

#### ABSTRACT

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First semester freshman Ss (N = 450) at the University of Wisconsin-La Crosse completed the Coping Resources Inventory (CRI) and the General Well-Being Schedule (GWB). Results showed general well-being and social support were significantly related ( $p = .0001$ ) and moderately correlated ( $r = .34$ ), suggesting students utilizing social support during a stressful period positively impacted their general well-being. Further, the GWB subscales "Satisfying, Interesting Life" ( $p = .0001$ ) and "Emotional Behavioral Control" ( $p = .0001$ ) were significantly related to social support as shown in the following equation: social support =  $31.473 + (.171)$  Satisfying, Interesting Life +  $(.057)$  Emotional Control. This implies that increases in these subscale scores will result in an increase in social support and general well-being. The relationship between general well-being and total coping resources was also significant ( $p = .0001$ ) and moderately correlated ( $r = .46$ ). This suggests that those students utilizing coping resources positively impacted their general well-being. The GWB subscales "Satisfying, Interesting Life" ( $p = .0001$ ), "Emotional Behavioral Control" ( $p = .0001$ ), "Energy Level" ( $p = .0001$ ), and "Cheerful vs. Depressed Mood" ( $p = .0308$ ) were significantly related to total coping resources as indicated in the following equation: total CRI =  $23.78 + (.233)$  Satisfying, Interesting Life +  $(.078)$  Emotional Control +  $(.025)$  Energy Level +  $(.007)$  Cheerful Mood. This means as individual subscale scores increase, an increase in total coping resources and general well-being results.

RELATIONSHIPS BETWEEN SOCIAL SUPPORT AND GENERAL  
WELL-BEING IN AN INTRODUCTORY HEALTH,  
FITNESS, AND RECREATION COURSE

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TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS.....	iii
LIST OF APPENDICES.....	vii
CHAPTER	
I. INTRODUCTION.....	1
Background.....	1
Statement of the Problem.....	3
Null Hypotheses.....	3
Assumptions.....	3
Delimitations.....	4
Limitations.....	4
Definition of Terms.....	4
II. REVIEW OF RELATED LITERATURE	
Introduction.....	5
Disease Today.....	5
Quality of Life.....	8
Stress and Coping.....	9
Social Support.....	12
Social Learning Theory.....	16
College Curriculum.....	19

CHAPTER	PAGE
<b>III. METHODS AND PROCEDURES</b>	
Introduction.....	24
Subject Selection.....	24
Instrumentation.....	25
General Well-Being Schedule (GWB).....	25
Coping Resources Inventory (CRI).....	26
Demographic Information.....	27
Measurement Procedures.....	27
Statistical Analysis.....	28
<b>IV. RESULTS AND DISCUSSION</b>	
Introduction.....	29
Results.....	29
General Well-Being and Social Support.....	29
General Well-Being and Total Coping Resources.....	30
Social Support and GWB Subscales.....	30
Total Coping Resources and GWB Subscales.....	32
Discussion.....	33
General Well-Being.....	33
Total Coping Resources.....	35
Demographic Information.....	39
<b>V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</b>	
Summary.....	40
Conclusions.....	40

CHAPTER	PAGE
Recommendations.....	42
Recommendations for Programs.....	42
REFERENCES.....	47
APPENDICES.....	52

LIST OF APPENDICES

APPENDIX	PAGE
A. Cover Letter.....	52
B. General Well-Being Schedule.....	54
C. General Well-Being Schedule Validation Information.	58
D. Coping Resources Inventory.....	60
E. Demographic Information.....	62

CHAPTER 1  
INTRODUCTION

Background

In the past 80 years in the United States, a shift from infectious to chronic diseases has occurred. The prevalence of influenza, tuberculosis, measles, and polio has declined, whereas cardiovascular disease, lung cancer, and drug and alcohol abuse has increased (Terris, 1992). Even though these are preventable diseases, the lifestyle behaviors associated with them are difficult to change since they have been acquired over a period of time (Quadrel & Hartman, 1990).

Reciprocal determinism within social learning theory is a theory that can assist in understanding and modifying behaviors. Reciprocal determinism contends behavior occurs as a result of interdependent personal determinants; those internal factors influencing behavior, and environmental determinants; outside forces directing behavior. For example, an individual exerts a behavior which in turn causes a reaction in the environment. The individual evaluates this reaction and changes future behavior accordingly (Bandura, 1977).

Perry (1990) has defined environment within social learning theory as all factors affecting a person's behavior that are external to that person. This environment can be broken into both social and physical environments. The physical environment might include things like the size of a room or the availability of facilities. The social environment includes family members, friends, and peers at work or in the classroom (Perry, 1990) and all people with whom the person usually comes into contact. All ways in which one person might affect another person's behavior are social influences. One such influence is social support (Baranowski, 1990).

The findings of many studies suggest that social support has a positive effect on well-being (Peplau, 1994; Willis, 1991; Wrotman & Conway, 1983). Hayes and Oxley (1986) found positive social support was related to overall well-being in college students. They noted that the support system allowed for the individual to feel cared for and provided a feeling of interpersonal worth during a transitional time.

Because students often act independently for the first time upon entering college, the typical college-age student is confronted with many lifestyle choices. These considerations provide support for identifying the college student as an ideal candidate for preventive health education (McClaren & Sarris, 1985). The goal of many

health education programs, therefore, is to facilitate behavior change which can reduce risks for lifestyle-related problems and chronic diseases beginning with the college-aged population (Carlson, DeJong, Robinson, & Heusner, 1994).

#### Statement of the Problem

This study examined the relationship between social support and general well-being in college students enrolled in an introductory health, fitness, and recreation course.

#### Null Hypotheses

The following null hypotheses were formulated for this study and tested at the .05 level of confidence:

1. There will be no significant relationship between general well-being and social support.
2. There will be no significant relationship between any of the six General Well-being (GWB) subscales and social support.
3. There will be no significant relationship between general well-being and total coping resources.
4. There will be no significant relationship between any of the six GWB subscales and total coping resources.

#### Assumptions

The following were assumptions to the study:

1. Each subject answered the questions honestly.
2. The week prior to final exams, when the study was conducted, was a stressful period in students' lives.

### Delimitations

The following was a delimitation of the study:

1. Only students enrolled in HPR 105, Health and Physical Wellbeing: Learning to Create Healthy Lives, at the University of Wisconsin-La Crosse in the Fall semester, 1994 were used for this study.

### Limitations

The following were limitations of the study:

1. Only those attending HPR 105 on December 12, 1994 were used in the sample.
2. All subjects were volunteers coming from intact groups.

### Definition of Terms

Social Support - "The degree to which individuals are imbedded in social networks that are able to provide support in times of stress" (Hammer & Marting, 1987 p. 3).

Stress - "...the nonspecific (that is, common) result of any demand upon the body, be the effect mental or somatic" (Selye, 1985, p. 17).

General Well-being - a quality of life index or mental health status appraisal (Public Health Service, 1977).

## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### Introduction

This study examined the relationship between social support and general well-being in college students enrolled in an introductory health, fitness, and recreation course. In this chapter, literature was reviewed and categorized into sections as follows: (a) disease today, (b) quality of life, (c) stress and coping, (d) social support, (e) social learning theory, and (f) college curriculum.

#### Disease Today

During the 1920s, 30s, and 40s, a shift from infectious to chronic diseases occurred (Terris, 1992). The overall infant mortality and deaths due to communicable disease decreased (Rothenberg & Koplan, 1990). Today, the leading causes of death are chronic diseases such as heart disease, cancer, cerebrovascular disease, chronic obstructive pulmonary disease, and chronic liver disease (Terris, 1992). Rothenberg and Koplan (1990) described chronic diseases by their attributes: "...long latency, protracted clinical course, uncertain etiology, and no definite 'cure'" (p. 267). The overall death rate due to chronic diseases decreased by 25% between 1970 and 1987; the age-adjusted

death rate from heart disease declined by 33%, from cerebrovascular disease by 55%, and from liver disease and cirrhosis by 40% (Terris, 1992).

Chronic conditions not only affect overall mortality, but often cause disability in later life. With current mortality and disability statistics, an average of 66.8 out of 75.1 years, or 89% of life expectancy at birth, will be spent free of limitation in major activity (Stoto & Durch, 1991). Stoto and Durch (1991) define major activity as "...the predominant social role expected of a person of a given age" (p. 1459). Rothenberg and Koplan (1990) reported on a large national cross-sectional assessment conducted by the Supplement on Aging to the National Health Interview Survey (NHIS) in 1984. They found 11% of the noninstitutionalized U.S. population 65 years and older, or 4,600,000 people, are dependent in one or more personal care and home management activities. Projections predict this number will increase to 5,650,000 dependent persons over 65 by the year 2020.

The majority of chronic diseases are preventable (Temple & Burkitt, 1993). Heart disease, for example, results from high blood pressure, cigarette smoking, lack of exercise, and high serum cholesterol caused by a diet rich in saturated fat and cholesterol. Factors associated with cancer include tobacco, alcohol, chemical carcinogens,

radiation (Terris, 1992), and diet (Dwyer, 1993).

Cerebrovascular disease can be effectively prevented through the treatment of high blood pressure, chronic obstructive lung disease via controlling cigarette smoking, and chronic liver disease through limiting alcohol intake (Terris, 1992).

Lifestyle seems to play a crucial role in the prevention of chronic diseases (Terris, 1992). For example, 80% of cardiovascular disease and cancer deaths, about 70% of all deaths, could be prevented through a positive lifestyle program (Smith & Smith, 1990). Belloc and Breslow (1972) found eating breakfast every day, doing moderate exercise two to three times per week, maintaining moderate weight, not smoking, sleeping seven to eight hours per night, and not drinking, or drinking in moderation, significantly related to life expectancy and health.

Unfortunately, unhealthy behaviors are not easy to change. As Lau, Quadrel, and Hartman (1990) suggested, the term "lifestyle" reflects the difficulty in changing unhealthy habits. They state, "styles of living involve habitual modes of behavior that are, like all habits, very difficult to change" (p. 240). These habits are not absent one day and present at full strength the next; a period of time is required for them to develop (Lau et al., 1990).

### Quality of Life

Shillingford and Mackin (1991) believe only the individual can make lifestyle changes to improve his or her quality of life. According to Krupinski (1980), quality of life includes all aspect of existence. It is synonymous with well-being or psychological wellness (Peplau, 1994). Quality of life also appears to be a state rather than a trait (King, 1994). It "...is not a static state, nor is it a firm goal, but rather it is a moving target - about the condition of a person's life varying with changing circumstances" (Peplau, 1994, p. 10).

Quality of life can be measured both objectively and subjectively (King, 1994). It can be defined objectively, by social indicator measures like employment, income, and hospitalization; and subjectively, by wellbeing and satisfaction measures (Krupinski, 1980). However, quality of life is primarily a perception formed after sensing, observing, or recognizing intuitively something experienced. From perception, an opinion or judgment is formed and inferences are made to the individual's life (Peplau, 1994). Therefore, how people appraise or perceive input is more important than the objective nature of the input (Krupinski, 1980; Lazarus & Folkman, 1984).

### Stress and Coping

Stress, having a multitude of definitions, seems to affect an individual's susceptibility to disease and overall well-being. Selye (1976), a pioneer in the stress field, identified stress as "...the nonspecific result of any demand upon the body" (p. 55). Selye further stated that a variety of dissimilar situations, such as emotional arousal, fatigue, pain, fear, humiliation, effort, unexpected success, and concentration are capable of producing stress. Therefore, no single factor can be pinpointed as the cause of the stress reaction.

Selye (1976) described the reaction to stress as the General Adaptation Syndrome (GAS). First, in the stage of alarm, the body's defense mechanisms react and become equipped to oppose the influence of the stressor, or the agent which causes the stress reaction. If one survives the alarm stage, the stage of resistance is entered. In this stage, hormonal and chemical changes are activated as a means of preserving or regaining the needed biochemical and fluid balance to counteract the noxious effects. The stage of exhaustion is entered when the demand is severe and applied for an appreciable amount of time. The body's adaptability, or adaption energy, is not indefinite. Constant stress over time leads to wear and tear on the body, depleting this finite amount of energy.

The initiation of GAS is dependent upon the individual's perception of the stressor (Pargman, 1986). Whether a stimulus is interpreted as a stressor depends upon previous experiences and the physical and social contexts in which they were formulated. Six broad classifications of stressors make distinctions among stressors. These are (a) social stressors, or reactions involving other individuals, (b) physical stressors, including pain or physical trauma, (c) chemical and biochemical stressors, involving adverse reactions to foods, medications, or overproduction of one's own body chemicals, (d) bacterial stressors, resulting in an infection with swelling, inflammation, or fever, (e) climatic stressors, focusing on environmental temperature or barometric pressure (Pargman, 1986) and, (f) psychological stressors, or the relationship between the person and the environment (Lazarus & Folkman, 1984).

Psychological stressors have been found to lead to both infective and noninfective illness. Stress may enhance the vulnerability to certain diseases by exerting an immunosuppressive effect on the immune system, or the body's protection from disease causing microorganisms, allergies, and auto-immune disorders (Abiodun, 1994). In his review of literature, Abiodun (1994) cited studies in which tuberculosis patients had decreased phagocytic activity in white blood cells during emotional excitement. In another

study, students had the highest antibody titres to three herpes viruses at the time of peak stress. Increased blood pressure and coronary heart disease have also been associated with stress (Manuck, Kasprovicz, & Muldoon, 1990), as well as the development of cancer (Maticsek-Grossarth, Bastiaans, & Kanazir, 1985), peptic ulcers in the stomach and upper intestines, and nervous disturbances (Selye, 1985).

Lazarus and Folkman (1984) emphasized the significance of psychological stress when stating it "...is a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p. 21). Fortunately, coping can counteract stressors. Through coping, one is "...constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984). Ultimately, successful coping contributes to an overall sense of social competence or self esteem, which in turn may positively affect health (Cwikel, Dielman, Kirscht, & Israel, 1988).

The way in which people cope also depends upon the resources that are available to them and the constraints that inhibit the use of resources. Lazarus and Folkman

(1984) define coping resources as "...the resources which a person draws on in order to cope" (p. 158). Hammer and Marting (1987) define them as "...those resources inherent in individuals that enable them to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to a stressor, or to recover faster from exposure" (p. 2).

#### Social Support

One coping resource is social support. Hammer and Marting (1987) define social support as "the degree to which individuals are imbedded in social networks that are able to provide support in times of stress" (p. 3). However, in their review of literature, Wohlgemuth and Betz (1991) found researchers define social support differently. Some assess social support according to structural dimensions, such as size, density, and number of family members. Others focus on the support system's functions, or the types of support being offered. A final approach studies individual satisfaction with the support received.

Regardless of the definition, human relationships are a major determinant in quality of life. As Peplau (1994) stated, "everyone is dependent upon someone else for something, in some degree, in a very large portion of their lives" (p. 13). Being independent, freedom from the control of others, and autonomous, or self-governing, are only

relative qualities of living as is demonstrated in the lonely experiences of an isolated person (Peplau, 1994).

High levels of support in interpersonal relationships have been found to lead to overall well-being (Peplau, 1994). Willis (1991), for example, has shown that high levels of support in interpersonal relationships help people to manage stress. This is thought to occur as a result of social integration because "...it provides a feeling of predictability and coherence in life, increases access to useful resources in the community or has a prevailing effect on mood because of regular social interaction" (p. 268). He also stated that relationships "...help persons to deal with emotional distress, provide communications that enhance self-esteem and self-acceptance or provide useful advice and information that help to guide more effective coping efforts" (p. 279).

Social support has also been associated with preventive health behaviors. For example, Gottlieb and Green (1984) found social ties were positively related to four health practices: never smoking, exercise, desirable weight, and sleeping 7 to 8 hours a night. Additionally, Zimmerman and Conner (1989) found that friends, relatives and coworkers were positive influences in initially changing health-related behaviors and encouraging maintenance of these changes over time in a group of employees enrolled in a

worksite health promotion program. Finally, respondents with many close friends were more likely to reduce smoking and decrease their consumption of fried foods (Mullin, Hersey, & Iverson, 1987).

Two models attempt to describe how social support supplies these beneficial effects. The "buffering hypothesis" contends social support is related to well-being only for people experiencing stress. In this model, social support serves as a coping resource that blocks or lessens the impact of stressors, but is not helpful for people who are relatively stress free. On the other hand, the "direct effects" hypothesis suggests that social support is beneficial to individuals regardless of the level of stressors in their lives. These hypotheses are not mutually exclusive, however; under stressful conditions social support could have both direct and buffering effects (Mallinckrodt & Leong, 1992).

Several suggestions as to how direct mechanisms operate have been postulated. In their review of research, Cwikel, et al. (1988) showed an inverse relationship between social ties and mortality. They further postulate that social ties affect health behavior because a more socially integrated person takes better care of his or her health, whereas a more socially isolated person takes more health risks. Strong social ties may also encourage more successful coping

styles, such as problem-focused coping. Problem-focused strategies like problem solving, decision making, or direct action function to alter the stressful situation itself rather than dealing with stress through avoidance and withdrawal (Lazarus & Folkman, 1984).

Women who often report higher stressors and reactions to stressors than men are more likely to take advantage of social support benefits (Gadzella, 1994; Mallinckrodt & Leong, 1992). One reason may be due to women's socialization; girls learn to express their emotions which may encourage the development of mutually supportive social relations. Boys, on the other hand, are taught to repress their emotions and act autonomously. Additionally, females tend to disclose more than males, and men are less likely to share half-formulated plans with their friends. Because of this, women may utilize support to formulate effective coping plans and, thus, have greater feelings of control than men (Krause & Keith, 1989). Ashton and Fuehrer (1993), also finding women were more likely to seek support than men, suggested this was because women feel free to seek both emotional and instrumental support. Men, on the other hand, may avoid seeking emotional support due to a possibility of entering a gender-role inappropriate situation.

Social support systems have been related to overall well-being in college students. Social support may allow

the individual to feel cared for and provide a feeling of interpersonal worth during a transitional time (Hayes & Oxley, 1986; Robbins, Lese, & Herrick, 1993). Valentiner, Holahan, and Moos (1994) studied a group of college freshman and found that those having initial parental support were associated with subsequent changes in psychological adjustment both directly and indirectly through adaptive coping strategies. Brack, Gay, and Matheny (1993) also indicated that relationships with family and friends were highly related to perceived coping resources. During times of stress, students with low goal-directedness seemed to benefit from having relationships to discuss their problems. High goal-directed individuals did not benefit from these relationships, but were able to benefit by having relationships that made available people with whom activities could be shared (Robbins, et al., 1993).

#### Social Learning Theory

Several theories have attempted to assist people in maintaining healthy lifestyles or to change behaviors to reduce risk prior to a diseased state (Rose-Colley, Eddy, & Glover, 1989). When health professionals first became interested in changing health related behaviors, providing information or knowledge to the public was emphasized. This was thought to automatically change behaviors through some process of enlightened self-interest. The results, however,

revealed that merely providing information did not change behavior (Bettinghaus, 1986). The lack of effectiveness of earlier models has led to the development of many other theories attempting to identify areas relevant to behavior modification (Baranowski, 1990).

One theory that encompasses social support is Albert Bandura's social learning theory (SLT) (Baranowski, 1990). One major proponent of this theory is self-regulation. This process involves several components in which individuals exercise some influence over their behavior by selecting, organizing, and transforming stimuli. This is accomplished through self-reinforcement or individuals rewarding themselves for achieving self-prescribed standards. Also, self-rewards arise from standards that are met, leading to self-motivation. Self-reactions through a judgmental function, whether rewarding or punishing, occur. Comparisons with others in similar situations result in performance judgment, whether positive or negative. Finally, one's previous behavior is used as the reference point for subsequential behaviors (Bandura, 1977).

The component of reciprocal determinism within SLT explains this self-regulatory behavior through its interlocking of personal and environmental determinants (Bandura, 1986). Personal determinants are those internal factors that influence and direct the behavior of the

individual. Environmental determinants are those outside forces directing behavior. Both factors are interdependent and are only a potentiality until activated by the individual (Bandura, 1977).

The formation of behavior is a continuous process. A given behavior produces a counterreaction in the environment which in turn changes the behavior accordingly and, therefore, changes the preceding environmental response. In addition, as can be seen in Figure 1, during ongoing interchanges, the same event can be a stimulus, a response, or an environmental reinforcer (Bandura, 1977). This continuous reciprocal interaction among environment, person, and behavior implies that neither environment alone nor person alone can determine behavior as once thought (Baronowski, 1990).

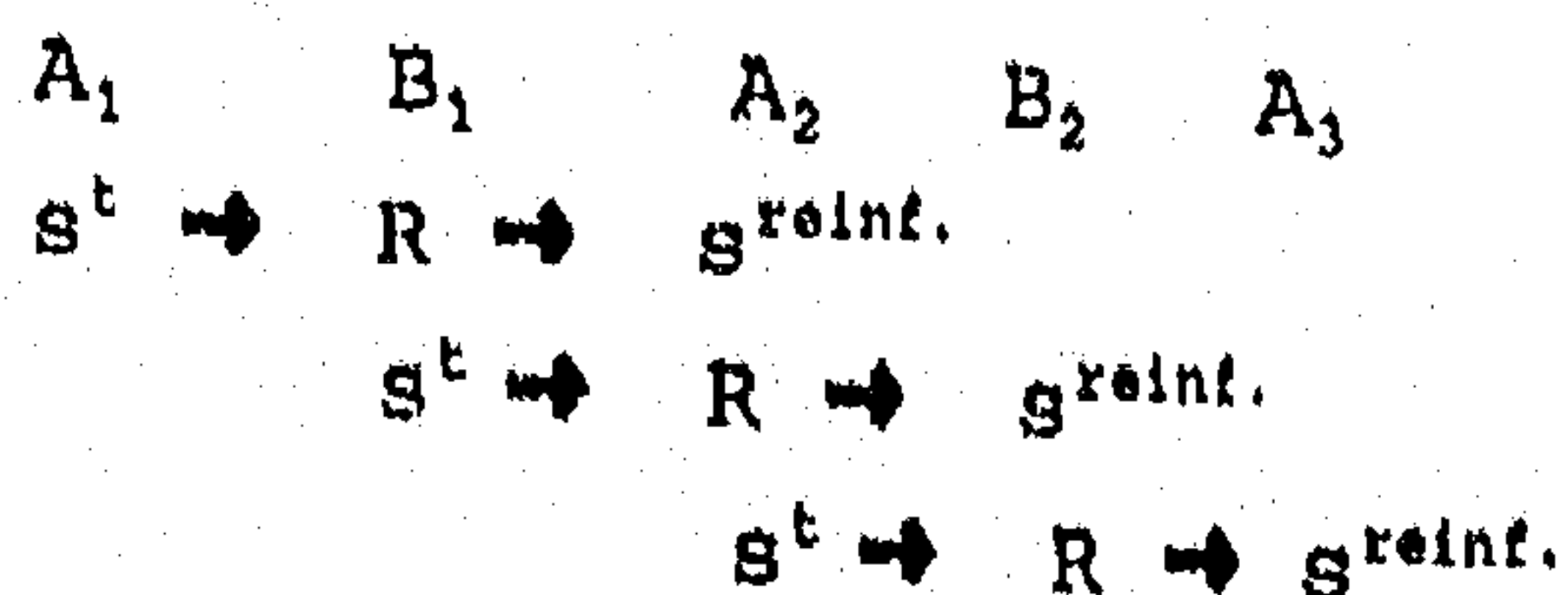


Figure 1. Illustration of how the same social behavior can be a stimulus, a response, or a reinforcer depending on where one begins the analysis in the continuous flow of social interaction. From Social Learning Theory by A. Bandura, 1977.

Perry (1990) viewed the environment within SLT as an objective notion of all the factors that can affect a person's behavior, but that are physically external to that person. It can be physical, including things such as size and temperature of a room or the availability of needed facilities. It can also be social, including family members, friends, peers at work or in the classroom (Perry, 1990), and all people with whom the person usually comes into contact (Baranowski, 1990).

Baranowski (1990) believed the greatest importance within the social environment are those people with whom the person has frequent regular contact. For most people, these would include friends, immediate family members, coworkers or classmates, and members of groups such as religious or service organizations. All ways in which one of these people may affect another person's behavior are termed "social influences". One such influence that has been associated with health behavior is social support (Baranowski, 1990).

#### College Curriculum

Young students transitioning into college life may develop positive health behavior changes through social support (Lau, et al., 1990). To illustrate this, Lau, et al. (1990) proposed a "windows of vulnerability" model. This model suggests parental influence on their child's

health beliefs and behavior will persist throughout his or her lifetime unless the child is exposed to social models whose health beliefs differ from the parents' at certain critical periods. Three "periods of vulnerability" exist in which individuals are particularly open to socialization agents other than their parents. The first is during adolescence as they seek independence from their parents. The second is when grown children leave home and begin to live on their own for the first time. During this time, those basic health behaviors generally under parental control have been transferred to the control of the individual. The final period of vulnerability is when the child begins a home environment with a significant other.

Students often act independently for the first time upon entering college (McClaren & Sarris, 1985). At this time, they are faced with many challenging health risks and decisions (Axiotis, Symons, Pepe, & Dubick, 1991) including food selection, use of alcohol and other drugs, health care habits, and leisure activities (McClaren & Sarris, 1985). Since health behavior patterns and habits are either reinforced or established during this time, they have the potential to influence health status (Axiotis et al., 1991). Therefore, the college student is an ideal candidate for preventive health education (Carlson, et al., 1994).

Recognizing the potential impact higher education can

have on health and quality of life, many institutions are embracing a wellness philosophy. Wellness and fitness courses have been designed to equip students with the needed information and motivation to make healthy lifestyle choices. Unfortunately, educators are unclear what motivates people to change their behaviors resulting in conflicting approaches (McClanahan, 1993).

Cognitive and activity approaches are commonly utilized by professors in educational institutions. The cognitive approach suggests that knowledge, or an understanding of health and wellness concepts, will motivate and move people toward the adoption of positive lifestyle behaviors. The activity approach, on the other hand, suggests more than information is needed to change attitudes and behavioral patterns. This approach involves experiential learning by creating an environment in which participation is allowed in the learning process (McClanahan, 1993). Through her study at Memphis State University, McClanahan (1993) found wellness programs including participation in physical activity and involvement in the learning process were more effective than those using a cognitive-based approach that relied on lecture and paper-pencil assessments.

College health curricula may also be more useful when focused on health information, products, and services that have immediate relevance to the students (Sofalvi, 1991).

As Ben-Sira stated, "why...should healthy people pay the 'cost' of the recommended behavior (i.e. forgo rewards such as particular foods, smoking) if presently they are already enjoying the 'promised' rewards (i.e. good health)" (1991, p. 211). Courses, therefore, should go beyond the traditional topics and include areas such as campus health services, student health insurance, the sale of contraceptives on campus, the campus food service, and issues surrounding the sale of alcohol on campus. Courses should also include consumer issues, such as environmental practices and respecting the rights of women and minorities, from a societal standpoint instead of a purely personal viewpoint (Sofalvi, 1991).

Even with the prime opportunity of influencing college students' health behaviors, a small number of students are being reached. Kittleson and DeBarr (1991) surveyed the universities listed in the Eta Sigma Gamma Directory of Health Education Programs. They found 85.8% of the institutions offered a general education course. Of these, only 16.5% reported all undergraduate students were required to take the course and only 59% required health education majors to complete their general health education course. Additionally, 23.2% of general health education courses in those surveyed were taught by part-time individuals, making research regarding the qualifications of these instructors

necessary. Thirteen respondents indicated they did not offer a health class, but did offer a wellness class which combined the health and physical education departments. Overall, slightly less than 3.9% of the 2.8 million students enrolled at the institutions surveyed completed a general health education course (Kittleson & DeBarr, 1991) at a time when there is a tremendous potential to influence the health status of college students (Axiotis et al., 1991).

CHAPTER III  
METHODS AND PROCEDURES

Introduction

This study examined the relationship between social support and General Well-Being (GWB) scores of those enrolled in HPR 105, a required introductory health, fitness, and recreation course at the University of Wisconsin-La Crosse (UW-L). The methods will be discussed in the following categories: subject selection, instrumentation, measurement procedures, and statistical design.

Subject Selection

All students attending the required HPR 105 at UW-L on December 12, 1994 were invited to participate in the study. They were informed that participation was not mandatory and would not affect their grade in the class. By completing the surveys, however, they would be implying consent for the use of their results. They were also assured anonymity and informed that the completion of the forms would be used to measure group results; individual scores would not be reviewed (see Appendix A).

### Instrumentation

Many instruments are available to assess well-being and social support. For the purposes of this research, the General Well-Being Schedule and the Coping Resources Inventory were used.

#### General Well-Being Schedule (GWB)

The GWB was used to assess the subjects' perceived quality of life (see Appendix B). The Public Health Service (1977) described the GWB as "...a highly structured instrument for assessing self-representations of subjective well-being and distress" (p.1). The instrument has six subscales that indicate: (a) freedom from health, (b) energy level, (c) satisfying life, (d) cheerful mood, (e) relaxed vs. tense and, (f) emotional control. The "total" score is the sum of these subscales and represents general well-being, with higher scores representing greater well-being.

From the results of a survey ( $N = 6,931$ ) conducted by the Public Health Service (1977), a total score between 71-110 indicated positive well-being, scores of 56-70 represented problem-indicative stress, and those between 0-55 identified clinically significant distress. This normative study demonstrated a mean of 80.3 and standard deviation of 17.7 (see Appendix C). The reliability of the GWB has been found to be  $r = .851$  for the total scale with a 3 month period between testing periods.

### Coping Resources Inventory (CRI)

The CRI emphasizes the use of resources rather than deficits when trying to manage stress (see Appendix D). It assesses coping resources in five domains. Hammer and Marting (1987) describe these as: (a) cognitive, "the extent to which individuals maintain a positive sense of self-worth, a positive outlook toward others, and optimism about life in general" (p. 3); (b) social, "the degree to which individuals are imbedded in social networks that are able to provide support in times of stress" (p. 3); (c) emotional, "the degree to which individuals are able to accept and express a range of affect" (p. 3); (d) spiritual/philosophical, "the degree to which actions of individuals are guided by stable and consistent values derived from religious, familial, or cultural tradition or from personal philosophy" (p. 3); and (e) physical, "the degree to which individuals enact health-promoting behaviors believed to contribute to increased physical well-being" (p. 3).

In this study, the total CRI score was used to measure all available coping resources and the social subscale score was used to assess the degree individuals rely on social networks as means of coping. As Hammer and Marting (1987) indicate, the higher the scale score, the higher the resource utilization. Because each of the scales have

different numbers of items, direct comparisons among the scales is impossible. Therefore, all raw scores can be converted to standard scores. When doing so, the standardized scores have a mean of 50 and standard deviation of 10 points. Thus, approximately 95% of individuals will have standard scores that fall between 30 and 70.

#### Demographic Information

Demographic information regarding gender, academic status, age, race, and marital status was collected (see Appendix E). In each of these demographic categories, students were asked to mark the answer that best applied to them.

#### Measurement Procedures

All students attending the required HPR 105 course on December 12, 1994 were invited to participate in the study. This date was chosen because it was a stressful period in the students' lives; the last HPR 105 exam was two days later and the finals period started the following week. All students were given a packet including the above instruments and given class time to complete them. All students completing the instruments were used in the statistical analysis.

### Statistical Analysis

Statistical analyses were performed with the SAS program. The Pearson-product moment correlation coefficient tested the relationships between general well-being and social support as well as general well-being and total coping resources. A forward stepwise regression analysis tested for a significant relationship between the six GWB subscales and social support and also for a significant relationship between the six GWB subscales and total coping resources. This procedure was chosen to identify which, if any, of the six subscales made a significant contribution to social support and total coping resources scores.

## CHAPTER IV

### RESULTS AND DISCUSSION

#### Introduction

This study was designed to identify the relationships between social support and general well-being in college students enrolled in a required introductory health, fitness, and recreation course. A total of 466 students enrolled in HPR 105 completed the research instruments. Of these, 16 did not complete two or three of the instruments. Therefore, only 450 students that completed all instruments or had missing data on only one of the instruments were used. This chapter discusses the results derived from the data collected.

#### Results

##### General Well-Being and Social Support

The following null hypothesis was examined first: There will be no significant relationship between general well-being and social support. The Pearson-product moment correlation coefficient tested the degree to which the two variables covary. Results showed general well-being ( $M = 65.61$ ,  $SD = 13.79$ ) and the standardized social support score ( $M = 52.40$ ,  $SD = 9.44$ ) were moderately correlated ( $r = .34$ ). Because the variables were significantly related ( $p = .0001$ ), the null hypothesis was rejected.

### General Well-Being and Total Coping Resources

The following null hypothesis was examined next: There will be no significant relationship between general well-being and total coping resources. The degree to which the two variables covary was tested with the Pearson-product-moment correlation coefficient. General well-being ( $M = 65.61$ ,  $SD = 13.79$ ) and the standardized total coping resources score ( $M = 50.90$ ,  $SD = 9.89$ ) were moderately correlated ( $r = .46$ ). The null hypothesis was rejected since the variables were significantly related ( $p = .0001$ ).

### Social Support and GWB Subscales

The following null hypothesis was examined next: There will be no significant relationship between social support and any of the six GWB subscales. A forward stepwise regression analysis assessed the predictive ability of each GWB subscale score.

As shown in Table 1, the subscales "Emotional Behavioral Control" ( $p = .0001$ ) and "Satisfying, Interesting Life" ( $p = .0001$ ) were the only statistically significant variables. As indicated by statistical analysis, the partial R-squared for the subscale "Satisfying, Interesting Life" was .171, which means approximately 17.1% of the variability in social support scores can be explained by this subscale. Likewise, the partial R-squared was .057 for the subscale "Emotional

Behavioral Control", meaning about 5.7% of the variability in social support can be explained by this subscale.

Table 1. Forward stepwise regression for social support and GWB subscales of college students enrolled in an introductory health, fitness, and recreation course (N = 450).

Subscale	R <sup>2</sup>	p
Satisfying Life	.171	.0001
Emotional Control	.057	.0001
Cheerful Mood	.004	.1104
Relaxed vs. Tense	.002	.2601
Energy Level	.002	.3436
Freedom From...	.001	.4065

The following regression equation was generated from the forward stepwise regression analysis:

$$\text{Social Support} = 31.473 + (.171) \text{ Satisfying Life} + (.057) \text{ Emotional Control}$$

This regression equation represents a linear relationship between the subscales "Satisfying, Interesting Life" and "Emotional Behavioral Control" and social support. When

these individual subscale scores are incorporated into the equation, the individual's standardized social support score can be predicted. In other words, an increase in either of these subscales will result in an increase in social support. The null hypothesis was rejected because two of the six variables were significant.

#### Total Coping Resources and GWB Subscales

Finally, the following null hypothesis was examined: There will be no significant relationship between any of the six GWB subscales and total coping resources. A forward stepwise regression tested the predictive ability of each of the subscales.

The subscales "Satisfying, Interesting Life" ( $p = .0001$ ), "Emotional Behavioral Control" ( $p = .0001$ ), "Energy Level" ( $p = .0001$ ), and "Cheerful vs. Depressed Mood" ( $p = .0308$ ) were statistically significant at the  $p < .05$  level. The equation below illustrates the predictive ability of each utilizing the partial R-squared.

$$\begin{aligned} \text{Total Coping Resources} &= 23.78 + (.233) \text{ Satisfying Life} \\ &+ (.078) \text{ Emotional Control} + (.025) \text{ Energy level} \\ &+ (.007) \text{ Cheerful Mood} \end{aligned}$$

This means the subscales "Satisfying, Interesting Life" (23.3%), "Emotional Behavioral Control" (7.8%), "Energy

Level" (2.5%), and "Cheerful vs. Depressed Mood" (.7%) can predict an individual's standardized total coping resources scores. Therefore, an increase in the subscale scores will result in an increase in the standardized total coping resources score. Because four of the six subscales were significant, the null hypothesis was rejected.

### Discussion

#### General Well-Being

The total GWB score ( $M = 65.61$ ,  $SD = 13.79$ ) indicates the students were experiencing mild, but bordering on moderate, problem-indicative stress (as indicated by the GWB validation study in Appendix C). Using the total GWB score, the population falls within the 16th percentile of a national sample,  $N = 6,931$  (Public Health Service, 1977). This may indicate students' general well-being was negatively impacted because of stress during the final exam period.

Even though students were experiencing mild to moderate problem-indicative stress, a significant relationship between social support and general well-being was found ( $p = .0001$ ). This seems to suggest that those students with high social support were utilizing others as a coping resource during their time of stress, thus positively impacting their general well-being. However, the moderate correlation ( $r = .34$ ) between general well-being and social support indicates

many were not utilizing social support as a means of coping with stress. This may be because some students have not had the opportunity to develop a social support network by the end of the first semester in a new environment.

The moderate correlation between social support and general well-being and the high level of stress in this population supports the "direct effects" hypothesis, or the idea that social support is beneficial to individuals regardless of the level of stress in their lives (Mallinckrodt & Leong, 1992). Those students that developed social support during the first semester may have gained "direct effects" by being able to better cope with stress. On the other hand, the high stress level of the population suggests many did not benefit from social support because, at this early stage in their college career, they may not have fully developed a social network.

The GWB subscales, "Satisfying, Interesting Life" ( $p = .0001$ ) and "Emotional Behavioral Control" ( $p = .0001$ ) were significantly related to general well-being. Additionally, a linear relationship was found between these variables, indicating an increase in the subscales leads to an increase in social support. When predicting social support scores, 17% can be attributed to the subscale "Satisfying, Interesting Life" and 5.7% to "Emotional Behavioral Control".

The subscale, "Satisfying, Interesting Life", indicated the largest portion of variability in social support. This may be because relationships with others give meaning and provide purpose in life. Peplau (1994) supports this finding as he suggests relationships are a major determinant of quality of life and overall well-being. Further, he implies social integration affects well-being because it "...provides a feeling of predictability and coherence in life, increases access to useful resources in the community, or has a prevailing effect on mood because of regular social interaction" (p. 268).

A significant relationship between "Emotional Behavioral Control" and general well-being was found. This implies students experiencing stress were able to alter their environment in order to better cope with stress. This ability to cope, therefore, may have contributed to general well-being. Lazarus and Folkman (1984) support this finding as they suggest control is the extent to which people assume they can control events and outcomes of importance. By appraising the environment and options available to alter the environment, the degree of stress and emotional reaction is shaped.

#### Total Coping Resources

The total coping resource score was a sum of the cognitive, social, emotional, spiritual/philosophical, and

physical resources utilized by the individual. When converted to a standard score, the mean total score on the CRI was 50.90 with a standard deviation of 9.89. Because normative data indicate standard scores have a mean of 50 and a standard deviation of 10 points (Hammer & Marting, 1987), the students in this study were at approximately the 51st percentile, or within a normal range.

A moderate correlation ( $r = .46$ ) between general well-being and total coping resources was found. Even though the coping resources score of this group falls within a normal range, students were experiencing mild to problem-indicative stress which negatively impacted upon their general well-being. This would seem to suggest many students were either not effectively utilizing coping resources or did not have resources available to them.

However, some students had coping resources available and utilized them. This is depicted by a significant relationship between total coping resources and general well-being ( $p = .0001$ ). This finding is supported by Lazarus and Folkman (1984) as they suggest coping can help counteract stress. Successful coping, in turn, positively impacts health (Cwikel, et al., 1988).

The GWB subscales "Satisfying, Interesting Life" ( $p = .0001$ ), "Emotional Behavioral Control" ( $p = .0001$ ), "Energy Level" ( $p = .025$ ), and "Cheerful vs. Depressed Mood" ( $p =$

.0308) were significantly related to the total coping resources score. In other words, coping resources seem to positively impact general well-being most in these specific subscale areas. When placed in an equation, the partial R-squared of each of these subscales can be used to predict an individual's total coping resource score. This means as subscale scores increase, total coping resources increase.

These findings imply coping resources positively effects general well-being through the subscale, "Satisfying, Interesting Life" ( $R^2 = .233$ ). As Selye (1976) suggested, "...one of the major sources of distress arises from dissatisfaction with life, namely, from disrespect of their own accomplishments" (p. 75). He further stated "...the best way to avoid harmful stress is to select an environment...which is in line with your innate preferences - to find an activity which you like and respect" (p. 82). The findings of this study imply that those having and using coping resources will best be equipped to find ways to achieve the satisfaction and happiness in life. This, in turn, will play a large role in positively impacting one's health and well-being.

Coping resources ( $R^2 = .078$ ) also positively effects general well-being through the subscale, "Emotional Behavioral Control". Those indicating high coping resources

in this study appear to handle stressful situations by using either problem-focused coping, active efforts to change the stressful situation, or emotion-focused coping, efforts to control the emotional response to an event (Lazarus & Folkman, 1984). In this case, a problem-focused strategy could be becoming involved in a study group to cope with a low grade in the class. An emotion-focused strategy would be exercising to relieve the stress of exam week.

Another GWB subscale, "Energy Level" predicted coping resources ( $R^2 = .025$ ). This subscale ties in with "Interesting, Satisfying Life"; when a person has a purposeful and enjoyable life, a feeling of vitality results. Coping resources assist in reaching that energy level.

The final subscale, "Cheerful vs. Depressed Mood", predicted coping resources ( $R^2 = .007$ ). Lightsey (1994) reports that negative schemata, or attitudes, intensify the effects of stress and thereby foster depression. Similarly, activated positive, or self-enhancing, schemata is theorized to buffer the effects of stress and assist in resisting depression. In this study, nondepressed persons appear to use coping resources to activate positive schemata, thus leading to an enhancement general well-being.

### Demographic Information

Descriptive statistics showed most students were first semester freshmen (85.33%), white (95.76%), single (91.33%), and ages 18 - 21 (95.56%). Initially, the null hypotheses tested differences in the various demographic groups using analysis of covariance and multivariate analysis of variance. These tests did not find significant differences between groups because of an inadequate representation of individuals from demographic categories other than the majority.

Adequate representation of men ( $N = 154$ ) and women ( $N = 296$ ) did exist. However, a t-test tested differences in social support between males and females and found no significant differences ( $F = .175$ ). This finding differs from previous studies that suggest women utilize social support as a means of coping more than men (Ashton & Fuehrer, 1993; Krause & Keith, 1989). Because the students form a homogenous group, results are applied to the group as a whole.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

This study was designed to identify the relationships between social support and general well-being in college students enrolled in an introductory health, fitness, and recreation course. All students attending HPR 105 at UW-L on December 12, 1994 were invited to complete the GWB, CRI, and the demographic information. Of the 466 students that participated in the study, 450 were used for analysis.

#### Conclusions

The conclusions of this study are as follows:

1. Students in this study were experiencing mild, but bordering on moderate problem-indicative stress.
2. There was a significant relationship and moderate correlation between general well-being and social support. This suggests students that were utilizing social support during this stressful period impacted their general well-being in a positive way.
3. There was a significant relationship between the GWB subscales "Satisfying, Interesting Life" and "Emotional Behavioral Control" and social support, but not with the remaining three GWB subscales. Additionally, a linear

relationship exists between the subscale "Satisfying, Interesting Life" ( $R^2 = .171$ ) and "Emotional Behavioral Control" ( $R^2 = .057$ ). This implies that individual social support scores will increase with increases in these subscales scores.

4. The total coping resources ( $M = 50.90$ ) utilized by this group was within the normal range.
5. There was a significant relationship and moderate correlation between general well-being and total coping resources. Therefore, those that utilized coping resources reported higher general well-being.
6. There was a significant relationship between the GWB subscales "Satisfying, Interesting Life", "Emotional Behavioral Control", "Energy Level", and "Cheerful vs. Depressed Mood" and total coping resources. Therefore, an individual's total coping resources can be determined by "Satisfying, Interesting Life" (23.3%), "Emotional Behavioral Control" (7.8%), "Energy Level" (2.5%), and "Cheerful vs. Depressed" (.7%). In other words, increases in these subscale scores result in an increase in total coping resources.

### Recommendations

Based on the results of this study, the following recommendations for further research were made:

1. Due to the homogeneity of this group, a future study could examine a group with greater diversity in age, marital status, academic status, and race.
2. A future study could compare social support resources in first semester freshmen and second semester freshmen or sophomores.
3. A future study to compare the general well-being of students involved in a program encouraging the development and utilization of social support resources and students that are not involved in such a group would be beneficial in determining the impact of such a support group.
4. This study explored a specific environmental variable, social support, within SLT. A future study could explore other environmental determinants as well as personal determinants in their relationship to general well-being.

### Recommendations for Programs

Recommendations for programs resulting from this study are as follows:

1. Introductory college health courses like HPR 105 could emphasize the importance of social support and coping

resources in relationship to students' current and future well-being. Curricula could encourage social support and coping resources by including handouts describing clubs, organizations, and residence life events.

Faculty could promote the utilization of social support and coping resources within the topics presented throughout the course. For example, when discussing exercise, the benefits of exercising with a partner or in a group, such as increased and continued participation, could be reviewed. Students interested in developing and participating in exercise groups could write their names and phone numbers on lists provided by faculty. When discussing tobacco, alcohol, and other drug use, specific support groups available at UW-L or within the La Crosse community could be identified and the steps necessary to become a part of these groups reviewed. These groups should be referred to as a means of introducing students to others with similar circumstances while providing support for their particular situation.

2. College campuses should provide an environment conducive to the development and growth of social support and other coping resources. Available opportunities to develop in these areas should be promoted through a

variety of channels, such as the campus newspaper, flyers, bulletin boards, floor meetings in the residence halls, and announcements in classes such as HPR 105. The campus should provide a resource center, such as the Involvement Center at UW-L, where students can learn more about how to become involved in student organizations and volunteer opportunities within their community.

3. Faculty, staff, and graduate students from the departments of Health Education and Health Promotion, Exercise and Sport Science, and Recreation Management and Therapeutic Recreation could collaborate with residence hall councils at UW-L to develop and implement programs or expand upon already developed programs promoting general well-being of college students. A large component of these programs would address the development of social support and coping resources. Because of the relative homogeneity of the group, programs can be generalized to the population as a whole rather than focusing on specific sub-populations.
4. Faculty working with HPR 105 should find specific behaviors students feel enhance their general well-being in the GWB subscales "Satisfying, Interesting Life", "Emotional Behavioral Control", "Energy Level", and "Cheerful vs. Depressed Mood". These findings could be

used to more effectively assist students in developing and utilizing coping resources to meet needs in these subscales and, therefore, augment current and future general well-being.

5. The average class size of HPR 105 each semester is 740, or four sections of 185 students each. This large class size may make it difficult for freshmen to develop a support network. To facilitate the development of social support and coping resources, the class could be reduced to a size where personal interaction, discussion, and collaboration could occur. A better format may be to include the Exercise and Sport Science and Recreation components in the former HED 101 health class; this would limit the class size to 30 to 35 students in each section, allowing students to connect with other students and faculty in meaningful ways.

Another approach would be to maintain the current class size, but organize students into small groups that meet on a regular basis throughout the semester as part of a class assignment. For example, groups with 3 to 5 students could be formed according to self-selected health behavior goals. Each group would be given assignments to help them meet their specific goals while interacting with the group in a unique and fun manner.

For example, a group focused on reducing the fat in their diet could hold a "quick and easy low fat cooking party" in which students prepare recipes given to them.

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APPENDIX A  
COVER LETTER

The instructors of HPR 105 are looking for ways in which they can assist in the development of coping strategies and general well-being during a transitional time in students' lives. By completing the following materials, you will provide information that will assist instructors in improving their ability to reach future HPR 105 students in need of resources and referrals.

The collection of information is completely anonymous. We are not asking you to identify who you are on any portion of the survey. Additionally, the information collected will be used to look at the group, not each individual. Finally, your grade in HPR 105 will not be affected by choosing to complete or not complete the survey. By completing it, however, you are consenting to the use of your answers by HPR 105 instructors.

Please answer each question honestly and to the best of your knowledge. Thank you for your participation.

APPENDIX B  
GENERAL WELL-BEING SCHEDULE

## GENERAL WELL-BEING SCHEDULE (GWB)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
 PUBLIC HEALTH SERVICE  
 HEALTH SERVICES AND SPECIAL HEALTH ADMINISTRATION  
 NATIONAL CENTER FOR HEALTH STATISTICS  
 HEALTH AND NUTRITION EXAMINATION SURVEY

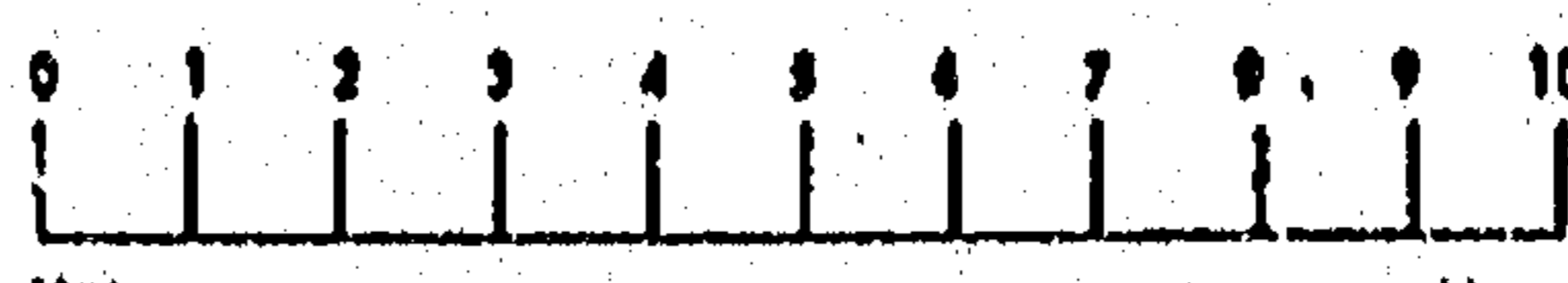
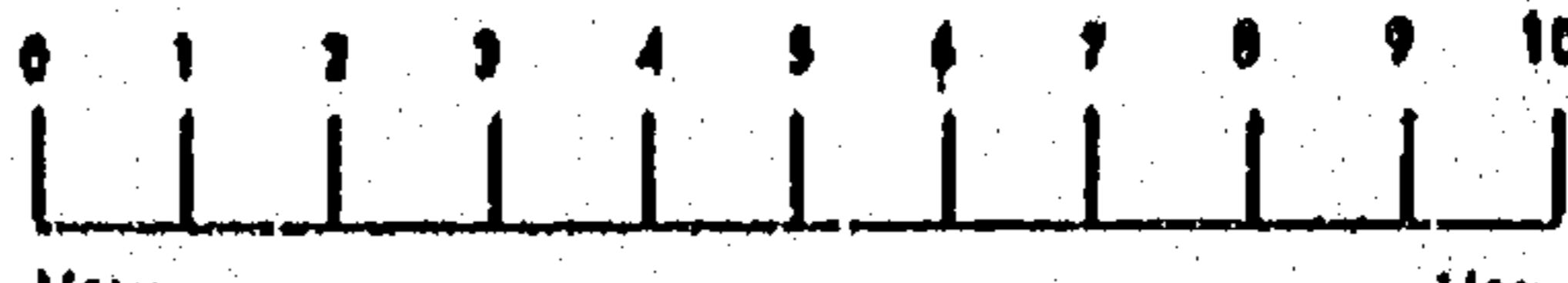

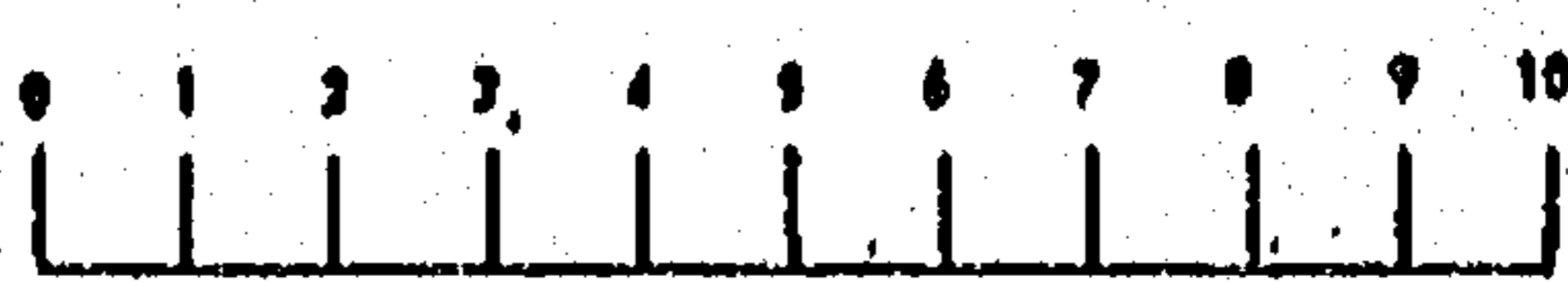
## GENERAL WELL-BEING

READ - This section of the examination contains questions about how you feel and how things have been going with you. For each question, mark (X) the answer which best applies to you.

- |   |    |   |
|---|----|---|
| 1. How have you been feeling in general? (DURING THE PAST MONTH)  | 1. | <input checked="" type="checkbox"/> (001) 1 <input type="checkbox"/> In excellent spirits<br>2 <input type="checkbox"/> In very good spirits<br>3 <input type="checkbox"/> In good spirits mostly<br>4 <input type="checkbox"/> I have been up and down in spirits a lot<br>5 <input type="checkbox"/> In low spirits mostly<br>6 <input type="checkbox"/> In very low spirits                |
| 2. Have you been bothered by nervousness or your "nerves"? (DURING THE PAST MONTH)  | 2. | <input checked="" type="checkbox"/> (002) 1 <input type="checkbox"/> Extremely so -- to the point where I could not work or take care of things<br>2 <input type="checkbox"/> Very much so<br>3 <input type="checkbox"/> Quite a bit<br>4 <input type="checkbox"/> Some -- enough to bother me<br>5 <input type="checkbox"/> A little<br>6 <input type="checkbox"/> Not at all                |
| 3. Have you been in firm control of your behavior, thoughts, emotions OR feelings? (DURING THE PAST MONTH)                                    | 3. | <input checked="" type="checkbox"/> (003) 1 <input type="checkbox"/> Yes, definitely so<br>2 <input type="checkbox"/> Yes, for the most part<br>3 <input type="checkbox"/> Generally so<br>4 <input type="checkbox"/> Not too well<br>5 <input type="checkbox"/> No, and I am somewhat disturbed<br>6 <input type="checkbox"/> No, and I am very disturbed                                    |
| 4. Have you felt so sad, discouraged, hopeless, or had so many problems that you wondered if anything was worthwhile? (DURING THE PAST MONTH) | 4. | <input checked="" type="checkbox"/> (004) 1 <input type="checkbox"/> Extremely so -- to the point that I have just about given up<br>2 <input type="checkbox"/> Very much so<br>3 <input type="checkbox"/> Quite a bit<br>4 <input type="checkbox"/> Some -- enough to bother me<br>5 <input type="checkbox"/> A little bit<br>6 <input type="checkbox"/> Not at all                          |
| 5. Have you been under or felt you were under any strain, stress, or pressure? (DURING THE PAST MONTH)  | 5. | <input checked="" type="checkbox"/> (005) 1 <input type="checkbox"/> Yes -- almost more than I could bear or stand<br>2 <input type="checkbox"/> Yes -- quite a bit of pressure<br>3 <input type="checkbox"/> Yes -- some - more than usual<br>4 <input type="checkbox"/> Yes -- some - but about usual<br>5 <input type="checkbox"/> Yes - a little<br>6 <input type="checkbox"/> Not at all |

6. How happy, satisfied, or pleased have you been with your personal life? (DURING THE PAST MONTH)	6. (004) 1 <input type="checkbox"/> Extremely happy -- could not have been more satisfied or pleased 2 <input type="checkbox"/> Very happy 3 <input type="checkbox"/> Fairly happy 4 <input type="checkbox"/> Satisfied -- pleased 5 <input type="checkbox"/> Somewhat dissatisfied 6 <input type="checkbox"/> Very dissatisfied
7. Have you had any reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory? (DURING THE PAST MONTH)	7. (007) 1 <input type="checkbox"/> Not at all 2 <input type="checkbox"/> Only a little 3 <input type="checkbox"/> Some -- but not enough to be concerned or worried about 4 <input type="checkbox"/> Some and I have been a little concerned 5 <input type="checkbox"/> Some and I am quite concerned 6 <input type="checkbox"/> Yes, very much so and I am very concerned
8. Have you been anxious, worried, or upset? (DURING THE PAST MONTH)	8. (008) 1 <input type="checkbox"/> Extremely so -- to the point of being sick or almost sick 2 <input type="checkbox"/> Very much so 3 <input type="checkbox"/> Quite a bit 4 <input type="checkbox"/> Some -- enough to bother me 5 <input type="checkbox"/> A little bit 6 <input type="checkbox"/> Not at all
9. Have you been waking up fresh and rested? (DURING THE PAST MONTH)	9. (009) 1 <input type="checkbox"/> Every day 2 <input type="checkbox"/> Most every day 3 <input type="checkbox"/> Fairly often 4 <input type="checkbox"/> Less than half the time 5 <input type="checkbox"/> Rarely 6 <input type="checkbox"/> None of the time
10. Have you been bothered by any illness, bodily disorder, pains, or fears about your health? (DURING THE PAST MONTH)	10. (010) 1 <input type="checkbox"/> All the time 2 <input type="checkbox"/> Most of the time 3 <input type="checkbox"/> A good bit of the time 4 <input type="checkbox"/> Some of the time 5 <input type="checkbox"/> A little of the time 6 <input type="checkbox"/> None of the time
11. Has your daily life been full of things that were interesting to you? (DURING THE PAST MONTH)	11. (011) 1 <input type="checkbox"/> All the time 2 <input type="checkbox"/> Most of the time 3 <input type="checkbox"/> A good bit of the time 4 <input type="checkbox"/> Some of the time 5 <input type="checkbox"/> A little of the time 6 <input type="checkbox"/> None of the time
12. Have you felt down-hearted and blue? (DURING THE PAST MONTH)	12. (012) 1 <input type="checkbox"/> All of the time 2 <input type="checkbox"/> Most of the time 3 <input type="checkbox"/> A good bit of the time 4 <input type="checkbox"/> Some of the time 5 <input type="checkbox"/> A little of the time 6 <input type="checkbox"/> None of the time

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<p>13. Have you been feeling emotionally stable and sure of yourself? (DURING THE PAST MONTH)</p>	<p>13. (013) 1 <input type="checkbox"/> All of the time  2 <input type="checkbox"/> Most of the time  3 <input type="checkbox"/> A good bit of the time  4 <input type="checkbox"/> Some of the time  5 <input type="checkbox"/> A little of the time  6 <input type="checkbox"/> None of the time</p>
<p>14. Have you felt tired, worn out, used-up, or exhausted? (DURING THE PAST MONTH)</p>	<p>14. (014) 1 <input type="checkbox"/> All of the time  2 <input type="checkbox"/> Most of the time  3 <input type="checkbox"/> A good bit of the time  4 <input type="checkbox"/> Some of the time  5 <input type="checkbox"/> A little of the time  6 <input type="checkbox"/> None of the time</p>
<p>15. How concerned or worried about your HEALTH have you been? (DURING THE PAST MONTH)</p>	<p>For each of the four scales below, note that the words at each end of the 0 to 10 scale describe opposite feelings. Circle any number along the bar which seems closest to how you have generally felt DURING THE PAST MONTH.</p> <p>15. (015) 0 1 2 3 4 5 6 7 8 9 10    Not concerned at all <span style="float: right;">Very concerned</span></p>
<p>16. How RELAXED or TENSE have you been? (DURING THE PAST MONTH)</p>	<p>16. (016) 0 1 2 3 4 5 6 7 8 9 10    Very relaxed <span style="float: right;">Very tense</span></p>
<p>17. How much ENERGY, PEP, VITALITY have you felt? (DURING THE PAST MONTH)</p>	<p>17. (017) 0 1 2 3 4 5 6 7 8 9 10    No energy AT ALL, listless <span style="float: right;">Very ENERGETIC, dynamic</span></p>
<p>18. How DEPRESSED or CHEERFUL have you been? (DURING THE PAST MONTH)</p>	<p>18. (018) 0 1 2 3 4 5 6 7 8 9 10    Very depressed <span style="float: right;">Very cheerful</span></p>
<p>19. Have you had severe enough personal, emotional, behavior, or mental problems that you felt you needed help DURING THE PAST YEAR?</p>	<p>19. (019) 1 <input type="checkbox"/> Yes, and I did seek professional help  2 <input type="checkbox"/> Yes, but I did not seek professional help  3 <input type="checkbox"/> I have had (or have now) severe personal problems, but have not felt I needed professional help  4 <input type="checkbox"/> I have had very few personal problems of any serious concern  5 <input type="checkbox"/> I have not been bothered at all by personal problems during the past year</p>

APPENDIX C

GENERAL WELL-BEING SCHEDULE VALIDATION INFORMATION

MAJOR STATISTICS FOR THE ELEMENTS  
OF THE GENERAL WELL-BEING SCHEDULE

MAJOR DATA ELEMENT	MEAN VALUE			STANDARD DEVIATION		
	Male	Female	Total	Male	Female	Total
GWB Total Scale	75.1	70.5	72.4	14.3	17.8	16.7
Subscales						
Freedom From...	11.6	11.1	11.3	3.2	3.1	3.2
Energy Level	12.5	11.6	11.9	3.3	3.8	3.6
Satisfying Life	5.7	6.0	5.9	1.9	2.3	2.2
Cheerful Mood	17.2	16.3	16.7	4.2	4.7	4.5
Relaxed vs. Tense	15.9	14.5	15.1	4.8	5.0	5.0
Emotional Control	12.1	11.1	11.5	2.7	2.8	2.8

EVALUATIVE ASSESSMENT OF UNWEIGHED NATIONAL SAMPLE  
BASED ON GWB TOTAL SCORES

DESCRIPTION OF GWB ATTRIBUTE    TOTAL GWB SCORE    % OF SAMPLE

POSITIVE WELL-BEING

Euphoric mood	101 - 110	10.4
Strong positive mood	91 - 100	22.7
Moderate high mood	81 - 90	22.4
Low positive mood	76 - 80	9.5
Marginal positive mood	71 - 75	<u>9.1</u>
		74.1%

PROBLEM-INDICATIVE STRESS

Mild	66 - 70	6.9
Moderate	61 - 65	5.4
Severe	56 - 60	<u>4.0</u>
		16.3%

CLINICALLY SIGNIFICANT DISTRESS

Mild	51 - 55	3.1
Moderate	41 - 50	3.5
Severe	26 - 40	2.3
Suicidal risk	00 - 25	<u>0.7</u>
		9.6%

SAMPLE: N = 6,931;    MEAN = 80.3;    S.D. = 17.7

CITATION: Public Health Service. (1977). A Concurrent Validation Study of the NCHS General Well-Being Schedule, DHEW Publication (EPA) 78-1347. Vital and Health Statistics, Data Evaluation and Methods Research. Series 2 - Number 73. Ryattsville, Md., National Center for Health Statistics.

APPENDIX D  
COPING RESOURCES INVENTORY

# Coping Resources Inventory – Form D

Allen L. Hammer, Ph.D. and M. Susan Marting

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## Directions

For each of the sixty statements that follow, fill in the circle on your answer sheet that best describes you in the last six months. For each statement mark one of the following descriptions:

- Never or rarely
- Sometimes
- Often
- Always or almost always

Do not make any marks in this booklet. Mark all of your answers on the separate answer sheet. It is important that you try to answer every question.

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APPENDIX E  
DEMOGRAPHIC INFORMATION

**DEMOGRAPHIC INFORMATION**

Please mark (X) the answer that best applies to you.

1. Gender:
  - Male
  - Female
  
2. Year in college:
  - Freshman - first semester at UW-L
  - Freshman - two or more semesters at UW-L
  - Sophomore
  - Junior
  - Senior
  - Transfer student - first semester at UW-L
  - Transfer student - 2 or more semesters at UW-L
  - International student - first semester at UW-L
  - International student - 2 or more semesters at UW-L
  
3. Age:
  - 18 - 21
  - 22 - 25
  - 25 - 29
  - 30 or older
  
4. Race:
  - African American/Black
  - American Indian/Alaskan Native
  - Asian American/Pacific Islander
  - Hispanic/Latino
  - White/nonhispanic
  
5. Marital status:
  - Married
  - Engaged
  - Divorced
  - Single/never been married
  - Living with a gay partner
  - Living with a partner of the opposite sex