note: Please indicate people you have met since October by putting an asterisk (*) beside their initials.

Thoughts about University Life

In the next section, you will be asked to describe some thoughts about university life. It is important that you respond to the written questions as fully as you can, i.e., complete sentences. Take your time and reflect on each question. Answer each question as thoroughly as possible.

1. **In general, what has university life been like?**

2. **What have classes and school work been like at university?**

3. What has university social life been like?

4. In what ways do you think personal relationships play a part in adjustment to university?

Social and Personal Attitudes

Below you will find a variety of statements related to your attitudes and personal beliefs. Please use the following scale to indicate your agreement or disagreement with each statement:

-4 = *very strongly disagree*	+4 = *very strongly agree*	
-3 = *strongly disagree*	+3 = *strongly agree*	0 = *precisely neutral*
-2 = *moderately disagree*	+2 = *moderately agree*	
-1 = *slightly disagree*	+1 = *slightly agree*	

1. _____ I feel that I am a person of worth, at least on an equal basis with others.
2. _____ I feel that I have a number of good qualities.
3. _____ All in all, I am inclined to feel that I am a failure.
4. _____ I am able to do things as well as most other people.
5. _____ I feel I do not have much to be proud of.
6. _____ I take a positive attitude toward myself.
7. _____ On the whole, I am satisfied with myself.
8. _____ I wish I could have more respect for myself.
9. _____ I certainly feel useless at times.
10. _____ At times I think I am no good at all.

Feelings and Thoughts - Part I

Below is a list of the ways you might have felt or behaved recently. Please indicate how often you have felt this way *during the past week.* Use the scale provided for your responses.

1	2	3	4
rarely or none of the time (less than 1 day)	**some or a little of the time (1-2 days)**	**occasionally or a moderate amount of time (3-4 days)**	**most or all of the time (5-7 days)**

During the past week:

1. _____ I was bothered by things that usually don't bother me.
2. _____ I did not feel like eating; my appetite was poor.
3. _____ I felt that I could not shake off the blues even with help from my family or friends.
4. _____ I felt that I was just as good as other people.
5. _____ I had trouble keeping my mind on what I was doing.
6. _____ I felt depressed.
7. _____ I felt that everything I did was an effort.
8. _____ I felt hopeful about the future.
9. _____ I thought my life had been a failure.
10. _____ I felt fearful.
11. _____ My sleep was restless.
12. _____ I was happy.
13. _____ I talked less than usual.
14. _____ I felt lonely.
15. _____ People were unfriendly.
16. _____ I enjoyed life.
17. _____ I had crying spells.
18. _____ I felt sad.
19. _____ I felt that people dislike me.
20. _____ I could not get "going".

Feelings and Thoughts - Part II

The questions in this scale ask you about your feelings and thoughts *during the last month*. In each case, you will be asked to indicate *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate. Use the following scale to record your answers:

1	2	3	4	5
never	almost never	sometimes	fairly often	very often

A. In the last month, how often have you:

1. _____ Been upset because of something that happened unexpectedly?
2. _____ Felt that you were unable to control the important things in your life?
3. _____ Felt nervous or "stressed"?
4. _____ Dealt successfully with irritating life hassles?
5. _____ Felt that you were effectively coping with important changes that were occurring in your life?
6. _____ Felt confident about your ability to handle your personal problems?
7. _____ Felt that things were going your way?
8. _____ Found that you could not cope with all the things that you had to do?
9. _____ Been able to control the irritations in your life?
10. _____ Felt that you were on top of things?
11. _____ Been angered because of things that happened that were outside of your control?
12. _____ Found yourself thinking about things that you have to accomplish?
13. _____ Been able to control the way you spend your time?
14. _____ Felt difficulties were piling up so high that you could not overcome them?

B. In the last month, how often have each of these areas been a hassle or a problem for you?

1. _____ Academic deadlines
2. _____ Contact with girlfriend/boyfriend
3. _____ Future job prospects
4. _____ Relationship with people at work
5. _____ Money for necessary expenses
6. _____ Noise
7. _____ Organization of time
8. _____ Weight
9. _____ Household chores
10. _____ Family expectations
11. _____ Relationship with mother and/or father
12. _____ Academic bureaucracy
13. _____ Preparing meals
14. _____ Exercise
15. _____ Owing money
16. _____ Job satisfaction
17. _____ Financial security
18. _____ Relationship with girlfriend/boyfriend
19. _____ Relationship with brother/sister
20. _____ University program requirements

Experiences at University

The 67 items included in this survey are statements that describe university experiences. Read each one and decide how well it applies to you at the present time (within the last few days). For each item, record the appropriate number in the space next to that item.

1 2 3 4 5 6 7 8 9

<——————— ———————>

Doesn't apply to me at all — Applies very closely to me

1. _____ I feel that I fit in well as part of the university environment.
2. _____ I have been feeling tense or nervous lately.
3. _____ I have been keeping up to date on my academic work.
4. _____ I am meeting as many people, and making as many friends as I would like at university.
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11. _____ I have felt tired much of the time lately.
12. _____ Being on my own, taking responsibility for myself, has not been easy.
13. _____ I am satisfied with the level at which I am performing academically.
14. _____ I have had informal, personal contacts with university professors.
15. _____ I am pleased now about my decision to go to university.
16. _____ I am pleased now about my decision to attend this university in particular.
17. _____ I'm not working as hard as I should at my course work.
18. _____ I have several close social ties at university.
19. _____ My academic goals and purposes are well defined.
20. _____ I haven't been able to control my emotions very well lately.
21. _____ I'm not really smart enough for the academic work I am expected to be doing now.
22. _____ Lonesomeness for home is a source of difficulty for me now.
23. _____ Getting a university degree is very important to me.
24. _____ My appetite has been good lately.
25. _____ I haven't been very efficient in the use of study time lately.
26. _____ I enjoy living in a university residence. (Please omit if you do not live in a residence; any university housing should be regarded as a residence.)
27. _____ I enjoy writing papers for courses.
28. _____ I have been having a lot of headaches lately.
29. _____ I really haven't had much motivation for studying lately.
30. _____ I am satisfied with the extracurricular activities available at university.
31. _____ I've given a lot of thought lately to whether I should ask for help from the Psychological/Counselling Services Centre or from a counsellor outside of university.
32. _____ Lately I have been having doubts regarding the value of a university education.

1 2 3 4 5 6 7 8 9

<———————— ————————>

Doesn't apply to me at all Applies very closely to me

33. _____ I am getting along very well with my roommate(s) at university. (Please omit if you do not have a roommate.)
34. _____ I wish I were at another university.
35. _____ I've put on (or lost) too much weight recently.
36. _____ I am satisfied with the number and variety of courses available at university.
37. _____ I feel that I have enough social skills to get along well in the university setting.
38. _____ I have been getting angry too easily lately.
39. _____ Recently I have had trouble concentrating when I try to study.
40. _____ I haven't been sleeping very well.
41. _____ I'm not doing well enough academically for the amount of work I put in.
42. _____ I am having difficulty feeling at ease with other people at university.
43. _____ I am satisfied with the quality or calibre of courses available at university.
44. _____ I am attending classes regularly.
45. _____ Sometimes my thinking gets muddled up too easily.
46. _____ I am satisfied with the extent to which I am participating in social activities at university.
47. _____ I expect to stay at this university for a bachelor's degree.
48. _____ I haven't been mixing too well with the opposite sex lately.
49. _____ I worry a lot about my university expenses.
50. _____ I am enjoying my academic work at university.
51. _____ I have been feeling lonely a lot at university lately.
52. _____ I am having a lot of trouble getting started on homework assignments.
53. _____ I feel I have good control over my life situation at university.
54. _____ I am satisfied with my program of courses for this term.
55. _____ I have been feeling in good health lately.
56. _____ I feel I am very different from other students at university in ways that I don't like.
57. _____ On balance, I would rather be home than here.
58. _____ Most of the things I am interested in are not related to any of my course work at university.
59. _____ Lately I have been giving a lot of thought to transferring to another university.
60. _____ Lately I have been giving a lot of thought to dropping out of university altogether and for good.
61. _____ I find myself giving considerable thought to taking time off from university and finishing later.
62. _____ I am very satisfied with the professors I have now in my courses.
63. _____ I have some good friends or acquaintances at university with whom I can talk about any problems I may have.
64. _____ I am experiencing a lot of difficulty coping with the stresses imposed on me in university.
65. _____ I am quite satisfied with my social life at university.
66. _____ I am quite satisfied with my academic situation at university.
67. _____ I feel confident that I will be able to deal in a satisfactory manner with future challenges here at university.

Final Questions

1. Looking back on your first year at university, what would you say were the most successful aspects of your adjustment? What were the most challenging or difficult aspects?

2. Looking back on your transition group experience in the fall, what would you say are the most important things you got out of it?

3. How often have you had any contact with other group members, since the group ended?

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly or more

4. Do you have any further comments you would like to mention regarding any aspects of the study?

THANK YOU!

July 4, 1995

Dear transition participant,

We hope that you have had a successful first year at Wilfrid Laurier University, and that you are enjoying the summer. The transition to university research team has been analyzing all the information collected this year, with your help. As promised, here is a short summary of the results of the study in which you participated.

In August of last year, we placed half of the study participants in one of three discussion groups, where they got together for six weeks to discuss issues dealing with university life; the other half of the participants did not receive this intervention, and as such were members of a comparison group. Regardless of group membership, all participants were sent three questionnaires: in August, November, and March of this past school year. We understand that completing these questionnaires was time-consuming, and we greatly appreciate your efforts in providing the information needed to evaluate our study.

Essentially, we wanted to see if increasing incoming students' feelings of social support (the amount of outside help available when faced with a problem) would have an impact on their adjustment to university. A previous study by the research team had shown a strong relationship between social support and adjustment to university. Therefore, we designed an intervention to increase social support, and in the process, to improve students' experience of the transition to university. To this end, you filled out measures of social support in all three questionnaires, and an adjustment to university scale and a "daily hassles" scale in November and March. We predicted that the "intervention" group would give higher scores on these measures than would the "non-intervention" group.

We found that the three "transition" groups showed some differences in their impact, and that this seemed related to the consistency with which they met and were well-attended. For the two groups that were most regular in meeting, we found that the discussions seemed to increase people's feelings of social support compared to the comparison group. Also, these "transition" groups reported higher levels of adjustment to university, and lower levels of daily hassles, than did the comparison group. Thus it would appear that the intervention succeeded in improving students' experience of the transition to university.

Many of you mentioned that the study was interesting, and that you were glad to be a part of it. Participants in the "transition" groups suggested that the intervention be held throughout the first term of school, with the possibility of shorter meeting times. We also believe that our intervention could be improved upon. However, the positive results indicated that social support is related to adjustment, and that such an intervention should be beneficial to students who might experience a difficult transition to university. The next step would certainly be more research and implementation in this area, in the hopes of maximizing students' adjustment to university life. We hope to continue this research in the future, building upon the findings that your group has provided.

We would also like to note that an article describing this research will be published in an upcoming issue of the *Canadian Journal of Community Mental Health*. The article will be entitled "Impact of a Social Support Intervention on the Transition to University". In publishing this information, we hope to encourage others to help us in studying ways to make the transition to university a more rewarding experience.

In the meantime, we would like to thank you once again for all your time and commitment. This study could not have been conducted without you, and we appreciate all your input. Have a great summer!

Best wishes,

Daniel Lamothe

Dr. Michael Pratt

Breakdown of Significant Effects in Analyses Including Intervention Group 2

Note: Significant effects in body of text, but missing here, are indicated in **bold**.
Significant effects listed here, but missing from body of text, are indicated in *italics*.

1. Intervention Hypothesis Analyses

- Set 1 analyses
  - Multivariate: gender, Wilk's $\lambda = .69^{*}$
    : time, Wilk's $\lambda = .46^{***}$
  - Social support: gender, $F(1, 42) = 5.71^{*}$
    : **group, $F(1, 34) = 4.15^{*}$**
  - Depression: time, $F(2, 82) = 7.34^{***}$
  - Stress: time, $F(2, 84) = 7,71^{***}$
  - Integrative complexity: Group X Gender, $F(1, 42) = 8.14^{**}$
    : *group, $F(1, 42) = 4.10^{*}$*
    : *gender, $F(1, 42) = 4.30^{*}$*
    : time, $F(2, 84) = 12.94^{***}$

- Set 2 analyses
  - Multivariate: time, Wilk's $\lambda = .79^{*}$
  - Adjustment to university: time, $F(1, 42) = 10.20^{***}$
    : **group, $F(1, 34) = 6.53^{*}$**
  - Daily hassles: **group, $F(1, 33) = 8.06^{**}$**

2. Analysis of Pretest Scores

  - Social support: *gender, $F(1, 51) = 4.60^{*}$*
  - Integrative complexity: gender, $F(1, 51) = 5.11^{*}$

- Set 1 analyses (with August scores as covariate)
  - Social support: covariate, $F(1, 41) = 36.96^{****}$ (B = 0.52)
  - Self-esteem: covariate, $F(1, 41) = 91.15^{****}$ (B = 0.89)
    : **time, $F(1, 34) = 4.19^{*}$**
  - Depression: covariate, $F(1, 40) = 17.16^{****}$ (B = 0.59)
    : time, $F(1, 41) = 9.95^{***}$
  - Stress: covariate, $F(1, 41) = 12.56^{***}$ (B = 0.52)
    : **Group X Time, $F(1, 34) = 4.46^{*}$**
    : time, $F(1, 42) = 8.41^{**}$
  - Integrative complexity: Group X Gender, $F(1, 41) = 5.46^{*}$ (B = 0.16)
    : time, $F(1, 42) = 8.41^{**}$

2. Analysis of Pretest Scores (cont.)

   - Set 2 analyses (with August social support as covariate)
     - Multivariate: time, Wilk's $\lambda = .79^{*}$
       : **group, Wilk's $\lambda = .74^{*}$**
     - Adjustment to university: time, $F(1, 42) = 10.20^{***}$
       : **group, $F(1, 33) = 5.76^{*}$**
     - Daily hassles: group, $F(1, 40) = 4.17^{*}$
       : **gender, $F(1, 32) = 4.67^{*}$**

3. Mediating Hypothesis Analyses

   - Social support as mediator
     - **November social support on November adjustment to university**
     - **November social support on March adjustment to university**

     [Group had non-significant effect on both November and March social support]

4. Coping Style Analysis

   - Task X Group on March social support, $t(42) = 2.06^{*}$
   - **Task X Group on March self-esteem, $t(34) = 2.95^{**}$**
   - Task X Group on March depression, $t(42) = -2.15^{*}$
   - **Task X Group on March stress, $t(34) = -2.73^{*}$**
   - **Emotion X Group on March daily hassles, $t(34) = 2.22^{*}$**
   - *Avoidance X Group on November depression, $t(48) = 2.05^{*}$*

5. Analysis of Secondary Variables

   - Checklist of supportive people
     - Total number of people listed: gender, $F(1, 42) = 11.32^{***}$
   - Grade point average
     - OAC as covariate: covariate, $F(1, 40) = 5.25^{*}$ (B = 0.14)
     - Correlation with grade expectation: $r(45) = .39^{**}$

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .005$. $^{****}p < .001$.