

THESIS

FACTORS ASSOCIATED WITH COLLEGE STUDENTS' PERCEIVED STRESS

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ABSTRACT

FACTORS ASSOCIATED WITH COLLEGE STUDENTS' PERCEIVED STRESS

Stress is a significant problem for college students that can lead to poor academic performance, anxiety, depression, and other serious health outcomes. This study examined the relationship between college students' perceived stress and their daily experiences of pleasure, productivity, and restoration. College students from a Mountain state university ($n = 187$) completed an online survey that included the Perceived Stress Scale and the Daily Experiences of Pleasure, Productivity, and Restoration Profile. Pearson correlation and regression analyses were used to examine the relationships between variables. The amount of pleasure, productivity, and restoration students experienced from their day were each negatively correlated to their total levels of perceived stress, although only weakly ($r = -0.15$ to -0.25). Regression analysis revealed that of the three experiences, the amount of pleasure students experienced explained the largest amount of the variance in perceived stress; but, it was a weak predictor, explaining only 3% of the variance independently. Implications for students, professionals working with students, and future research are discussed.

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CHAPTER 1: EXTENDED LITERATURE REVIEW

As the culture of America has shifted into the fast-paced, productivity-focused world that it is for many today, stress has become the focus of national attention because it is a significant risk factor for diminished physical and mental health (Larzelere & Jones, 2008). Although stress can affect people of any age, circumstance, and socioeconomic status (American Occupational Therapy Association, 2007), college students may be at greater risk for stress (Pelletier & Laska, 2012; Zuzanek, 1998), and consequentially, at risk for decreased mental and physical health (Larzelere & Jones, 2008). Stress is not only the most frequently cited barrier to academic performance (American College Health Association [ACHA], 2009) but it has also been shown to be associated with depression (ACHA, 2009; Dyson & Renk, 2006), eating disorders (Costarelli & Patsai, 2012), and obesity (Nelson, Lust, Story, & Ehlinger, 2008) in student populations.

One major area of research related to stress in college students has focused on understanding the circumstances associated with reported stress and how students cope when feeling stressed. Overall, students with good coping and time management skills, or who participate in a variety of leisure activities report being less stressed than their peers (Dusselier, Dunn, Wang, Shelley Ii, & Whalen, 2005; Misra & McKean, 2000; Sawatzky et al., 2012; Welle & Graf, 2011). Conversely, an absence of or dissatisfaction with leisure activities is associated with higher stress (Dusselier et al., 2005; Misra & McKean, 2000; Sawatzky et al., 2012; Welle & Graf, 2011). These findings have influenced the development of educational programs with the goal of preventing stress or mediating the associated health effects (Conley, Travers, & Bryant, 2012; Colorado State University Health Network, 2011; New York University, 2013;

University of Washington, 2009). Despite these efforts to intervene, a rising percentage of students report experiencing stress and it continues to impede their health and academic success (ACHA, 2009; Pryor, 2012). This continued trend suggests that there are elements influencing students' stress that have not yet been explored.

While the relationship between stress and certain types of activities (e.g. academic activities, leisure) is well established (Aselton, 2012; Dusselier et al., 2005; Welle & Graf, 2011), few studies have explored the relationship between students' stress and the subjective characteristics of their activities such as perceived levels of engagement, absorption or enjoyment. Many have argued for the importance of this latter relationship. Theorists in occupational science (the study of occupation or "doing") have historically emphasized understanding not only what people do but also the meaning and experiences that they receive from participating in occupations (Pierce, 2001; Yerxa, 1998). The purpose of this study is to examine the relationship between students' stress and their subjective experiences of pleasure, productivity, and restoration during their daily activities. This chapter provides a review of common approaches to studying students' stress, as well as an overview of how theorists and researchers in occupational science have described and studied the subjective dimensions of occupation or activity as they relate to stress, health, and well-being.

Stress

Stress can be operationalized in a variety of different ways, two of which are discussed for the purpose of this review. One type of stress, referred to here as situational stress, occurs as a response to a specific event or circumstance, or stressor. Situational stress is the result of the transaction between a potential stressor and an individual as depicted in Figure 1 (Lazarus, 1974). An event is appraised as stressful if the person identifies it as challenging or difficult in light of

their current internal and external resources. The individual then uses various strategies to cope with the situation and its associated stress. He or she may cope by (1) attempting to address the stressor directly (problem-focused coping) or (2) addressing the negative emotions that accompany stress (emotion-focused coping; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). The severity of the stressor, availability of resources, and the success of chosen coping strategies determine whether an individual is able to adapt to or recover from situational stress (Folkman et al., 1986).

Another approach to understanding stress examines it as a broader perceived experience. Perceived stress is one's global evaluation of life as being unpredictable, uncontrollable or overloaded (Cohen, Kamarck, & Mermelstein, 1983). Perceived stress is theoretically influenced by how well an individual adapted to or coped with all of the situational stress he or she has recently encountered, as well as the number of stressors the individual has faced (Cohen, Kamarck, & Mermelstein, 1983).

Stress and college students. Studies of stress in college students have often examined the components of situational stress described in Figure 1 that may relate to more global experiences of perceived stress. These studies have identified events and circumstances that are stressors for students, factors that contribute to students' available resources, and the strategies students use to cope with stress.

Researchers have identified potential stressors for college students primarily through the use of surveys. For example, Dusselier and colleagues (2005) surveyed 462 undergraduate students to establish events and circumstances that predicted how frequently students experienced stress. Experiencing chronic illness and frequent conflicts with friends, family, or faculty were both predictors of stress. This survey also included an open-ended question

allowing students to identify their primary source of stress. Over half of the students indicated that academics were a primary stressor (e.g. homework, preparing for projects, or time required in class). Qualitative approaches have identified similar types of stressors (Aselton, 2012). Analysis of interviews with students diagnosed with depression revealed that concerns about academic success, pressure from family, and financial concerns were primary stressors for this group (Aselton, 2012).

The internal and external resources available to an individual play a large part in how he or she appraises stress, as well his or her ability to cope with stress (see Figure 1). These resources determine “stress tolerance” or one’s ability to adapt to or cope with stressors (Welle & Graf, 2011). Students who have higher stress tolerance theoretically have, or perceive that they have, more resources available to them to manage demands or cope with stress. Welle and Graf (2011) examined lifestyle habits that contribute to higher stress tolerance among a sample of college students. Social support, sleep, exercise, enough leisure, enough social interaction, and participation in extracurricular activities were all associated with higher stress tolerance. Welle and Graf (2011) also identified coping strategies that related to higher stress tolerance including use of a calming hobby and listening to calming music. An analysis of interviews with students diagnosed with depression revealed similar strategies, because students reported coping with stress by talking to friends, talking to a therapist, participating in physical activities, and listening to music (Aselton, 2012).

As seen in the literature reviewed above, the activities that students engage in play a role throughout the stress process. Students report academic activities as a primary stressor (Dusselier et al., 2005), while leisure activities such as talking to friends, exercising, or listening to calming music are commonly reported coping strategies and are associated with better stress tolerance

(Aselton, 2012; Welle & Graf, 2011). Given the relationship between activity and stress, the following section will provide an overview of theory and research from occupational science to further explore the dimensions of activity that relate to stress and other elements of well-being.

Subjective Dimensions of Activity – Perspectives from Occupational Science

Occupational science, a discipline dedicated to the study of “occupation,” or the activities that occupy an individual, has historically argued that participation in occupation (activities) is directly related to health and well-being (Yerxa, 1998). To better understand this relationship, occupational scientists have sought to identify characteristics of activity that contribute to an individual’s overall well-being. Two assumptions of occupational science have guided this effort:

- occupation must be considered in context;
- occupation is best understood subjectively from the perspective of the individual engaged in it (Yerxa et al., 1990).

Based on these assumptions, several theorists have presented experience-based dimensions of occupation to explain how individuals perceive occupation in context (Atler, 2014a; Hammell, 2004; Jonsson & Persson, 2006; Matuska & Christiansen, 2008; Persson, Erlandsson, Eklund, & Iwarsson, 2001; Pierce, 2003). An overview of several of these theories and associated research is provided below.

Jonsson and Persson (2006) proposed dimensions that expanded on the concept of flow. Csikszentmihalyi (1997) described flow as an optimal experience where the challenge presented by an activity matches an individual’s skill level. Flow is marked by becoming fully engaged in an activity and losing track of time and self. Jonsson and Persson (2006) viewed flow as an optimal experience, but further argued that individuals need to participate in activities that provide other levels of challenge. Their experiential model of balance includes three dimensions:

- flowing, where skill and challenge are matched;
- exacting, where challenges exceed an individual's level of skill;
- calming, where an individual's skill level exceeds the challenges of an occupation.

While Jonsson and Persson (2006) created these dimensions from subjective data (participants' rating of their skill and the demands of their activities collected through the experience sampling method), the dimensions themselves were not identified by the participants. Their model may therefore be limited because, "it is impossible to give an individual's occupation any meaning other than the subjective meaning that they, themselves choose to give it" (Weinblatt & Avrech-Bar, 2001, p. 169). Additionally, there is limited empirical evidence for Jonsson and Persson's added dimensions of calming and exacting (Persson & Jonsson, 2009).

Like Jonsson and Persson (2006), Hammel (2004) proposed that through participation in occupation, humans meet innate needs. However, while Jonsson and Persson (2006) primarily emphasized a need for various levels of challenge, Hammel (2004) proposed a broader perspective, theorizing that individuals need to receive meaning, purpose, choice, and self-worth from their occupations. Further, she suggested that meaning is created in occupation through an individual's experiences of doing, being, belonging, and becoming. Experiences of "doing" bring a sense of purpose or accomplishment. "Being" refers to occupations that allow for introspection, reflection, or meditation. "Belonging" adds pleasure and meaning to occupations through social support. Finally, "becoming" is the experience of envisioning a positive future. Although Hammel derived her theories from qualitative research, the dimensions she proposed have yet to be explored empirically.

Persson and colleagues (2001), like Hammel (2004) emphasized the importance of the meaning an occupation has for an individual. The value of an occupation (why it was chosen by

the individual and what was gained from participating in the occupation) is considered to be an important element of meaning. In their Value and Meaning in Occupation (ValMO) model, Perrson and colleagues (2001) proposed that occupations can be characterized by the concrete, symbolic, or self-reward value that they hold for the individual. Concrete value is determined by the tangible outcomes produced from an occupation such as mastery of skill, income, or the avoidance of negative consequences. Symbolic value is less easily observed and is the personal, cultural, or universal significance of an occupation. Self-reward value is found in the enjoyment of the occupation itself. The Occupational Value Assessment with Predefined Items has been developed based on elements of the ValMO model (Eakman & Eklund, 2011; Eklund, Erlandsson, Persson, & Hagell, 2009; Eklund, Erlandsson, & Persson, 2003). Researchers have identified correlations between this assessment and college students' life-satisfaction (Eakman & Eklund, 2012) as well as health and well-being for individuals with mental illness (Eklund, Erlandsson, & Persson, 2003).

A final perspective on experience-based dimensions is that of Adler (2014a) who, building on theories of Pierce (2003), proposed that all occupations are experienced at varying levels of pleasure, productivity, and restoration. These dimensions of experience have similarities to those of the theories described above, but this approach is unique in that Pierce (2003) asserts that occupation is experienced as a unique blend of all three dimensions, which better captures the dynamic and multi-faceted nature of occupation (Pierce, 2003). More specifically, pleasure is experienced when an individual enjoys the process of an occupation, while productivity occurs when there is a sense of accomplishment or achieving a goal. Restoration is experienced when one feels rejuvenated or refreshed from participating in an occupation (Pierce, 2003).

A recently developed assessment elaborates on Atler's (2015) and Pierce's (2003) work by providing the means to simultaneously capture experiences of pleasure, productivity, and restoration. The Daily Experiences of Pleasure, Productivity, and Restoration Profile (PPR Profile; Atler, In Press) is a time-diary that captures occupational experiences associated with activities across a 24-hour period. The PPR Profile allows users to identify what they were doing in their own words, where they were, and who they were with. Preliminary validation studies of test content and the response process suggest that users of the PPR Profile appear to understand the key concepts of the assessment and are able to rate their experiences easily and with little to no burden (Atler, 2014b). As the PPR Profile allows for the assessment of activity and experience, and has shown promising psychometrics, it is an appropriate assessment to use to further understand how subjective characteristics of activity relate to stress for college students.

In summation, studies of college students' stress have identified a relationship between their activities and the amount of stress they experience. Because of occupational science's unique perspective on activity, theories from this discipline are well situated to provide a theoretical rationale for further exploration of how activity is related to stress. Many of these theories emphasize the importance of considering subjective dimensions of occupation to understand the relationship between occupation and elements of health and well-being. The PPR Profile, an assessment founded on the theories of occupational scientists Atler (2015) and Pierce (2003), will be used to explore the relationship between students' stress and the amount of pleasure, productivity, and restoration students experience from their activities.

CHAPTER 2: EXAMINING THE RELATIONSHIP BETWEEN COLLEGE STUDENTS' PERCEIVED STRESS AND DAILY EXPERIENCES OF PLEASURE, PRODUCTIVITY, AND RESTORATION

Stress is a significant problem facing modern college students. Pressure from family, professors, and peers to succeed academically causes many students to feel overwhelmed and unable to handle the demands of college life (Aselton, 2012; Dusselier et al., 2005; Pierceall & Keim, 2007). For traditional students, the transition to college requires students to adapt to many newfound responsibilities such as managing their own finances, health, and time (Arnett, 2013; Dill & Henley, 1998). Non-traditional and graduate students also face a lot of pressure as they are more likely than traditional students to have home and work responsibilities that compete with academic expectations (Dill & Henley, 1998; Offstein, Larson, McNeill, & Mjoni Mwale, 2004). Some students appear to be able to cope well with the pressure and demands of college, but an increasing percentage feel stressed to the point that they become depressed, anxious, or ill (Mahmoud, Staten, Hall, & Lennie, 2012; Rawson, Bloomer, & Kendall, 1994). It is therefore vital that we better identify the strategies that help students prevent feelings of stress and cope with it when it occurs.

Studies have identified a relationship between students' stress levels and the types of activities in which students engage. Students who organize their time to ensure they get enough sleep, leisure, socialization, and relaxation tend to experience less stress than their peers (Dusselier et al., 2005; Welle & Graf, 2011). While understanding the types of activity that can help reduce stress is valuable, several professions advocate for understanding not just what people do, but how they subjectively experience or feel about their activities. For example,

proponents of positive psychology argue that happiness (derived from experiences of pleasurable, satisfying, or meaningful activities) relates to higher levels of well-being (Sirgy & Wu, 2009) and lower stress levels (Schiffirin, Rezendes, & Nelson, 2009). Additionally, occupational science, a discipline dedicated to studying the meaning of occupations (the activities that occupy peoples' time) emphasizes that consideration of both what people do and how they experience or perceive their activities is important to understanding the relationship between activity and well-being (Matuska & Christiansen, 2008; Meyer, 1922). The purpose of this study is to examine the relationship between students' stress and the amount of self-reported pleasure, productivity, and restoration experienced from their daily activities. The recently developed Daily Experiences of Pleasure, Productivity, and Restoration Profile (PPR Profile) will be used to examine students' subjective experience related to daily activities (Atler, 2014b).

Stress

Though certain life events and circumstances are more likely to cause an individual to feel stressed, it is believed that it is an individuals' appraisal of those events rather than the events themselves that determines whether or not the individual experiences stress (Lazarus, 1966; Lazarus & Folkman, 1984). According to this definition, stress occurs when one sees an event or circumstance is threatening, demanding, or beyond his or her capacity to handle. When one perceives circumstances as stressful, he or she seeks coping skills and strategies to reduce feelings of stress (Mahmoud et al., 2012). If one experiences chronic stress or uses unsuccessful coping strategies he or she may begin to feel that life in general is unpredictable, uncontrollable, or overloaded (Cohen et al., 1983; Offstein et al., 2004). This global appraisal of life, referred to as perceived stress, is thought to be influenced by all the events and activities of daily life (Cohen & Williamson, 1988). Because of the potential connection between activity and

perceived stress, researchers have shown an interest in identifying the characteristics of certain activities that are associated with increased or decreased stress. Most often, results indicate that obligatory activities (e.g. work- or school-related) often increase feelings of stress (Aselton, 2012; Dusselier et al., 2005; Larson, 2006; Ross, Niebling, & Heckert, 1999), while leisure activities lower stress and are reported as coping strategies (Aselton, 2012; Bland, Melton, Bigham, & Welle, 2014; Gerber, Brand, Elliot, Holsboer-Trachsler, & Pühse, 2014; Welle & Graf, 2011).

Stress and Students' Activities

Obligatory activities. Engagement in obligatory activities (e.g. work- or school-related) tend to be associated with high stress levels (Aselton, 2012; Dusselier et al., 2005; Larson, 2006; Ross, Niebling, & Heckert, 1999). College students frequently report obligatory activities such as paid work, taking tests, studying, and writing papers as major sources of their stress (Aselton, 2012; Dusselier et al., 2005; Ross, Niebling, & Heckert, 1999). Additionally, students with more academic responsibility (e.g. higher course-load or more difficult classes) often report more stress than their peers with less academic responsibility (Dusselier et al., 2005). Finally, Larson (2006) found that among a small group of female students, academic activities were more likely to be reported as stressful than other activities such as self-care, leisure, and household tasks.

When examining associations between students' obligatory activities and measures of stress and well-being, results are inconclusive. One study identified that students who have a higher course-load (presumably having a higher number of obligatory activities and spending more time spent in class and studying) also reported higher stress levels, suggesting that students with a larger amount of academic responsibility may be more likely to feel stressed (Dusselier et al., 2005). However, others have found that students who reported that their responsibilities,

roles, and obligations increased also reported higher levels of life satisfaction and lower levels of perceived stress than students who report that their responsibilities decreased (Bailey & Miller, 1998). Bailey and Miller's results suggest that increasing obligations are not inherently associated to increased stress, and in fact may be associated with lower stress if students also have high satisfaction with life.

One explanation for these incongruous findings is that perhaps that it is not just what one does but also how one subjectively experiences or feels about their activities that relates to their perceptions of global or immediate stress (Larson, 2006; Schaufeli, Martínez, Pinto, Salanova, & Bakker, 2002). For example, feeling absorbed and engaged in classes was associated with decreased burnout (Schaufeli et al., 2002), a common outcome of long-term stress (Maslach, Schaufeli, & Leiter, 2001). On the other hand, feeling a lack of success in academic activities was identified as a major stressor in an open-ended survey of college students, suggesting that feeling unsuccessful (a negative experience) may increase perceived stress from activities (Dusselier et al., 2005). Based on the findings of these studies and others (Carney, McNeish, & McColl, 2005), gathering information about the subjective experiences derived from activities may be helpful in understanding the relationship between activity and stress.

Leisure activities. While academic activities are often thought to increase students' stress, leisure activities are thought to increase students' ability to handle stressors and are identified as a method for coping with stress. Current research on college students has examined the time spent or satisfaction with leisure and various measures of stress. According to Pierceall and Keim (2007) community college students reported that interactions with family or friends, leisure, and exercise were commonly used as coping strategies. Similar coping strategies were communicated by college students diagnosed with depression who engaged in qualitative interviews (Aselton,

2012). Talking to friends and family and engaging in physical or quiet activities (e.g. journaling, listening to music) helped interviewees cope with stress from academic pressure, financial concerns, and social conflict. Welle and Graf (2011) demonstrated a relationship between stress tolerance, or ability to handle stressors, and time spent in overall leisure activities or in social leisure. Students who reported spending “enough” time also reported a higher stress tolerance than those students who did not report spending enough time in leisure activities (Welle & Graf; 2011). Additionally, those who participated in extracurricular sports (a type of active leisure) and who used a calming hobby to cope with stress also reported higher stress tolerance than those who did not engage in these activities (Welle & Graf, 2011). These and other studies provide evidence that participation in various types of leisure activity may be beneficial for reducing stress (Bland, Melton, Bigham, & Welle, 2014; Gerber, Brand, Elliot, Holsboer-Trachsler, & Pühse, 2014).

Evidence that supports the relationship between perceived stress and students’ subjective experiences or feelings about their leisure activities is limited. Only one study was found that examined the relationship between students’ perceived academic stress and their subjective experiences or feelings about their leisure activities (Misra & McKean, 2000). In Misra and McKean’s (2000) study students’ perceived academic stress correlated weakly with their experiences or feelings of satisfaction with their general or overall leisure activities.

Another important characteristic of the research presented above, that examined the relationship between students’ subjective experiences about obligatory and leisure activities and perceived stress, is that the researchers measured global perceptions of students’ experiences associated with activity rather than specific experiences derived from specific episodes of activity. This may be restrictive because global perceptions related to past events have limited

accuracy when compared to perceptions derived from a specific event (Schwarz, 2012). Feelings and perceptions are also more accurately assessed during or soon (in close proximity to) after an event, when compared to those assessed retrospectively (Schwarz, 2012). Therefore, subjective experiences or feeling relating to activities may be better assessed in direct association with specific activities as or directly after the individual is engaged in them.

Measuring Experience in Context.

Two methods that are appropriate for gathering information on how students experience activities are experience sampling methods (ESM) and time use diaries. Both of these methods can collect experiences in direct association with a specific event and in close proximity to the time the activity occurred. Researchers use ESM to collect information on experiences and activities at intervals throughout the day. Using ESM, Asakawa (2004) explored how Japanese college students experience their daily activities. Specifically, Asawaka (2004) found that the extent to which students felt that the challenge presented by an activity was matched by their skill level, defined as flow, was related to other experiences such as concentration, enjoyment, happiness, satisfaction, perceived control, and fulfillment for students. Larson (2006) also used ESM to collect information on subjective experiences related to students' activities including time passing more quickly than the clock, perceived challenge of the activity, perceived skill required by the activity, and how much stress students experienced during the activity. Larson was unable to identify a consistent pattern of experiences that was common among activities in which students reported high or low stress and suggested that other experiences such as enjoyment may help account for differences in students' stress levels.

Another method of gathering information about activities and experiences is the time-use diary. The time-diary approach asks participants to record all of their activities over a set period

of time. Therefore, subjective experiences such as enjoyment or flow that are derived from specific activities can also be gathered. Although time-use diaries have been used with college students, to my knowledge, no one has used them to gather subjective experiences associated with colleges students' activities. Rather, researchers using this method have primarily gathered information about how much time students spend in certain types of activity. For example, George, Dixon, Stansal, Gelb, and Pheri (2008) found that spending less time sleeping and in passive leisure activities and spending more time studying were each predictive of academic success.

The purpose of this study was to explore the relationship between students' subjective experiences derived from their specific activities and their perceived stress. More specifically, the Daily Experiences of Pleasure, Productivity, and Restoration Profile (PPR Profile), a time use diary was used to capture students activities and experiences of pleasure, productivity, and restoration (Atler, 2014b). The PPR Profile was chosen because it allows the researcher to gather experiences of pleasure, productivity, and restoration simultaneously (Atler, 2014b). For the present study, these dimensions were defined as follows:

- pleasure: enjoying the process of an activity;
- productivity: a sense of accomplishment or achieving a goal;
- restoration: feeling rejuvenated or refreshed from an activity (Pierce, 2003).

These experiences have been described as basic human needs that can be met through engagement in activities and associated with one's health and well-being (Atler, 2014b; Peirce, 2003). Exploration of the relationships between pleasure, productivity and restoration and students' perceived stress, an important health factor for students, were guided by the following research questions:

- Is there a relationship between students' perceived stress and their levels of pleasure, productivity, or restoration received with-in a 24-hour period?
- If so, what is the direction and strength of each relationship?
- Do levels of pleasure, productivity, or restoration students experience individually predict their levels of perceived stress?

To date there is no research available on the relationship between stress and daily experiences of pleasure, productivity, and restoration. However, based on related research and theories I anticipated that higher levels of pleasure, productivity, and restoration would be negatively associated with high levels of perceived stress for several reasons. Experiences of pleasure and restoration are commonly associated with leisure activities (Atler, 2014a; Fasoli, 2008; Kleiber, Larson, & Csikszentmihalyi, 2014); based on the established relationship between leisure activities and stress, it was expected that these experiences would be negatively associated with perceived stress. In contrast, experiencing a sense of productivity is associated with academic and work activities (Atler, 2014a; Kleiber et al., 2014). While these obligatory activities are often thought to increase stress, positive experiences such as engagement and absorption in these activities, which may be associated with feeling like one is getting something done or accomplishing a goal, are associated with lower stress (Schaufeli et al., 2002). Therefore, I also expected that experiencing more productivity to be negatively related to perceived stress.

While I expected that experiencing higher levels of pleasure, productivity, and restoration would be associated with reporting lower levels of perceived stress, I anticipated finding only weak or moderate relationships due to the differences in how each construct was measured. As previously discussed, episodic assessments of experience such as time diaries often do not have strong relationships with more global assessments, even when measuring similar constructs

(Schwarz, 2012). Therefore I would not expect strong relationships between episodic experiences of pleasure, productivity, and restoration, and perceived stress, a global interpretation of life.

Methods

Study Design and Data Collection

This study used a non-experimental, cross-sectional survey design to examine the relationship between perceived stress and daily experiences for college students at a Mountain state university. Following Institutional Review Board approval, 3,418 students were randomly selected from the university's online student directory using a random number generator. To be selected, students had to be currently enrolled and have an active email account registered with the university.

Potential participants received an email in late April inviting them to participate in the study and be entered into a drawing to win one of two iPad Minis ®. This email included a brief description of the study, approximate time required to complete the survey, and a direct link to SurveyMonkey, an online platform for survey completion. After viewing introductory information about the study, students clicked on a radio button consenting to participate in order to complete the online surveys. Reminder emails were sent 10 days and 4 days before the end of the 2-week study period. Three hundred and forty-seven students (about 10% response rate) consented to participate and filled out the Daily Experiences of Pleasure, Productivity, and Restoration Profile (PPR Profile), the Perceived Stress Scale –10 Item (PSS-10) as well as other assessments included for use in a larger study.

Measures

The Daily Experiences of Pleasure, Productivity, and Restoration Profile (PPR Profile). This study used the PPR Profile to assess the amount of pleasure, productivity, and

restoration students experienced from their activities across a 24-hour period. It was administered as an online survey on which students recorded each of their activities from 6 a.m. yesterday to 6 a.m. today. Participants recorded all of their activities in their own words as well as the start time and end time of each activity. They were instructed to account for the full 24 hours without leaving gaps between activities. For each activity, participants also identified where they were and whom they were with, then rated the levels of pleasure, productivity, and restoration they experienced during each activity. Experiences were rated using a seven-point Likert scale to reflect a broad range of experiences (e.g., very productive to very unproductive; see Appendix A for more details).

The PPR Profile has demonstrated good internal reliability (Cronbach's $\alpha = 0.77 - 0.80$), and initial validity evidence based on test content, response process and user's perceived utility has indicated that users could identify their experiences of pleasure, productivity, and restoration without difficulty or burden (Atler, 2014b). To establish the overall amount of pleasure, productivity, and restoration each participant experienced from their activities, raw scores were translated into linear measures using Rasch rating scale analyses as described in the Data Preparation section below (Wright & Masters, 1982).

Perceived Stress Scale, 10 item (PSS-10). The PSS-10 is a short survey used to measure the level at which an individual has appraised life events as unpredictable, uncontrollable, or overloaded. The PSS-10 has ten questions such as, "In the last month, how often have you been upset because of something that happened unexpectedly?" Participants answered each question using a five-point Likert rating scale with responses that range from never (zero) to always (4); see Appendix A for the full assessment. It has shown to have good internal and test-retest reliability (Cronbach's $\alpha = .84-.86$) and it has demonstrated convergent validity with measures of

anxiety, depression, and health, and divergent validity with measures of sensations seeking, religious faith, and aggression among college students (Roberti, Harrington, & Storch, 2006). Cronbach's alpha for the present study was 0.87. The PSS-10 total scores are obtained by reversing the scores on the four positive items, then summing across all 10 items, so that a higher total score indicates higher stress.

Data Preparation

Raw data from SurveyMonkey were imported into Microsoft Excel and examined for accuracy and missing data. When possible, missing time on the PPR Profile was imputed based on other information from the participant's profile. Participants who were missing more than 2 hours of activities ($n = 152$) were not included in this study as recommended by the Task force on Time Use Surveys (2013). One additional participant was identified as an outlier (more than two standard deviations above or below the mean) based on visual analysis of the data and was also excluded.

To create linear measures of each participants' experiences of pleasure, productivity and restoration from the ratings collected on the PPR Profile Rasch analysis was employed (Linacre, 2014). The ordinal level ratings from the PPR Profile were transformed into natural logarithms in order to produce logits that have interval properties (Royal, 2010). This conversion allowed the researcher to account for the differences in each participants' ability to rate his or her levels of experiences (e.g. some people will always rate their experiences higher than others) and the likliability that some activities will be easier to give a higher rating level of experienced productivity than other activities (i.e. , getting homework done vs. hanging out with friends).

First, participants' descriptions of what they did were coded into activity categories using guidelines established for this study. The intial coding guideline was based on the activity and

participation categories identified by the International Classification of Functioning, Disability, and Health's activity and participation domains (World Health Organization, 2001). When developing the coding guideline inter-rater reliability or the agreement among three independent coders was monitored and reported as 87—90%, which is considered acceptable (Morgan, Gliner, & Harmon, 2006). Next, I modified the coding guideline, by separating out some specific activities from some of the original 50 categories to better represent the activities in which students engage, especially those that have been associated with stress (obligatory and leisure activities). For example, I separated “taking a test or presenting” from the original category “attending class” because more often students report experiencing high levels of stress from testing and presenting than from simply attending class (Aselton, 2012; Dusselier et al., 2005; Ross et al., 1999). At the same time, I examined the number of times each activity group was used as suggested by Linacre (2002). If an activity group code was used less than 10 times activity codes were combined. The final guidelines contained 51 categories of activity (see Appendix B)

Once all activity descriptions were coded, average scores were created for each activity that students reported more than once during their recorded time. For example, if a student rated “eating” as completely pleasurable (score of 7) at breakfast but as only a little pleasurable at lunch and dinner (score of 5), these three numbers were averaged to provide 1 score for “eating.” As Winsteps requires the use of whole integers, these scores were then rounded to the closest integer (the average score of 5.66 from the example above would have been round up to 6). To avoid artificial inflation of the data, average scores that were half way between integers (e.g. 6.5) were round up half of the time and down half of the time.

Data Analysis

Winsteps was used to complete a Rasch rating scale analyses (Wright & Masters, 1982) which generated linearized measures of pleasure, productivity, and restoration for each of the remaining participants ($n = 187$). These measures indicate the extent to which each participant experienced pleasure, productivity or restoration during his or her activities. Higher measures indicate that the participant reported higher degrees of each experience.

Using Stata Statistical Software (StataCorp, 2013), I calculated descriptive statistics including mean, standard deviation, and range for all variables (see Table 1). Pearson correlation coefficients were calculated to establish the zero-order relationships between experiences of pleasure, productivity, and restoration and perceived stress. Correlations between 0.1 and 0.3 were considered weak; correlations between 0.3 and 0.5 were considered moderate; and correlations above 0.5 were considered strong (Cohen, 1988). Regression analysis was then used to evaluate and compare the unique contributions of each experiential dimension on perceived stress. The acceptance level for statistical significance for both correlation and regression analysis was set to 0.05.

Results

Participants were between the ages of 17 and 53, and most were under the age of 26 (75%), white (88%), and pursuing an undergraduate degree (68%). A summary of participant demographics is provided in Table 2.

Moderate positive correlations were found among PPR Profile logits ($r = .38$ to $.43$) as seen in Table 3. Negative zero ordered correlations were found between perceived stress and pleasure ($r = -.25$), productivity ($r = -.21$) and restoration ($r = -.15$). Although pleasure was the strongest, all of the correlations were weak. As seen in Table 4, when entered into the regression

model, pleasure was the only statistically significant predictor of stress ($\beta = -.18$), and the total model predicted about 7% of the variance in perceived stress ($R = .27, p < .01$).

Discussion

The purpose of this study was to examine the relationship between perceived stress and students subjective experiences derived from their activities with in one day. As expected, experiences of pleasure, productivity, and restoration were each negatively related to stress and found to have only weak correlations. As anticipated, the relationships were small because perceived stress and daily experiences were measured using global and episodic methods respectively.

I will discuss this reason as well as others while also suggesting why these results are still important to examine in future studies. First, although the Perceived Stress Scale has been frequently used with students (Gerber et al., 2014; Roberti et al., 2006; Ruiz-Aranda, Extremera, & Pineda-GalÁN, 2014), it is a global measure of perceived stress. Global reports such as the PPS draw on all of one's experiences not just those experiences related to specific activity episodes (Cohen & Williamson, 1988). More importantly, global reports of experiences are more reflective of beliefs and expectations about a situation than the actual lived experience (Schwarz, 2012). So while the correlations between stress and experiences of pleasure, productivity and restoration derived from specific activity episodes of one day were expected and found to be weak, this relationship warrants further exploration. Because many of today's stress interventions are designed to address stress on a daily basis (Conley, Durlak, & Dickson, 2013; Conley, Travers, & Bryant, 2012; Oman, Shapiro, Thoresen, Plante, & Flinders, 2008), learning more about the role subjective experiences derived from activities may enable universities to gain additional information on how to enhance current approaches.

Weak correlations may also have been found for various other reasons. First, capturing mean averages of experiences over one day may not provide an adequate representation of experiences derived from activities. One might find stronger correlations with perceived stress by assessing experiences of pleasure, productivity, and restoration across several days. Additionally, as mentioned previously, experiences of pleasure, productivity and restoration derived from episodic activities may not share a meaningful relationship with global perceptions of stress. Therefore, stronger relationships may be found by using a global assessment of experiences derived from activities. The Occupational Value Assessment with Predefined Items (Eakman & Eklund, 2011; Eklund, Erlandsson, Persson, & Hagell, 2009; Eklund, Erlandsson, & Persson, 2003) is one such global assessment that has been found to be related to life-satisfaction among college students (Eakman & Eklund, 2012) and health and well-being among individuals with mental illness (Eklund et al., 2003).

I also anticipated that experiences of pleasure, productivity, and restoration would each independently predict levels of perceived stress. However, our results show that the level of pleasure experienced was the only statistically significant predictor of stress. Again, the relationship identified was weak ($\beta = -0.18$), likely for the same reasons described in the above paragraphs. There are a few possible explanations for why experiences of productivity and restoration as measured for this study were not found to be predictive of perceived stress. First, while productivity is a positive experience, many students may prioritize feeling productive over participation in important health activities. If activities such as sleep or exercise are sacrificed in favor of feeling productive, students' stress levels are likely to increase (Benham, 2010; Bland et al., 2014; Dusselier et al., 2005; Welle & Graf, 2011).

Experiences of restoration were also poor predictors of stress, and had the lowest zero-order correlation with perceived stress. It is possible that this relationship was negligible to weak because restoration experiences especially need to be assessed over a longer period of time to establish their relationship with stress. For example, many people report resting and recovering from work on the weekends (Drach-Zahavy & Marzuq, 2013) and for students, experiencing recovery on the weekend is an important factor in preventing chronic stress (Ragsdale, Beehr, Grebner, & Han, 2011). Students also report studying or working hard on a project for several days followed by a period of relaxation (Schraw, Wadkins, & Olafson, 2007). Therefore, if restoration experiences were measured for several days, to include both weekdays and weekends, one may get a more accurate understanding of their relationship with stress.

Experiencing pleasure may also have been the strongest predictor of stress because experiencing pleasure in turn enhances experiences of productivity and restoration. In other words, perhaps when students enjoy their activities, they are not only less likely to be stressed, but also more likely to experience restoration or productivity from their activities, which, in turn, further lessens their chances of being stressed. This explanation is supported by Proyer (2014), who found that adults use humor, amusement, or entertainment (tactics used to enhance the enjoyment or pleasure experienced) to increase a sense of success and mastery over challenges (similar to experiencing productivity), and to relax and unwind during leisure times (similar to experiencing restoration). Pierce (2003) also theorized that while experiences of restoration and productivity were unlikely to occur in high levels within the same occupation, individuals can experience a great amount of pleasure while simultaneously experiencing high restoration or productivity.

Implications

The weak strength of the relationships identified in this study limits their practical significance. However, the results do suggest that how students experience their daily activities may contribute just a small amount to the variance in perceived stress. That is, although experiences of pleasure, productivity, and restoration share only a small percentage of the variance with students' levels of perceived stress (2% - 6%), this small percentage may still have important implications for interventions targeting students' stress levels. Current interventions for stressed students focus on encouraging participation in relaxing activities such as meditation, or on teaching time management techniques that may increase students' academic performance (Conley et al., 2013; Conley et al., 2012; Oman et al., 2008). It may be beneficial to include education on the importance of how students experience their activities and the potential impact those experiences may have on their levels of stress. Students may first need guidance in becoming more aware of how they experience their activities. In several stress interventions, students have successfully learned mindfulness techniques, learning to increase nonjudgmental attention to in-the-moment experiences (Caldwell, Harrison, Adams, Quin, & Greeson, 2010; Warnecke, Quinn, Ogden, Towle, & Nelson, 2011). These techniques may be modified to teach students to be more aware of specific experiences such as pleasure, productivity, and restoration, because students must first be aware of how they are experiencing their activities before they are able to attempt to change their experiences.

Additionally, because pleasure had the strongest, though still weak, relationship with stress in the present study, interventions for students could also include guidance on how students can increase pleasure in their daily activities. This may be through the identification of new enjoyable activities, or through identifying new ways of completing current activities that

makes them more enjoyable to do. For example, in a qualitative interview, one student described using a nice journal and pen to work on schoolwork because it made it more enjoyable and less stressful (Aselton, 2012), suggesting that even small changes to an activity can make it more enjoyable and decrease the amount of stress students experience. Based on the relationships between experiencing pleasure and experiencing productivity and restoration found in the present study, if students can increase the amount of pleasure they experience from their activities, they may also find that they experience just a little more productivity and restoration. By increasing the amount of pleasure, productivity, and restoration they experience from their activities, students may also feel just a little less overall stress. Further research is needed to truly establish whether daily experiences present a useful point of intervention for students' perceived stress.

Future Research

Future research could offer a better understanding of the constructs and relationships examined in this study through several different methods. First, future studies might examine experiences of pleasure, productivity, and restoration while controlling for other known predictors of perceived stress to establish their true effect. Factors such as the amount of (a) social interaction and support (R. M. Lee et al., 2002; Offstein et al., 2004; Renk & Smith, 2007; Welle & Graf, 2011), (b) sleep (Benham, 2010; Bland et al., 2014; Welle & Graf, 2011), and (c) physical activity (Welle & Graf, 2011) in which students participate should be considered alongside the experiences addressed in this study because these factors are consistently associated with stress. Further, because of the large amount of literature that associates student's stress with certain categories of activity such as leisure or obligatory activities (Aselton, 2012; Bland, Melton, Bigham, & Welle, 2014; Dusselier et al., 2005; Gerber et al, 2014; Ross, Niebling,

& Heckert, 1999; Welle & Graf, 2011), future studies could look at how students experience activities that fall into these and other categories.

In addition to including other variables or examining experiences related to specific types of activity, the relationship between experiences and perceived stress may be better captured using a longitudinal approach. A longitudinal approach could help identify whether changes in students' perceived stress is related to or predicted by changes in their levels of pleasure, productivity, and restoration over time. This approach would allow for a better understanding of if and how daily experiences are associated with students perceived stress.

Limitations

There are several limitations of the current study. First, data were collected from a single university and participants were primarily white, female, and in their early 20s. Therefore, the results may not be reflective of other students at other universities. However, the demographic profile of our sample was similar to that of the study site as well as the profile of college students nationally at the time of data collection (ACHA, 2009). Another limitation of the current study is the use of self-report measures to assess stress and experience. While self-report is a preferred method for gathering subjective data (Reis, 2012), it also introduces potential biases due to social desirability or participants' limited ability to recall their activities and experiences. Additionally, I did not have access to information on the students who did not respond to the survey, which may have created a response bias toward students with more time to participate in university studies, or who were more interested in winning the iPad ® incentive. Finally, because this study was cross-sectional a causal relationship could not be established.

In conclusion, this study suggests that perceived stress is related, though only weakly, to students' experiences of pleasure, productivity, and restoration. Therefore, interventions designed

to decrease stress may benefit from including education on the importance of prioritizing these types of positive experiences in daily life. Future research on these constructs should include other predictors of stress and consider a longitudinal design to better identify the best targets for intervention.

CHAPTER 3: REFLECTION

As a result of choosing to complete a thesis, I have grown as a consumer of research, and have gained insight into important constructs that will help guide my future practice in occupational therapy. First, by participating in the many steps required for an empirical study, I have become more skilled at finding and interpreting research. I completed an extensive literature review before beginning my study, and continued to find new research and information throughout the process. Through trial and error and a lot of practice, I am now much better at targeting the information I need through searches of various databases. More importantly, I am better able to find patterns across articles and synthesize information in a meaningful way. Running my own data analyses also increased my ability to interpret analysis and results from other studies. With help from my committee members, I had the opportunity to learn many of the nuances of correlation and regression analyses, and to observe and begin to understand Rasch analysis. My greater understanding of and appreciation for research will be very helpful as I begin my career as an occupational therapist. Because of the hands-on experiences I have had, I will be better able to find and interpret evidence that is relevant for my clients.

In addition to building my skills as a consumer of research, completing this thesis has broadened my understanding of occupation, stress and coping. The knowledge I have gained will be reflected in how I approach these constructs with my future clients, and are already reflected in how I approach them for myself. I plan to begin my career in occupational therapy by working with children with physical, cognitive, and behavioral disabilities. Many of my clients are likely to be adolescents who are in high school, who may need guidance as they transition into college or other young-adult roles. Understanding the prevalence of stress in typical college students, as

well as the methods they use to prevent and cope with stress will allow me to assist my clients through this process by educating them on the importance of sleep, exercise, leisure activities, and social support (Benham, 2010; Bland et al., 2014; Hammell, 2004; R. M. Lee et al., 2002; Offstein et al., 2004; Renk & Smith, 2007; Welle & Graf, 2011) and by helping them establish a routine that includes these elements in their day-to-day lives. Additionally, because my study identified a small relationship between stress and students' daily experiences, I will feel confident in encouraging my clients to consider their own experiences of pleasure, productivity and restoration when they are feeling stressed. I may then be able to help clients identify new activities or new ways of engaging in activities to improve their daily experiences. Many of these concepts may also be relevant for parents and families of children with disabilities, because they are also likely to experience high stress (Saloviita, Itälänmäki, & Leinonen, 2003).

As a future occupational therapist, it is also important that I learn to manage my own stress to allow me to be fully engaged with my clients. Throughout the process of completing my thesis, I have become more aware of how I experience my daily activities and how my experiences influence the amount of stress I perceive. Atler (2014a) and Pierce's (2003) theories on the importance of experiencing pleasure, productivity, and restoration have become very relevant in my daily life. For example, I have found that when I am stressed, I often engage in activities such as watching television that provide an escape from feeling stressed but do not provide me with any real pleasure, productivity, or restoration. Since this revelation, I have made an attempt to recognize when I am engaging in escape activities and choose to engage in other activities that bring me more positive experiences such as going for a walk, talking to a friend, or accomplishing a small task around the house. I have found that this relatively small change in my

daily habits has made me more successful at coping with stress, and I hope to maintain this change and others throughout my future career.

In summary, this research project has been a valuable experience that has transformed me both professionally and personally. I am now able to more confidently find and interpret literature, which will improve my ability to provide evidence-based interventions to my future clients. I also have a more thorough understanding of potential avenues to address stress for my future clients and their families. Finally, this project has improved my ability to cope with stress in my own life, which will increase my ability to remain engaged with future clients even when stress occurs.

FIGURES AND TABLES

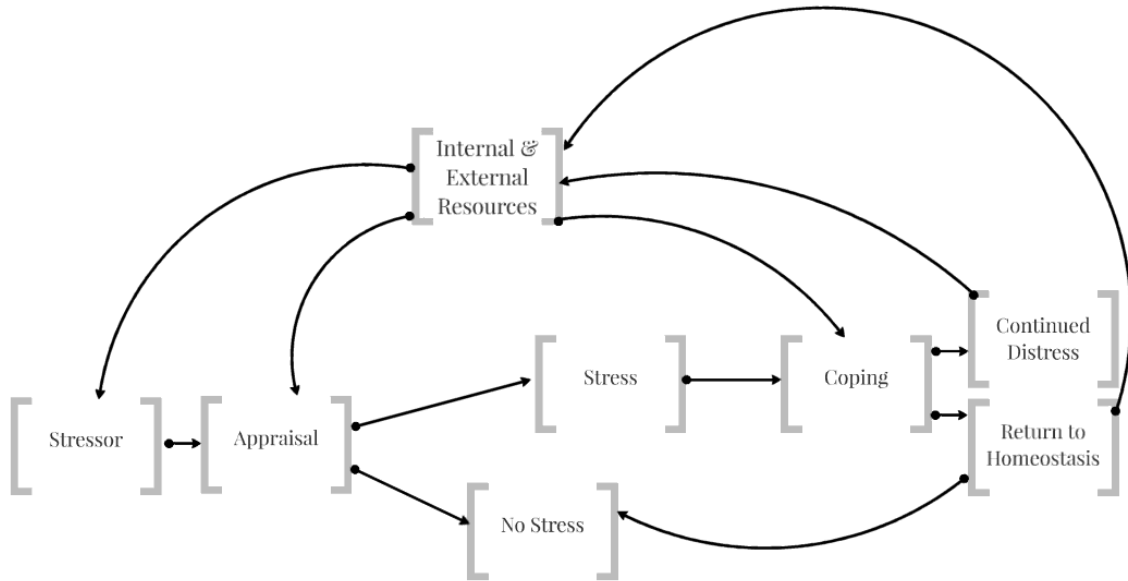


Figure 1. Model of Situational Stress – The person/stressor transaction (Folkman et al., 1986; Lazarus, 1974)

Table 1

Descriptive Statistics

	Mean	Standard Deviation	Median	Minimum	Maximum
Age	25	6.7	22	17	53
Perceived Stress Scale Total	17.29	6.28	17	3.00	34.00
Measure of Pleasure (Logits)	1.36	0.67	1.25	-0.13	3.84
Measure of Productivity (Logits)	0.62	0.81	.55	-1.19	3.59
Measure of Restoration (Logits)	0.42	0.61	.37	-1.25	2.46

Table 2

Participant Characteristics (n=186)

Characteristic	<i>n</i>	%
Sex		
Male	83	45
Female	103	55
Year of Study		
<u>Undergraduate</u>	126	68
Freshman	33	18
Sophomore	24	13
Junior	38	20
Senior	31	17
<u>Graduate</u>	60	32
Masters	40	22
Doctorate	20	11
Race/Ethnicity		
White	163	88
Asian	7	4
Black	1	.5
Hispanic	8	4
Other/Prefer Not to Answer	7	3.5

Table 3

Correlations Among Perceived Stress Scale Total, and Measures of Pleasure, Productivity and Restoration Experiences (Logits)

	Perceived Stress	Pleasure	Productivity
Pleasure	- 0.25*		
Productivity	- 0.21*	0.39*	
Restoration	- 0.15*	0.43*	0.38*

*significant at $p < .05$

Table 4

Results of the Regression Analysis of the Extent to Which Measures of Pleasure, Productivity, and Restoration Experiences (Logits) Predict Perceived Stress Scale Totals

	<i>B</i>	Standard Error	β
Pleasure	- 1.73*	.17	- 0.18*
Productivity	- 0.85	.16	- 0.11
Restoration	- 0.25	.17	- 0.02
Model R Square	$R^2 = 0.07, R = .27^*$		

* $p < 0.05$

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APPENDIX A: ASSESSMENTS

The Daily Experiences of Pleasure Productivity and Restoration Profile

Choose the best options that describe your experiences during each activity

PLEASURE – experiencing a sense of enjoyment						
Unpleasant, Annoying, Irritating			Fun, Feeling good, Can't wait to do it again			
Descriptors:						
Extreme Displeasure	Quite a bit of Displeasure	A little Displeasure	Neither Pleasure nor Displeasure	A little Pleasure	Quite a bit of Pleasure	Complete Pleasure
PRODUCTIVITY – experiencing a sense of doing						
Inefficient, Ineffective, Useless			Useful, Achievement, Efficient, Creative			
Descriptors:						
Extreme Unproductivity	Quite a bit of Unproductivity	A little Unproductivity	Neither Productive nor Unproductive	A little Productivity	Quite a bit of Productivity	Complete Productivity
RESTORATION- experiencing a sense of renewal						
Empty, Drained, Exhausted			Refreshed, Energized, Rejuvenated			
Descriptors:						
Extreme Depletion	Quite a bit Depleted	A little Depleted	Neither Renewed nor Depleted	A little Renewed	Quite a bit of Renewed	Complete Renewal

The Perceived Stress Scale 10-Item

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 by circling *how often* you felt or thought a certain way.

Name _____ Date _____

Age _____ Gender (*Circle*): **M** **F** Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- | | | | | | |
|--|---|---|---|---|---|
| 1. In the last month, how often have you been upset because of something that happened unexpectedly? | 0 | 1 | 2 | 3 | 4 |
| 2. In the last month, how often have you felt that you were unable to control the important things in your life? | 0 | 1 | 2 | 3 | 4 |
| 3. In the last month, how often have you felt nervous and "stressed"? | 0 | 1 | 2 | 3 | 4 |
| 4. In the last month, how often have you felt confident about your ability to handle your personal problems? | 0 | 1 | 2 | 3 | 4 |
| 5. In the last month, how often have you felt that things were going your way? | 0 | 1 | 2 | 3 | 4 |
| 6. In the last month, how often have you found that you could not cope with all the things that you had to do? | 0 | 1 | 2 | 3 | 4 |
| 7. In the last month, how often have you been able to control irritations in your life? | 0 | 1 | 2 | 3 | 4 |
| 8. In the last month, how often have you felt that you were on top of things? .. | 0 | 1 | 2 | 3 | 4 |
| 9. In the last month, how often have you been angered because of things that were outside of your control? | 0 | 1 | 2 | 3 | 4 |
| 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? | 0 | 1 | 2 | 3 | 4 |

Please feel free to use the *Perceived Stress Scale* for your research.

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APPENDIX B: CODING GUIDELINES

Label	Examples
Medical Appts	therapytherapy at the doctor's office Dr's Appointment
TV or Movie with Others	Watching "2012" with wife. Watched TV with family watched tv with husband Watching TV with my roommates.
Taking Test or Presenting	Class - presentation on brain function Exam Psychology Test
Volunteer	Volunteering at the Health Fair at a local medical plant. Volunteering at Colorado Master Gardener Meeting with at-risk teen boy group home to set up seed starting lab
Socializing with Alcohol	Played beer pong with friends drinking wine Hung out at bars Hanging out and drinking with friends at the bar
Nonroutine Grooming	Got ready to go out Getting ready to go to a concert Get dressed for dinner
Active Recreation With Others	Playing catch Went to the park ice skating Walk in to and around city park with boyfriend
Meeting Superiors	on the phone with advisor/boss Met with a professor to discuss my upcoming presentation Spoke with advisor
Group Exercise	swim practice Vinyasa Yoga kickboxing

Planning and preparing	At my house getting things ready for work the next day. Prepared for work Prepped for next morning (made school lunches, etc)
Large Social Ev	Barbeque and Eating and Drinking Was at a birthday party Playing card games at Haunted game Cafe with friends
Sex and Intimacy	personal time with husband Sex Laying in bed with my boyfriend.
Snooze Waking	waking up and getting out of bed Got up after two rounds of snoozing Snooze alarm Laying in bed, trying to make myself get up
VideoComputer Game	Play Minecraft played mario kart wii Played video games
Public Transport	taking the bus home Taxi to airport
Caring for Pets	Played with my dogs Walking my dogs Took the dog to the Dog park
Help Other NonCG	Helping my girlfriend get ready to go to Denver for the week Drove to pick up a friend Drove my friend home
Waiting	Waited for class to start Waiting outside my girlfriends classroom Wait in line for coffee and breakfast sitting in a car
Meeting Clients or Students	Teaching Calculus I Held a study session with my students. Proctored a test for my students.
Independent Hobbies	Practice flute Played guitar Writing a story Writing for Pleasure Painting

Community Activity with Others	Orchestra Rehearsal Attending a concert Work at student government Bible Study
Written communication and social media	Checked Email talking to friends online Checked Facebook and E-mails
Dressing	Got dressed for work Getting dressed Got up and got dressed
Active Recreation Alone	climbing Ride two different horses Mountain biking
Work at Computer	working on a resume checked email for work Made phone calls and sent emails for work Registering for classes Checking emails, reeding reports.
Napping	Napping Nap took a nap
Movie Alone	Watched a movie Watching Batman Beyond Watched a movie - A Haunted House
Computer Unspec	On computer Messing around on the computer Surfing the Internet
Caregiving	Gave daughter bath & got her ready for bed Dressed and prepared daughter for the day Dropping off Daughter at Daycare Helped 6 year old son with homework
Eat With Others	Eat dinner while visiting with friends Coffee/Breakfast with church members Eating with my girlfriend
Housework	Did laundry Cleaning my apartment Vacuuming

Reading and Passive Leisure	Casual reading Listening to the radio Read the Bible/ prayed
Meeting Peers	Study Group meet Meeting with Coworkers group project met with group partner for project
Preparing Meals	Make smoothie and coffee cooked dinner making breakfast
Making & Eating Meals	preparing and eating breakfast prepare and eat lunch Making and eating breakfast
Eating in the Community	Went out to get breakfast Got Dinner Sitting at a café
Exercise Alone	Swimming for exercise Working out. Gym
Relaxation	Lounging St in the sun Hanging out in my dorm Smoked a Cigar
Errands	Running errands Bought and replaced tires Went to Walmart
Showering	Shower took shower
PM Grooming	Get ready for bed Prepare for bed
Real Time Social Communication	Called Mum socialized with friends Took friends on tour of house
Watch TV Alone	watching television Watched an episode of Stark Trek (TNG)
Formal Employment	Corrected papers Work (Research) Tutoring work from home office
Routine Day-time Grooming	Getting showered, dressed, and makeup Getting ready for my day Dressing/ getting ready to leave for the day

Commute: Biking or Walking walking to class
biking back to my dorm room
walking to the dining hall to get food

Homework Worked on paper for school.
Worked some more on homework.
Home work in my room
Reading journal articles
Editing a manuscript

Attend Class In class
Class
Calculus class
Film class

Eating Eating dinner
Ate Breakfast
Ate Dinner

Commute: Driving Driving from Gunnison to Fort Collins
Drove to school
Drove home

Sleeping Sleeping
slept
