

#### **Proposal for Senior Honors Thesis**

#### HONS 497 Senior Honors Thesis Credits 2

Directions: Please return signed proposal to the Honors Office **at least one week prior to your scheduled meeting with the Honors Council**. This proposal must be accepted by Honors Council the semester before presentation.

Student's Name: Paola Caceres

Primary Advisor: Dr. Bailey

Secondary Advisor:

Thesis Title: Sabbath Keeping Narratives

Local phone: (269)-240-0395

Email: paola.sara.caceres@gmail.com

Expected date of Graduation: May 2014

I. Provide goals and brief description of your project or research.

#### Goals

This research project seeks to examine the nature of Sabbath-keeping experiences among college students at Andrews University. Specifically, I will be examining the following hypotheses:

- 1. The moderate relationship between internalization of Sabbath keeping and well-being will replicate in a new sample of Seventh-day Adventist young adults.
- 2. Need satisfaction, reported on a survey and coded from Sabbath keeping narratives (as in Philippe, Koestner, Beaulieu-Pelletier, & Lecours, 2011), will be positively related to well-being and internalization of Sabbath keeping.
- 3. For life-long Adventists, relationships to parents will be positively related to need satisfaction, wellbeing, and internalization of Sabbath keeping.
- 4. Need satisfaction and relationships to parents (for life-long Adventists) will mediate the relationship between internalization of Sabbath keeping and well-being.

#### **Background and Rationale**

Recent research has demonstrated a relationship between Sabbath keeping and the well-being of Seventh-day Adventists (Superville, Pargament, & Lee, 2013; Bailey & Emanuel, 2013). Superville and his colleagues found that four variables— religious coping, religious support, diet, and exercise—partially mediate the relationships between Sabbath-keeping and physical and mental health. However, their results cannot be interpreted causally and some of the mediations are properly interpreted as shared variance. Nevertheless, the Superville study makes a case for the involvement of Sabbath-keeping in the well-being of Seventh-day Adventists. A study by Bailey and Emanuel (2013) found similar but stronger relationships in a sample of college students, as well as evidence for the role of internalization in well-being. Based on a theoretical model proposed by Diddams, Surdyk, & Daniels (2004), Bailey & Emanuel (2013) developed an instrument that measured internalization of Sabbath keeping, which was moderately positively correlated with well-being, participation in religious activities on the Sabbath, and a general measure of internalization of Christianity. Bailey and Emanuel (2013) also found that the relationship between internalization of Sabbath keeping and well-being was only weakly mediated by internalization of Christianity, suggesting unique contributions of Sabbath-keeping internalization to well-being above and beyond general internalization of religion.

What remains unclear from these studies is the mechanism by which Sabbath-keeping relates to well-being. It could be that Sabbath-keeping functions as means of exposing Seventh-day Adventists to opportunities for coping, support, and instruction in well-being (Superville, et al., 2013). However, it is also possible that internalization of Sabbath-keeping is a proximal mechanism of well-being for Seventh-day Adventists because it is an extremely effective means of meeting basic psychological needs for competence, autonomy, and relatedness. Such an effect would be consistent with other work showing moderate to strong effects of internalization of religion on mental and physical health (Neyrinck, Vansteenkiste, Lens, Duriez, & Hutsebaut, 2006; Ryan, Rigby, & King, 1993; Zeldman, 2006).

The current study seeks to use an episodic memory recall technique (Philippe, et al., 2011) along with surveys to examine whether the relationship between internalization of Sabbath-keeping and well-being is mediated by basic need satisfaction. Moreover, because life-long Adventists will have learned their Sabbath-keeping practices from their parents (in more or less need-supportive environments), I also intend to examine the relationships between Sabbath-keeping narratives, well-being, Sabbath-keeping internalization, need satisfaction, and perception of parental environment among life- long Adventists.

II. Outline your methodology. Please be specific. How does this achieve your goals and how reliable is it?

#### Materials

Subjects will be recruited from the Behavioral Sciences Research Participation Pool. Subjects will only be included in the study if they are 18 years of age or older and self-identify as Sabbath keepers. All subjects will complete the following questionnaire online via a lab-specific installation of LimeSurvey 2.00+ Build 130802 in a lab-controlled website and only the researchers will have access to the data. The subject pool website will link directly to the survey. Subjects will be able to track their completion of the survey via a bar at the top of the screen. Once the subjects have completed the survey, they will be auto-forwarded by the survey site back to the subject pool website, where they will automatically receive credit for their participation. No unique identifying information about subjects will be stored with their questionnaire data. Depending on how long subjects write about their Sabbath experience, this procedure should take between 30 minutes and an hour.

Measure	Source	Number of
		Items
Sabbath Memory	Philippe, Koestner, Beaulieu-Pelletier, &	1
	Lecours, 2011	
Sabbath-Keeping	Bailey & Emanuel, 2013	21
Internalization		
Christian Religious	Ryan, Rigby, & King, 1993	12
Internalization Scale		
Oxford Happiness	Hills & Argyle, 2002	19
Questionnaire		
Parental Environment	Eakins, McGue, Iacono, 1997; Caceres,	12 items each
Questionnaire (Andrews	Bailey, Baltazar, & McBride, 2013	for mother and
University Version)		father
Perception of Parents	Niemiec, Lynch, Vansteenkiste, Bernstien,	12 items each
Scale	Deci, & Ryan, 2006	for mother and
		father
Basic Need Satisfaction	Gagné, 2003	25
Demographics		4

Measures will be presented in the order indicated in the following table:

The Parental Environment Questionnaire and Perception of Parents Scale are presented for both mother and father. Subjects will be asked if they grew up in a household with a mother or maternal figure (and father and paternal figure in a separate question). For those subjects that answer "no", the corresponding questionnaires will not be displayed.

#### Reliability & Validity

All of the included surveys have strong to excellent reliabilities ( $\alpha > 0.8$  for all surveys). In addition, each of the surveys has been extensively validated by the studies cited in the table above. Our laboratory has also checked (and revised when necessary) the factor structure of most of these questionnaires in previous studies as part of our data analysis protocol.

#### Analysis

First, the Sabbath narratives will be coded for need satisfaction or thwarting using the guidelines used by Philippe and his colleagues (2011). Next, we will correlate this measure of need satisfaction in episodic recall, the basic measure of need satisfaction, the measures of Sabbath-keeping and Christian internalization, and the measure of well-being. We will then examine whether the measures of need satisfaction mediate any relationships between internalization and well-being. Following this analysis, we will limit our sample to only life-long Adventists, and re-run the analysis, including measures of parental perception as mediators.

#### Implications

Identifying which specific religious practices promote religious internalization is crucial in understanding the relationship between religious practice and well-being. Confirmation of our hypothesis would provide further evidence for the relation between Sabbath-keeping internalization and higher levels of subjective well-being and support the use of Self-Determination Theory-based models proposed by Diddams, Surdyk, & Daniels (2004) to better understand internalization of religion (specifically, Seventh-day Adventist Christianity). Moreover, it would suggest that internalization of religion is better understood in respect to practices that directly involve autonomy, competence, and relatedness. Lastly, it would set a foundation for subsequent research hoping to find ways in which to promote a religious community that thrives.

III. Explain in what sense your project is original, unique, or beyond normal senior expectations. How does it relate to current knowledge in the discipline?

By doing this research project, I will be going beyond the normal coursework expected of a senior psychology student. Unlike the majority of behavioral neuroscience students (BNS) I will be learning and applying statistical analyses that go above and beyond what is taught in the required Research Methods courses. Though Sabbath keeping has long been thought to contribute to the well-being of Seventh-Day Adventists, there is very little research that demonstrates this relationship. Additionally, my sample involves a high-risk population (prone to leaving the Church) for which we have gathered little empirical evidence. Working with Dr. Bailey will continue to help me to develop analytical and statistical skills as a researcher.

IV. Include a substantive annotated bibliography of similar or related work.

### Bailey, K. G. D. & Emanuel, A. C. B. (2013). [An exploratory factor-cluster analysis of the internalization of Sabbath keeping]. Unpublished raw data.

This study proposes that specific Christian communal practices, such as Sabbath keeping, may serve as an important function in the internalization of religion and subjective well-being. The authors developed an instrument used to measure the internalization of Sabbath keeping using a cluster-factor approach. Results show a relationship between higher levels of internalization of Sabbath keeping and higher levels of subjective well being as predicted by Self-Determination Theory. I will be using the same instrument used in this study to measure the internalization of Sabbath keeping. Additionally, this research provides evidence suggesting that there are separate contributions of internalization for specific practices and general beliefs.

### Caceres, P. S., Bailey, K. G. D., Baltazar, A. & McBride, D. C. (2013). [A revision and validation of the Parental Environment Questionnaire for use in a diverse sample of young adults]. Unpublished raw data.

This article furthers the development of two attested subscales from The Parental Environment Questionnaire (PEQ) by Elkins, McGue, and Iacono (1997), for the use of young adults by 1) using exploratory factor analysis in place of principal components analysis, re-writing selected items to ensure that no reverse coding of items is necessary for positive scales, and by using a sample that includes males, females, and non-twins. The study also demonstrates that a revised short form of the PEQ (renamed the Parental Involvement and Conflict scale) predicts interpersonal relationships among young adults. The revised, 12-item short-form version of the questionnaire is used in my survey to measure parental environment.

#### Diddams, M., Surdyk, L. K., & Daniels, D. (2004). Rediscovering models of Sabbath keeping: Implications for psychological well-being. *Journal of Psychology and Theology*, 32, 3-11.

This article describes three models of Sabbath keeping, their implications for well-being, their inherent challenges and a program of research to investigate the proposed relationships. The models are (a) Life Segmentation, in which people actively segment their lives to create respite; (b) Prescribed Meaning, in which people prescribe positive and religious meaning to life segmentation; and (c) Integrated Sabbath, in which Sabbath keeping is celebrated as an integrated belief system of daily rest, reflection and relationship development. The Sabbath-Keeping internalization survey (Bailey & Emanuel, 2013) was developed from one of the theoretical models proposed by Diddams, Surdyk, & Daniels (2004) within the framework of Self-Determination theory.

#### Elkins, I. J., McGue, M., & Iacono, W. G. (1997). Genetic and environmental influences on parentson relationships: Evidence for increasing genetic influence during adolescence. *Developmental Psychology*, 33, 351-363.

The original Parental Environment Questionnaire described in this study was developed for use in the Minnesota Twin Family Study as an assessment of family environment that. It is a 42-item scale created to assess the different aspects of parent-child relationships, including parental support, closeness, and conflict. The questionnaire was developed for use in a twin study. Ratings were made on a four-point Likert-like scale from *definitely false* to *definitely true*; where sons made separate ratings for mother and father. There are a number of issues with the analysis used to develop the original PEQ, including the use of only male twins and the use of principal components analysis in place of factor analysis. Thus, my study uses a revised version of the PEQ.

### Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and Emotion*, 27, 199-223.

The authors conduct two studies that examine individual and environmental forces that affect engagement in prosocial behavior. A model in which autonomy orientation and autonomy support predicted satisfaction of three core psychological needs was derived using Self-Determination Theory. Results from these two studies show that autonomy orientation is strongly related to engagement in prosocial activities and shows that need satisfaction fully mediates the effect of autonomy support and partially mediates the effect of autonomy orientation. This research provides a basis for our hypothesis that basic psychological needs being satisfied will be positively related to well-being and internalization of religion and well-being.

### Hills, P. & Argyle, M (2002). The Oxford Happiness Questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences*, *33*, 1073-1082. doi:10.1016/S0191-8869(01)00213-6

This article discusses the Oxford Happiness Questionnaire (OHQ), derived from the Oxford Happiness Inventory, (OHI). The questionnaire is comprised of 29 items that tap into self-esteem, sense of purpose, social interest and kindness, sense of humor, and aesthetic appreciation. The questionnaire is based on a uniform six-point Likert scale ranging from *strong disagree* to *strongly agree*. In my study, this questionnaire will serve as a measure of well-being.

## Niemiec, C. P., Lynch, M. F., Vansteenkiste, M., Bernstein, J., Deci, E.L., & Ryan, R. M. (2006). The antecedents and consequences of autonomous self-regulation for college: A self-determination theory perspective on socialization. *Journal of Adolescence*, 29, 761-775.

The authors investigate the relationship between perceived need support from parents, their child's autonomous self-regulation for academics, and the child's well-being. Their discussion is based on self-determination theory and concentrates on three psychological needs: competence, relatedness, and autonomy. Results indicate that perceived need support from parents independently predicts adolescent well being, a relation shown to be stronger for mothers than for fathers. Thus, support from parents does seem important for the development of adolescents' autonomous self-regulation and well-being. This research provides further support for the idea that learned practices taught by parents, such as Sabbath-keeping, may serve a function in mediating internalization of religion and well-being.

## Neyrinck, B., Vansteenkiste, M., Lens, W., Duriez, B., Hutsebaut, D. (2006). Cognitive, affective and behavioral correlates of internalization of regulations for religious activities. *Motivation and Emotion*, 30, 323-334. doi:10.1007/s11031-006-9048-3

The goal of this study was to explore various religious behaviors and their relationship to various types of extrinsic motivation; it questions whether and how reasons for engaging in religious practices relate to the way individuals approach religious content. Results showed that individuals engaging in religious practices that were regulated autonomously and congruent with personal goals also report higher levels of overall well-being. When religious practices were mediated or controlled by guilt, social pressure, fear, or shame, individuals reported lower levels of well-being. This research shows that internalization of beliefs is positively related to well-being and that individuals who engage in religious behaviour (i.e. Sabbath Keeping) because perceived personal significance will exhibit higher levels of well-being, more cognitive flexibility openness towards Christian content, and a stronger devotion to its message.

# Philippe, F. L., Koestner, R., Beaulieu-Pelletier, G., & Lecours, S. (2011). The Role of Need Satisfaction as a Distinct and Basic Psychological Component of Autobiographical Memories: A Look at Well-Being. *Journal of personality*, 79(5), 905-938.

The goal of this research was develop a coding scheme to measure need satisfaction for autobiographical memories in line with self-determination theory's definitions of the needs for autonomy, competence, and relatedness. On the basis of past research, a self-rating method was developed to assess these needs. As expected, satisfaction of these psychological needs were shown to be correlated to each other and suggests that need satisfaction corresponds to the cognitive affective component with an autobiographical memory and that it is different form other narrative, qualitative, and functional measures of memory. The most important finding of the research relating to my study was that need satisfaction was associated with well-being, above all these other memory components, for both positive and negative memories.

## Ryan, R. M., Rigby, S., & King, K. (1993). Two types of religious internalization and their relations to religious orientations and mental health. *Journal of Personality and Social Psychology, 65*, 586-596. doi:10.1037/0022-3514.65.3.586

This study conceptualizes two types of religious internalization presumed to vary in their relative autonomy. Identification, characterized by willful choice, indicates an adherence of beliefs based on personal values. Introjection, characterized by self- and other-approval-based pressures, represents a partial internalization of beliefs and is. Results show a relationship between higher levels of religious introjection and lower levels of well-being and a positive correlation between identification and subjective well-being. This article serves the purposes of my study by emphasizing the relationship between internalization of religious motivations and well-being, allowing us to suggest that the internalization of Sabbath-keeping practices may be stronger than the previously demonstrated relationships between low-cost practices and well-being.

## Superville, D. J., Pargament, K. I., & Lee, J. W. (2013). Sabbath keeping and its relationships to health and well-being: A mediational analysis. International Journal for the Psychology of Religion. Advance online publication. doi:10.1080/10508619.2013.83765

Due to a lack of research addressing questions about how and why religion is associated with health and well-being, the authors of this research sought to clarify the relationship between religion and health thought the analysis of four possible mediators believed to affect health: religious coping, religious support, diet, and exercise. These mediators were examined in relation to one specific aspect of religiosity, Sabbathkeeping. The association between Sabbath-keeping and physical and mental health was shown to be partially mediated by all four mediators. Thus, it is quite possible that Sabbath keeping practices might themselves mediate the relationship between religious well-being as well as coping and support, an issue that I hope to address in my study.

V. Provide a statement of progress to date and list the research methods coursework completed.

I have completed the following required research coursework for my psychology major: Research Methods I, Research Methods II, Research Methods III, and Research Methods IV. Coursework that has addressed the topic of how individuals approach religion include: Cosmos, Workshop: Spirituality and Addiction, and Thinking Theologically. Thus far, I have received IRB approval, data has been collected from 185 students, and I have begun coding the Sabbath narratives for need satisfaction or thwarting using the guidelines used by Philippe and his colleagues (2011).

#### **Department Chair Approval**

- This student's performance in his/her major field is acceptable.
- He/she has completed the requisite research methods coursework for the research to be pursued.
- I understand that he/she plans to graduate with Honors.

Department Chair (signature)

**Research Advisor Approval** 

I have read and support this proposal:

Primary Advisor (signature)

I have read and support this proposal:

Secondary Advisor (signature)

If human subjects or if live vertebrate animals are involved, evidence of approval from the Institutional Review Board or an Animal Use Committee is needed through the campus scholarly research offices (Ext. 6360).