THE RELATIONSHIP BETWEEN USE OF PRAYER AND STUDENTS’ INTERNAL WORKING MODEL OF ATTACHMENT IN ADJUSTMENT TO COLLEGE

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Psychologists have always been interested in how human attachment affects coping mechanisms and psychological outcomes associated with attachment. Attachment theory began with Bowlby (1969) who argued that the purpose of attachment is for the infant to maintain a close proximity to the caregiver who can provide the basic needs of survival and early emotional well-being. He believed that the "attachment behavioral system" was one of four behavioral systems that are inherent in all humans and represent an evolutionary system necessary for survival. The quality of attachment develops over time as the infant interacts with caregivers. Bowlby argued that the attachment relationship becomes internalized and therefore carries forth into future human interactions through the use of an IWM or a schema of close relationships.

There are three central types of attachment as discovered by Mary Ainsworth (1978) during her strange-situation experiment. Secure attachment is characterized by the infant seeking contact with the caregiver, and being comforted by their contact. In insecure-avoidant attachment the infant avoids contact, is the least affected by the caregiver’s absence and is not comforted by the caregiver. Lastly, the insecure-ambivalent (resistant) attachment results in the infant who is most upset by the caregiver’s absence and will seek contact, but cannot be comforted. Each type varies in the level of emotional security that the child derives from the relationship. Subsequent research has shown a significant relationship between the early security of attachment to parents and later adjustment.

Sroufe (1995) conceptualizes attachment as a system of dyadic emotional regulation between an infant and caregiver. Infants cannot control their emotions or state of arousal and require the support of the caregiver in order to do so; therefore the infant’s eventual ability to
regulate emotion stems from how the caregivers regulate their own emotions. Once children can manage their arousal levels and express to the caregivers their wants/needs they develop self-regulation skills. Sroufe believes that the dichotomous relationship between a parent and child never completely disappears. Both self and dyadic regulation is necessary throughout an individual’s life. In a later longitudinal study, Sroufe (2005) found that an individual’s attachment history was significantly related to self-reliance, emotional regulation, and social competence later in life.

In his research assessing the moderators and mediators of attachment and religious coping Granqvist (2005) found that individuals with an insecure attachment involved God in coping with stress. This finding supported Granqvist’s compensation hypothesis which states, “…God would be sought out by people with insecure attachment characteristics particularly in stressful circumstances (2005).”

Many researchers have looked at how attachment security during adulthood relates to various psychological outcomes. Byrd and Boe (2001) specifically looked at the interaction of attachment and the use of prayer in college students. They discovered a negative correlation between individuals who had an insecure-avoidant attachment and use of prayer. Insecure-ambivalent participants tended to pray while under stress, but insecure-avoidant participants did not. The prayers of insecure-ambivalent participants were generally related trying to seek closeness to God rather than requesting material objects. Byrd and Boe’s findings support the correspondence hypothesis of attachment theory related to religion which states, “…an individual’s relationship (or lack thereof) with the divine is predicted by their current internal working model of the self and the generalized other that influences behavior in human
relationships (2001).” The support of this hypothesis suggests that there is a significant relationship between the IWM, prayer, and stress.

Hypothesis

The hypothesis of this study is that dependent upon the students’ internal working model of attachment they will pray more or less frequently in order to cope with the stressors of adapting to college. Specifically, students with an insecure-ambivalent attachment to their parents will pray more to replace parental attachment with attachment to a divine being. Students with insecure-avoidant attachment will pray less because they hold little value in depending upon others, even a divine being. Students with a secure attachment will use prayer moderately and have a more successful transition to college.

This research is significant because although studies have been done measuring religiosity they encompass multiple variables such as church attendance, prayer, and perception of God (Francis, 1997; Francis, Robbins, Lewis, & Quigley, 2004; Granqvist, Ivarsson, Broberg, & Bent, 2007; Robbins & Francis, 2005). Also, they have been too broad in defining the relationship between religiosity and adjustment. Through focusing on one variable, prayer, it is easier to focus on its influence in student’s lives rather than broad generalizations of religiosity. In his research on attachment and religious coping Granqvist (2005) suggests a need for situation-specific research in the future because in his study there was no control over the nature of stressors.

Through researching specific stressors regarding adjustment to college (e.g., roommate problems, academic difficulty) the study can gauge the relationships and interactions between prayer, attachment, and adjustment to college. Although Byrd and Boe (2001) focused on prayer
in their study they specifically focused on types of prayers (meditative, colloquial, etc.) this study was designed to measure the frequency of prayer rather than specific type.

Method

Participants and Procedure

Fifty students at Marietta College (29 females and 21 males, mean age = 18.24 years) were recruited through both the Marietta College Research Participation Site and an introductory Communications class and received some sort of credit in exchange for their participation. All participants were freshmen at Marietta College. In regard to religious affiliation the sample had the following breakdown: Catholic 24%, Protestant 56%, Atheist 4%, Agnostic 4%, Other 12%. Prior to participation the students read and signed an informed consent form, and then they were given a packet containing four different measures. Once everyone had completed the informed consent and been handed a packet of materials instructions were given and the participants were asked to complete the measures. Each measure also had its own written instructions. The assessment took approximately twenty minutes.

Measures

Hazan and Shaver’s Adult Attachment Types and Their Frequencies (1987) questionnaire was used to assess student’s internal working model of attachment. There is one question, “Which of the following best describes your feelings?” Then, there are three separate answers which will categorize the participants as having a secure, avoidant, or anxious/ambivalent attachment. The reliability and validity of this measure has been established in more than 30 studies conducted since 1987 (Shaver & Clark, 1994; Shaver & Hazan, 1993; Mikulincer, Florian, Weller, 1993). See Appendix A.
The Ways of Coping Checklist (1985) is a 66-item questionnaire which measured the thoughts and actions individuals use to deal with stressful events. An academic examination was used as the focus of the questionnaire and the participants answered the questions regarding the particular event. The participants read the statement, “You have just taken the most important exam of your college career and you walk away knowing you failed it.” They then were prompted to respond to the following questions using a 4-point scale ranging from 0 (not used) to 3 (used a great deal). This questionnaire was used as an exploratory measure to determine if there is a correlation between the use of prayer and the use of other coping mechanisms. The 66-items are broken into eight subscales of adaptive and maladaptive coping mechanisms. Folkman and Lazarus determined reliability by determining the alpha coefficient of each scale/coping mechanism. The first scale-problem-focused coping had an alpha of \( \alpha = 0.88 \), scale two- wishful thinking \( \alpha = 0.86 \), scale three-detachment \( \alpha = 0.74 \), scale four-seeking social support \( \alpha = 0.82 \), scale five- focusing on the positive \( \alpha = 0.70 \), scale six-self blame \( \alpha = 0.76 \), scale seven-tension reduction \( \alpha = 0.59 \), and scale eight-keep to self \( \alpha = 0.65 \). Validity was measured using intercorrelations over three occasions which showed that each scale measured either the adaptive or maladaptive coping mechanism to which it was intended to measure (Folkman and Lazarus, 1985). See Appendix B.

The Multidimensional Prayer Inventory (Laird, Snyder, Rapoff, Green 2004) was used to measure student’s personal prayer. The Multidimensional Prayer Inventory is a four-part scale with eighteen questions assessing the frequency and type of prayer, two questions focusing on the student’s perceived effect of prayer, two more questions were added by the researcher to determine the influence of parent and/or guardian’s religious background, and one question regarding religious affiliation. Nineteen questions are on a 7-point scale, 2 questions were on a
8-point scale, with 1 question being purely demographic. Reliability for this measure is affirmed through a high alpha coefficient of $\alpha=0.92$. In determining validity the Multidimensional Prayer Inventory indexes were positively correlated with intrinsic religious orientation, affirming the measure’s convergent validity (Laird, Snyder, Rapoff, Green 2004). See Appendix C.

The Student Adaptation to College Questionnaire (SACQ) (1999) is a 67-item questionnaire which will measure the effectiveness of the student’s adjustment to college. The participants respond to each item using a 9-point scale ranging from “applies very closely to me” to “doesn’t apply to me at all.” There are four subscales: academic adjustment which consists of twenty-four items, social adjustment which consists of twenty items, personal-emotional adjustment which consists of fifteen items and attachment (goal commitment/institutional) which consists of fifteen items. The reliability and validity of this measure has been determined through administration of the questionnaire over several years at different academic institutions. Cronbach’s alpha coefficient values for the Academic Adjustment subscale range from $\alpha=0.81-0.90$, for Social Adjustment subscale from $\alpha=0.83-0.91$, for the Personal-Emotional Adjustment subscale from $\alpha=0.77-0.86$, for the Attachment subscale from $\alpha=0.85-0.91$, and for the Full Scale from $\alpha=0.92-0.95$. Research conducted by other investigators has obtained results that are consistent with Baker and Siryk (1999). Validity is shown through several intercorrelations among the subscales and between the subscales and full scale. The intercorrelations are large enough to signify a common construct is being measured, but small enough to maintain the conceptualization of the construct as having different facets as represented by the subscales (Baker and Siryk, 1999). See Appendix D.
Results

Table 1 summarizes the descriptive statistics of the measures derived from the sample. Means, standard deviations, and ranges do not indicate any floor or ceiling effects. Floor effects occur when most participants score near the bottom or "floor" of a test. It then becomes difficult to distinguish between participants and the results are skewed. Ceiling effects occur when participants all score around the maximum or "ceiling" of a test. Both floor and ceiling effects show a lack of variability in the scale of measurement.

In order to test the hypothesis that students’ internal working model (IWM) of attachment has a significant influence their frequency of prayer in order to cope with the stressors of adapting to college a one-way analysis of variance (ANOVA) was run with attachment as the independent variable and prayer per week and duration of prayer as dependent variables. The independent variable of attachment only resulted in two types: secure and insecure-ambivalent because none of the participants rated themselves as insecure-avoidant. According to multiple studies done by Hazan and Shaver (1987, 1990) twenty to thirty percent of participants generally described themselves as avoidant, so the data collected in this study is unusual compared to previous research. Table 2 summarizes the findings of this test. Neither number of times an individual prayed per week nor duration of time spent in prayer was significantly related to attachment type.

A bivariate correlation matrix for the main variables of interest is shown in table 3. There was a significant correlation between how often an individual prayed per week and the coping mechanisms of self-blame $r(16) = -0.375$, $p<0.01$ and tension reduction $r(16) = 0.315$, $p<0.05$. This finding showed that the more participants prayed the less they used self-blame and the more they used tension reducing strategies. There were also significant negative correlations
between students’ institutional attachment during adjustment to college and wishful thinking
$r(23) = -0.340, p<0.05$ and detachment $r(23) = -0.303, p<0.05$ coping mechanisms. These
correlations show a relationship between students who are attached to their academic institution
and lower levels of wishful thinking and detachment. There was also another negative
correlation between personal-emotional adjustment to college and the keeping to oneself coping
mechanism $r(23) = -0.293, p<0.05$. This result showed that participants who had successful
personal-emotional adjustment kept to themselves less. In social adaptation to college another
negative correlation was found of both wishful thinking $r(23) = -0.304, p<0.05$ and detachment
$r(23) = -0.373, p<0.01$ coping mechanisms. These correlations show that participants who had
successfully social adjusted to college were less likely to use wishful thinking and detachment to
cope with stress.

Exploratory tests were run to determine if the data revealed any significant relationships
outside of the original hypotheses. A two-way analysis of variance was run with all of the
coping mechanisms and the subscales of adjustment to college as dependent variables in order to
determine if sex and attachment type played any sort of role in coping and/or adjustment to
college. Both figure 1 and 2 show the significant findings of this exploratory analysis. In figure
1 the criterion variable is the coping mechanism of seeking social support and the predictor
variables are sex and attachment. In figure 2 the criterion variable is academic adjustment to
college and the predictor variables are sex and attachment.

The subscale of Academic Adjustment in the SACQ showed a trend in regard to the main
effects of sex and attachment and the interaction of sex and attachment. In figure 1 the
interaction can be seen between males and females both secure and insecure-ambivalent. The
main effect of sex $F(1,49)=15.203, p=.000$ and the interaction between sex and attachment
$F(1,49)=3.699 \ p=.061$ showed a trend. In figure 1 it is obvious that there was a higher instance of successful academic adjustment among females with an insecure-ambivalent attachment than among females with a secure attachment. Conversely, males with secure attachment were more likely to have successful academic adjustment than those with insecure-ambivalent attachment. Figure 1 shows that the effect of academic adjustment to college depends upon the interaction between sex and attachment.

The coping mechanism of seeking social support showed significant results in regard to the main effect of sex and the interaction between sex and attachment, but the main effect of attachment did not show significant results. The main effect of sex $F(1, 49)=66.423, \ p=.030$ as well as the interaction between sex and attachment $F(1,49)=20.076, \ p=.000$ were significant. Females with an insecure-ambivalent attachment used seeking social support more than females with a secure-attachment, but males with an insecure-ambivalent attachment used seeking social support less than secure males. Figure 2 shows that the use of particular coping mechanisms depends upon the interaction between sex and attachment.

Discussion

The main hypothesis was not supported. Prayer was not correlated with any specific type of attachment relationship; secure and insecure-ambivalent types did not differ in frequency or duration of prayer. According to previous research by Byrd and Boe, participants with an insecure-avoidant attachment had a lower frequency of prayer than participants with an insecure-ambivalent attachment. They also found that the prayers of insecure-ambivalent participants were generally related trying to seek closeness to God rather than requesting material objects (2001). The present study had dissimilar findings from Byrd and Boe, which could have been caused by several factors. Individuals reared in homes in which prayer is not used or where
parents have no history of religious activity may resort to other coping mechanisms than prayer regardless of attachment type. As shown in research by Granqvist (2005) when parents have a minimal history of religious activity the relationship between an insecure-ambivalent attachment and religious coping was not significant. Therefore, in the present study the relationship between the parent’s religious background and the child’s use of prayer as a coping mechanism may have played a larger role than previously believed. Previous research has used much larger samples of well over one-hundred when working with a college population (Byrd & Boe, 2001; Larose & Bovin, 1998; Francis, 1997), which presents another mitigating factor within this study. In this study only fifty participants were used and of the thirty-five of participants who prayed only twelve of them had an insecure-ambivalent attachment history (34%), perhaps if there had been a larger sample and more students who prayed the results might have been significant.

Although the main hypothesis was not supported there were some interesting correlations between the number of times a student prayed per week and the coping mechanisms used. Those students who prayed more were more likely to have reduced tension and were less likely to use self-blame. Participants who felt a greater amount of loyalty and attachment to their college, and were more socially well-adjusted did not use detachment and wishful thinking as coping mechanisms as much as students who were not very attached to their educational institution and/or socially well-adjusted. Individuals with higher levels of personal-emotional adjustment to college used the coping mechanism of keeping to oneself less than those who had lower levels of personal-emotional adjustment.

The correlational findings make sense in regard to coping and adjustment. Students who have successfully adjusted to college used maladaptive coping mechanisms (i.e. detachment, wishful thinking, keeping to oneself) less than those who had not adjusted successfully.
Maladaptive coping is an individual’s response to a stressful situation that works neither to reduce anxiety nor to resolve the situation. Also students who prayed more had less tension and self-blame perhaps because they use prayer as a way to release stress, etc. In a study conducted by Byrd and Boe (2001) they found that there was a positive relationship between stress and prayer. This may relate to the idea that individuals who have higher levels of stress tend to pray more in an effort to release tension and anxiety.

The results of the exploratory analysis presented some interesting findings. As seen in figures 1 and 2 there are differences in how insecure-ambivalent attachment manifests itself in men and women. Specifically within the areas of academic adjustment to college and seeking social support there were interesting relationships. Female students with an insecure-ambivalent attachment were more likely to be academically successful than all of the groups (both secure and insecure-ambivalent). However, the opposite was found in regard to males. Male students with an insecure-ambivalent attachment were less likely to be academically successful than the other groups. This finding relates to how men and women internalize their gender roles. According to the Social Role Theory (Eagley, 1987) suggests behavioral differences between males and females are the result of cultural stereotypes and the roles that are taught to children in regard to gender. In the classroom while men may be favored and called upon more often, women are supposed to remain quiet and be good girls while still getting all of their work done. Therefore, insecure-ambivalent females may be seeking teacher approval in working hard and valuing academic achievement, whereas insecure-ambivalent males may no longer care about academic success.

A similar relationship was found for the seeking social support coping mechanism. Insecure-ambivalent females were more likely to seek social support in the midst of a stressful
situation than secure females, secure males, and insecure-ambivalent males. Males, on the other hand, were more likely to seek social support if they had a secure attachment. These findings were interesting and similarly suggest that the Social Role Theory (Eagley, 1987) may play a role in how different genders externalize attachment types. At an early age men are encouraged to be tough and unemotional, whereas women are taught to build relationships and be emotional. Therefore, women with an insecure-ambivalent attachment may seek social support as a way to fulfill their role as a woman and maintain strong social ties as well as communicate with others when they are experiencing stress. Insecure-ambivalent men, however, do not seek social support or feel the need to communicate their feelings/emotions with others in order to successfully fulfill their role as a man. The attachment type may also be playing a role in that these individuals have difficulty forming close relationships, but once they do they cling to that bond and are devastated once it is over (Cassidy & Berlin, 1994). Insecure-ambivalent women may be distant at first but feel comforted by close social relationships once they have formed, whereas insecure-ambivalent men are more likely to be wary of and have difficulty forming the same close social bonds as women.

Limitations

In previous research regarding attachment approximately twenty to thirty percent of the sample will classify themselves as insecure-avoidant (Hazan and Shaver, 1987, 1990). In the present study there were no individuals with an insecure-avoidant attachment. This was surprising and did not allow the researcher to measure the hypothesis in regard to that specific attachment type. This may have occurred due to the measures all being self-report. Participant bias may have played a role in reporting what they believed the researcher was looking for rather than accurate results. Also, the ratio of insecure-ambivalent to secure attachment was also
surprisingly high. In Hazan and Shaver’s (1987, 1990) research insecure-ambivalent attachment is generally somewhere below twenty percent in the sample, but in the present study insecure-ambivalent attachment was at thirty-two percent which may have had some influence on the statistical significance of the data. The high amount of participants with an insecure-ambivalent attachment may have resulted again from participant bias in that students may have ruled out choosing insecure-avoidant attachment therefore they selected between secure and insecure-avoidant. The higher levels of insecure-ambivalent attachment may also have been related to the transition from high school to college causing the attachment style to become more pronounced as students struggle between being completely autonomous and still dependent upon their parents.

Another limitation would be the general student population of Marietta College. The study was conducted using students from introductory psychology and communications classes. Specifically, a larger population would have been beneficial as well as a larger religious population. Through using a larger sample there would have been a greater number of students who were religious allowing for more diverse data. Within the sample most of the students who classified themselves as belonging to a particular religion either described themselves as Protestant or Catholic. In a bigger population other religious groups who place more emphasis on prayer may have been better represented.

Future Research

The exploratory tests were a good start for future research. They suggest the possibility of gender differences in the expression of attachment types and suggest areas in which further study should be conducted particularly in regard to previous research done in social role theory.
Based upon the data collected it would be prudent to expand upon this study to also look at differences in gender, attachment type, and adjustment to college in future research.
References


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Table Captions

Table 1. Descriptive Statistics

Table 2. One-way ANOVA Prayer per week and duration by attachment

Table 3. Correlations between prayer per week, wishful thinking, detachment, keeping to self, social adjustment, personal-emotional adjustment, institutional attachment, self-blame, and tension reduction

Figure Captions

Figure 1. The Interaction Between Sex and Attachment by Academic Adjustment

Figure 2. The Interaction Between Sex and Attachment by Seeking Social Support

Appendices

Appendix A. Adult Attachment Types and Their Frequencies (1987)

Appendix B. Ways of Coping Checklist Revised (1985)

Appendix C. Multidimensional Prayer Inventory (2004)

Appendix D. Student Adaptation to College Questionnaire (1999)
Table 1

*Descriptive Statistics*

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Table 2.

Oneway ANOVA Prayer per week and duration by attachment

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Table 3.

*Correlations between prayer per week, wishful thinking, detachment, keeping to self, social adjustment, personal-emotional adjustment, institutional attachment, self-blame, and tension reduction*

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<td>-0.242</td>
<td>-0.340*</td>
<td>0.245</td>
<td>-0.097</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.032</td>
<td>0.091</td>
<td>0.016</td>
<td>0.086</td>
<td>0.504</td>
</tr>
<tr>
<td></td>
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<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Detachment</td>
<td>Pearson Correlation</td>
<td>-0.373*</td>
<td>0.023</td>
<td>-0.303*</td>
<td>0.096</td>
<td>0.186</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.008</td>
<td>0.873</td>
<td>0.032</td>
<td>0.508</td>
<td>0.196</td>
</tr>
<tr>
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<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Keep to self</td>
<td>Pearson Correlation</td>
<td>-0.093</td>
<td>-0.293*</td>
<td>-0.084</td>
<td>-0.032</td>
<td>0.098</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.522</td>
<td>0.039</td>
<td>0.561</td>
<td>0.825</td>
<td>0.497</td>
</tr>
<tr>
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<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Figure 1. The Interaction Between Sex and Attachment by Academic Adjustment
Figure 2. The Interaction Between Sex and Attachment by Seeking Social Support
APPENDIX A

Adult Attachment Types and Their Frequencies

Question: Which of the following best describes your feelings?

Answers (circle one):

1. I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me.

2. I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.

3. I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away.
APPENDIX B

**Multidimensional Prayer Inventory**

Gender: Male ` Female  
Age: _______  
Date: _______

**Directions Part 1:** The following questions have been written to better understand private prayer. To assist you in answering these questions, scales are provided which consist of several numbers along with corresponding descriptions. Please circle ONE number on each scale that corresponds with the description that best indicates how you have privately prayed during the past month (other than during religious attendance). [In the questions that refer to “God”, feel free to substitute other words or phrases such as “Higher Power”, etc.]

*** If you do not pray in private, please go directly to question #21. ***

1. During the average week of this past month, I prayed approximately:

   0  1  2  3  4  5  6  7  
   No One Two Three Four Five Six Seven  
   Days/ day/ days/ days/ days/ days/ days/ 
   Week week week week week week week

*** If you have not prayed during the past month, please go directly to question #21. ***

2. On the day(s) that I did pray, I would estimate that I typically prayed _______ time(s) during the course of the day. (Please fill in one number that is your best estimate).

3. My prayers typically lasted for approximately:

   1  2  3  4  5  6  7  8  
   A few ½ 1 2 3–5 6–10 11–20 21+  
   Seconds min min’s min’s min’s min’s min’s min’s
Directions Part 2: Now, using the scale provided below, please answer the following questions according to how often during the past month your prayers included each of the activities described below. For example, if you circle the number “4”, this indicates that “About half the time” your prayers during the past month included the described activity. (Note: Some prayers combine these different activities. Also, do not be concerned if some items appear to overlap with one another.)

<table>
<thead>
<tr>
<th>Never</th>
<th>Little</th>
<th>Some</th>
<th>About</th>
<th>Much</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>of the</td>
<td>of the</td>
<td>half the</td>
<td>of the</td>
<td>of the</td>
<td>of the</td>
<td>of the</td>
</tr>
<tr>
<td>time</td>
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<td>time</td>
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</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

4. I made specific requests.
5. I offered thanks for specific things.
6. I tried to be open to receiving new understanding of my problems.
7. I worshiped God.
8. I admitted inappropriate thoughts, feelings, and behaviors.
9. I expressed my appreciation for my circumstances.
10. I tried to be receptive to wisdom and guidance.
11. I made various requests of God.
12. I confessed things that I had done wrong.
13. I praised God.
14. I opened myself up to God for insight into my problems.
15. I thanked God for things occurring in my life.
16. I asked for assistance with my daily problems.
17. I acknowledged faults and misbehavior.

18. I devoted time to honoring the positive qualities of God.

**Directions Part 3:** Please rate the degree to which prayers have an effect using the following two questions (#s 19 and 20):

1. Strongly Disagree
2. Neutral
3. Strongly Agree

19. I believe that my prayers have an effect on my life.

20. I believe that my prayers have an effect on other people’s lives.
Directions Part 4: Please indicate on question # 21, where you would place your beliefs:

21. My religious beliefs are most closely related to (Check One):

   Catholicism ____

   Protestantism:
   Baptist ____ Episcopalian ____ Methodist ____
   LDS (Mormon) ____ Lutheran ____ Presbyterian ____
   Other Protestant (please specify) ____________________________

   Judaism:
   Conservative ____ Reformed ____ Orthodox ____

   Buddhism ____

   Hinduism ____

   Muslim ____

   New Age ____

   Atheism ____

   Agnosticism ____

   Other (please specify) ____________________________
WAYS OF COPING (Revised)

Please read each item below and indicate, by using the following rating scale, to what extent you used it in the situation you have just described.

<table>
<thead>
<tr>
<th>Not Used</th>
<th>Used</th>
<th>Used</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

_____ 1. Just concentrated on what I had to do next – the next step.
_____ 2. I tried to analyze the problem in order to understand it better.
_____ 3. Turned to work or substitute activity to take my mind off things.
_____ 4. I felt that time would make a difference – the only thing to do was to wait.
_____ 5. Bargained or compromised to get something positive from the situation.
_____ 6. I did something which I didn’t think would work, but at least I was doing something.
_____ 7. Tried to get the person responsible to change his or her mind.
_____ 8. Talked to someone to find out more about the situation.
_____ 9. Criticized or lectured myself.
_____ 10. Tried not to burn my bridges, but leave things open somewhat.
_____ 11. Hoped a miracle would happen.
_____ 12. Went along with fate; sometimes I just have bad luck.
_____ 13. Went on as if nothing had happened.
_____ 14. I tried to keep my feelings to myself.
_____ 15. Looked for the silver lining, so to speak; tried to look on the bright side of things.
_____ 16. Slept more than usual.
17. I expressed anger to the person(s) who caused the problem.

18. Accepted sympathy and understanding from someone.

19. I told myself things that helped me to feel better.

20. I was inspired to do something creative.

21. Tried to forget the whole thing.

22. I got professional help.

23. Changed or grew as a person in a good way.

24. I waited to see what would happen before doing anything.

25. I apologized or did something to make up.

26. I made a plan of action and followed it.

27. I accepted the next best thing to what I wanted.

28. I let my feelings out somehow.

29. Realized I brought the problem on myself.

30. I came out of the experience better than when I went in.

31. Talked to someone who could do something concrete about the problem.

32. Got away from it for a while; tried to rest or take a vacation.

33. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.

34. Took a big chance or did something very risky.

35. I tried not to act too hastily or follow my first hunch.

36. Found new faith.

37. Maintained my pride and kept a stiff upper lip.

38. Rediscovered what is important in life.
39. Changed something so things would turn out all right.
40. Avoided being with people in general.
41. Didn’t let it get to me; refused to think too much about it.
42. I asked a relative or friend I respected for advice.
43. Kept others from knowing how bad things were.
44. Made light of the situation; refused to get too serious about it.
45. Talked to someone about how I was feeling.
46. Stood my ground and fought for what I wanted.
47. Took it out on other people.
48. Drew on my past experiences; I was in a similar situation before.
49. I knew what had to be done, so I doubled my efforts to make things work.
50. Refused to believe that it had happened.
51. I made a promise to myself that things would be different next time.
52. Came up with a couple of different solutions to the problem.
53. Accepted it, since nothing could be done.
54. I tried to keep my feelings from interfering with other things too much.
55. Wished that I could change what had happened or how I felt.
56. I changed something about myself.
57. I daydreamed or imagined a better time or place than the one I was in.
58. Wished that the situation would go away or somehow be over with.
59. Had fantasies or wishes about how things might turn out.
60. I prayed.
61. I prepared myself for the worst.
62. I went over in my mind what I would say or do.

63. I thought about how a person I admire would handle this situation and used that as a model.

64. I tried to see things from the other person’s point of view.

65. I reminded myself how much worse things could be.

66. I jogged or exercised.
APPENDIX D

Student Adaptation to College Questionnaire

Please provide the identifying information requested on the right. The 67 statements describe college experiences. Read each one and decide how well it applies to you at the present time (within the past few days). For each statement, circle the asterisk at the point in the continuum that best represents how closely the statement applies to you. Circle only one asterisk for each statement. To change an answer, draw an X through the incorrect response and circle the desired response. Be sure to use a hard-tipped pen or pencil and press very firmly. Do not erase.

A   B   C   D   E   F   G   H   I
Applies very closely to me             Doesn’t apply to me at all

1. I feel that I fit in well as part of the college environment.
2. I have been feeling tense or nervous lately.
3. I have been keeping up to date on my academic work.
4. I am meeting as many people, and making as many friends as I would like at college.
5. I know why I’m in college and what I want out of it.
6. I am finding academic work at college difficult.
7. Lately I have been feeling blue and moody a lot.
8. I am very involved with social activities in college.
9. I am adjusting well to college.
10. I have not been functioning well during examinations.
11. I have felt tired much of the time lately.
12. Being on my own, taking responsibility for myself, has not been easy.
13. I am satisfied with the level at which I am performing academically.
14. I have had informal, personal contacts with professors.
15. I am pleased now about my decision to go to college.
16. I am pleased now about my decision to attend this college in particular.
17. I’m not working as hard as I should at my course work.
18. I have several close social ties at college.
19. My academic goals and purposes are well defined.
20. I haven’t been able to control my emotions very well lately.
21. I’m not really smart enough for the academic work I am expected to be doing now.
22. Lonesomeness for home is a source of difficulty for me now.
23. Getting a college degree is very important to me.
24. My appetite has been good lately.
25. I haven’t been very efficient in the use of study time lately.
26. I enjoy living in a college dormitory. (Please omit if you do not live in a dormitory; any university housing should be regarded as a dormitory.)
27. I enjoy writing papers for courses.
28. I have been having a lot of headaches lately.
29. I really haven’t had much motivation for studying lately.
30. I am satisfied with the extracurricular activities available at college.
31. I’ve given a lot of thought lately to whether I should ask for help from the Psychological/counseling Services Center or from a psychotherapist outside of college.
32. Lately I’ve been having doubts regarding the value of a college education.
33. I am getting along very well with my roommate(s) at college. (Please omit if you do not have a roommate.)
34. I wish I were at another college or university.
35. I’ve put on (or lost) too much weight recently.
36. I am satisfied with the number and variety of courses available at college.
37. I feel that I have enough social skills to get along well in the college setting.
38. I have been getting angry to easily lately.
39. Recently I have had trouble concentrating when I try to study.
40. I haven’t been sleeping very well.
41. I’m not doing well enough academically for the amount of work I put in.
42. I am having difficulty feeling at ease with other people at college.
43. I am satisfied with the quality or the caliber of courses available at college.
44. I am attending classes regularly.
45. Sometimes my thinking gets muddled up too easily.
46. I am satisfied with the extent to which I am participating in social activities at college.
47. I expect to stay at this college for a bachelor’s degree.
48. I haven’t been mixing too well with the opposite sex.
49. I worry a lot about my college expenses.
50. I am enjoying my academic work at college.
51. I have been feeling lonely a lot at college lately.
52. I am having a lot of trouble getting started on homework assignments.
53. I feel I have good control over my life situation at college.
54. I am satisfied with my program of courses for this semester/quarter.
55. I have been feeling in good health lately.
56. I feel I am very different from other students at college in ways that I don’t like.
57. On balance, I would rather be home than here.
58. Most of the things I am interest in are not related to any of my course work at college.
59. Lately I have been giving a lot of thought to transferring to another college.
60. Lately I have been giving a lot of thought to dropping out of college altogether and for good.
61. I find myself giving considerable thought to taking time off from college and finishing later.
62. I am very satisfied with the professors I have now in my courses.
63. I have some good friends or acquaintances at college with whom I can talk about any problems I may have.
64. I am experiencing a lot of difficulty coping with the stresses imposed upon me in college.
65. I am quite satisfied with my social life at college.
66. I’m quite satisfied with my academic situation at college.
67. I feel confident that I will be able to deal in a satisfactory manner with future challenges here at college.