

1-1-2017

Examining the Relationship Between Attachment, Peer Influence, and Parent Modeling with Student Fitness

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Recommended Citation

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Examining the Relationship Between Attachment, Peer Influence,
and Parent Modeling with Student Fitness

by

Mae D. Adams Shirley

Presented to the Faculty of the
Graduate Department of Clinical Psychology
George Fox University
in partial fulfillment
of the requirements for the degree of
Doctor of Psychology
in Clinical Psychology

Newberg, Oregon

March, 2017

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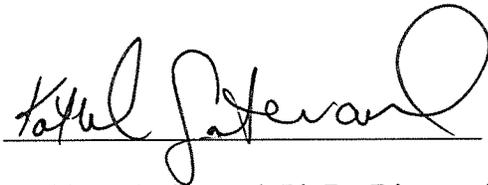
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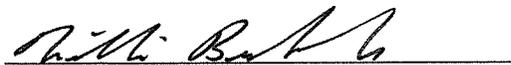
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Abstract

While college should be an ideal place for physical fitness behaviors to be supported through academic programming, access to exercise facilities and nutritional education, students are not engaging in the recommend daily physical fitness requirements (Gyurcsik, Johnson & Perrett, 2006). Studies examining the poor health behaviors of college students suggest there is a growing need for students to adopt lifelong fitness behaviors that are both sustainable and meet the recommended guidelines for health. Strong relationships have been found to positively influence exercise attitudes and behaviors (Feeny, 2000). The present study sought to examine a relationship between attachment style, parental modeling and peer influence and fitness behaviors in the college student population. The primary hypotheses were that college students who endorse a history of observing modeled fitness behaviors by their primary caregivers, have a secure attachment style in their close relationships and are positively influenced by peers to engage in exercise will demonstrate more regular engagement in fitness behaviors.

Participants in this study were enrolled in a Lifelong Fitness course as first year college students. A self-report measure of attachment and qualitative questions were distributed and completed by participants. Additionally, students were asked to meet regularly in assigned accountability groups and submit data demonstrating their physical activity, measured in number of steps taken, through an online portal. In contrast with previous research, the present study did not yield statistically significant results among secure attachment, observed parental modeling of fitness behaviors, peer influence, and fitness behaviors.

Table of Contents

Approval Page	ii
Abstract.....	iii
List of Tables	vii
Chapter 1: Introduction.....	1
Factors Impacting Health Behaviors	3
Relationships as Variables of Health.....	4
Attachment,	4
Modeling.....	5
Peer Influence.....	6
Previous Studies on Fitness Behaviors of College Students	8
Present Study	9
Chapter 2: Methods	10
Participants	10
Materials.....	10
Adult Attachment Scale, Close Relationships Version (AAS; Collins & Read, 1990).....	10
Parent Modelling of Activity Level.....	11
Peer Relationship.....	11

STUDENT FITNESS BEHAVIORS	vi
Measure of Fitness Behavior -Daily Steps	11
Demographic Questions.	12
Procedure	12
Chapter 3 Results.....	14
Hypothesis 1	14
Hypothesis 2	15
Hypothesis 3	16
Chapter 4 Discussion	18
Implications for Practice.....	19
Limitations of the Study	20
Suggestions for Future Research	22
References	24
Appendix A Adult Attachment Scale (AAS)	29
Appendix B Parent Activity Level Report	31
Appendix C End of Semester Survey for Life Long Fitness – Fall 2015.....	32
Appendix D Curriculum Vitae	43

List of Tables

Table 1 Mean percent change in daily steps for students in the four attachment groups. 14

Table 2 The presence of parent modeling of fitness behaviors for four attachment groups. ... 15

Table 3 Mean percent change in daily steps from September to November for students in the four attachment groups who did and did not have parent models. 16

Chapter 1

Introduction

This study sought to describe the relationship of parental attachment, parent modeling and peer influence on college student fitness behaviors. In recent years, robust research has been conducted to better understand the separate influences of parent modeling and attachment on the development and later sustainability of college student health behaviors. However, fewer researchers have explored the relationship between attachment and parent modeling and their combined impact on health practices of young adults and whether both variables are directly correlated with positive physical activity behaviors of college students. Additionally, few studies have examined the importance of peer relationships in influencing fitness behaviors of college students. The present research hypothesizes that college students who endorse a secure attachment style, have observed parental modeling of physical fitness behaviors, and have peer relationships in which they are positively influenced to engage in exercise will demonstrate greater involvement in regular fitness behaviors.

In 2000, the Healthy People 2010 Initiative estimated that “obesity in adults has increased over 50 percent in the last two decades,” (U.S. Department of Health and Human Services, 2000, p. 3). The significance of the present study can best be explained through a review of the current literature pertaining to college student health practices and the alarming statistics that highlight the increase of obesity and obesity-related illness in the United States. Studies examining the poor health behaviors of college students suggest there is a growing need for students to adopt

lifelong fitness behaviors that are both sustainable and meet the recommended guidelines for health. As outlined by the American College of Sports Medicine and American Heart Association,

To promote and maintain health, all healthy adults aged 18 to 65 years old need moderate-intensity aerobic (endurance) physical activity for a minimum of 30 min on five days each week or vigorous-intensity aerobic physical activity for a minimum of 20 min on three days each week (Haskell et. al, 2007, p. 1081).

In their review of the health research on college students, Theresa Brown and Mary Fry found that obesity-related health concerns are on the rise in the college student population as a result of poor engagement in physical health recommendations (Brown & Fry, 2014). Other researchers illuminate the extent of the health risk for college students, finding only 37.6% of college students regularly engaging in physical activity, (Gyursick, Bray, & Brittain, 2004). Additionally, 30% of college freshmen display a decrease in physical activity during their transition from high school to college, despite health practices prior to their enrollment in a college or university, (Gyursick et al., 2004).

While the college setting may provide an ideal place to address physical health needs for transitioning young adults, with students often having access to exercise facilities and nutritious meal options, research suggests students are not meeting recommendations for health. Sparling (2007, paragraph 5) summarized

Findings from a national survey conducted in 2005 indicate that 3 of 10 college students are either overweight (body mass index [BMI] 25.0–29.9 kg/m²) or obese (BMI \geq 30.0 kg/m²). Behaviorally, 9 of 10 students eat fewer than five servings of fruits and

vegetables per day, and nearly 6 of 10 students participate fewer than 3 days per week in vigorous-intensity (20 minutes or more) or moderate-intensity (30 minutes or more) physical activity.

The transition for students in their freshman year of college is a significant one, both physically and psychologically, and colleges that anticipate the challenges that students may experience can implement programs to remove barriers for student health behaviors. One way in which colleges and universities may be able to provide institutional support for student fitness is by requiring students to take courses that emphasize health and wellness. Students who feel they are in a learning environment that is both caring and “task-involving” show greater motivation for engagement in physical activity (Brown & Fry, 2014, p. 300). Additionally, institutions must be mindful of different obstacles to college student physical health behaviors, as these may prohibit the engagement in exercise upon entering college (Gyurcsik et al., 2004).

Factors Impacting Health Behaviors

There is general agreement that the approach to address college student fitness and nutrition must be multifactorial. College campuses have responded by increasing students’ access to fitness programs, changing the types of food served on campus and instituting speaker series on health topics, among other approaches (American College Health Association, 2014). Current health research also suggests the importance of increased focus on the factors influencing health behaviors of college students prior to their enrollment, and how these influences continue to promote or negate physical activity across the lifespan (Valos, Umstatt, Zullig, & Praxton, 2008).

Relationships as Variables of Health

Previous research by Ullrich-French, Smith, and Cox (2011) found that secure attachment relationships with one's parents and peers are associated with more adaptive physical activity motivation. Additionally, Rew, Arheart, Thompson, and Johnson (2013) discovered that both parent monitoring of adolescent behavior as well as parents' own engagement in health-promoting behaviors are positively correlated with adolescent health behaviors. By studying the relationship between attachment and modeling on health behaviors of young adults, mental health professionals, professors and athletic coaches working with the undergraduate students can assist students in modifying their health practices. In turn, students may be encouraged to evaluate the impact of parental influence on their current physical health behaviors, thus leading to an increase in self-awareness and self-determination (Valos et al., 2008).

Attachment. Attachment, which was defined by John Bowlby as "lasting psychological connectedness between human beings," may provide important data for understanding how behaviors are adopted and maintained (Bowlby, 1969, p. 194). Attachment styles have implications for various areas of health, including an individual's ability to manage negative life experiences with a general sense of well being and navigate stress (Armsden & Greenberg, 1987; Feeny, 2000). Additionally, attachment in early relationships may serve to bolster feelings of self esteem, supporting adults' engagement in preventative health behaviors such as exercise, (Huntsinger & Lueken, 2004). The present study was designed with an awareness that attachment styles, established early life, continue to impact relational styles throughout adulthood, and therefore can be assessed in the college student population (Ainsworth, 1982, 1989; Bowlby, 1969, 1977, 1980).

Attachment literature is robust and a review of the relevant attachment studies is beyond the scope of the current study. The present study adopted a model of attachment typology proposed by Bartholomew and Horowitz (1991). Prototypes of attachment were developed to capture salient attachment-related behaviors and the ability of an individual to internalize working models of caregivers during formative years of development, (Bartholomew & Horowitz, 1991). The attachment types proposed by Bartholomew and Horowitz were: Secure, Preoccupied, Dismissing and Fearful, (Bartholomew & Horowitz, 1991).

Attachment styles in adulthood tend to follow trends in relational security attained in early life, and these relationships are critical to the college experience (Haydon, Collins, Salvatore, Simpson & Roisman, 2012; Hazan & Shaver, 1987). Broadly defined, positive health practices and secure attachment styles of college students are positively correlated (Huntsinger & Luecken, 2004; Paredes, Ferreira, & Pereira, 2013; Ullrich-French et al., 2011). However, the impact of attachment is not the only factor affecting students' levels of physical activity. Even though students who report higher levels of secure attachment in their relationships engage in more physical activity than their peers, the numbers of students on university campuses who engage in regular, suggested amounts of physical activity are still very low (Gyurcsik, Johnson, & Perrett, 2006; Ullrich-French et al, 2011).

Modeling. Parental modeling plays an important role in adolescents' development of physical activity behaviors, though this impact may decline over the lifespan, as adolescents become increasingly concerned with identifying with their peers (Davison & Jago, 2009; Worthington-Roberts, Rodwell, & Williams, 1999). Parent modeling of health behaviors was found to be most strongly correlated between mothers and daughters when physical activity was

measured using pedometers, (Jacobi et al., 2011). Modeling of certain nutritional intake was also found to be strongly correlated between same gender dyads for parents and children, (Beydoun & Wang, 2009). Rew et al. (2013) suggested that certain elements of parenting may increase the internalization of preventative health behaviors for adolescents, including the provision of a warm and caring environment. Rew et al. had hoped to discover a correlation between parental modeling of health behaviors and the physical activity of their offspring. However, the authors' extensive review of the research was inconclusive on whether or not the physical activity of parents has a direct correlation (i.e., positive correlation) with the physical activity of adolescents (Rew et al., 2013).

Although no direct correlation between parental modeling and the fitness behaviors of adolescents was found in the literature review for this study, Baker, Whisman, and Brownell (2000) found that in some cases, adolescents may be more influenced by perceptions of their parents' eating and physical activity behaviors (Baker et al., 2000). This suggests that what is observed in by one's parents may have some impact in the development of certain health behaviors. The current study seeks to expand upon these ideas by proposing that in addition to secure attachment, parental modeling of preventative health behaviors, including physical fitness, may be related to the health choices of young adults in college.

Peer Influence. In addition to parental modeling and attachment style, peer influence may be an important factor to consider when exploring college student health behaviors. Peer acceptance plays a vital role in the development of certain personal characteristics, including the ability to utilize self-determination and to see one's self as competent, (Smith, Ullrich-French, Walker, & Hurley, 2006). In younger populations, peer relationships prove to be critical to the

exercise behavior acquisition and maintenance of health behaviors, (Smith, 1999). For example, youth enjoyment and perceived competence in sports has been linked to stronger peer relationships, (Ullrich-French & Smith, 2006). Even at younger ages, children naturally gravitate toward others whose levels of physical activity closely mirror their own, (de la Haye, Robins, Mohr, & Wilson 2011).

Research assessing the importance of peer relationships and exercise behaviors shows a significantly greater correlation between peer influence and student physical activity than parental influence and adolescent physical activity, suggesting that college aged adults tend to align with peers whose physical activity levels closely mirror their own (Burk, van der Vorst, Kerr, & Stattin, 2012; de la Haye et al, 2011). However, discrepancies do exist in the research about the relationship between peer influence and target exercise behaviors. One study that sought to evaluate the importance of peer influence in a program to address the use of alcohol and other substances found less correlation for peer exercise behaviors than substance use (Barnett et al., 2013). The findings of this study were consistent with research that indicates peer influence tends to be stronger for risk behaviors than for preventative health behaviors (Aalsma, Carpentier, Azzouz, & Fortenberry, 2012). That same study noted that one potential limitation to accurately gaging the impact of peer influence on exercise behaviors is that often exercise behaviors are done in isolation (Barnett et al., 2013). Additionally, they suggest studying older adolescents, such as college students, to see how their physical activity engagement compares to that of their peers.

When it comes to health behaviors, like many other choices young adults make, the perceptions of their peer activity may be critically important. Young adults may be less inclined

to engage in behaviors that promote health, including fitness and healthy eating if they perceive that peers and parents are not interested in their health choices and if they perceive that peers and parents do not value these health behaviors themselves (Baker, Little & Brownell, 2003). The current study was designed to promote peer influence of health behaviors in order to determine whether it is an important facilitating factor for assessing college student physical activity.

Previous Studies on Fitness Behaviors of College Students

Two studies provided the inspiration for the present project due to their exploration of parental attachment and peer relationships as influential in the behavioral health choices of college students. In their article, Attachment Relationships and Physical Activity Motivation of College Students, Ullrich-French et al. (2011) distributed self-report measures of attachment to college students in order to assess the relationship between motivation and the influence of relationships. They found that attachment may account for at least some of the variance in college students' motivation to engage in physical activity. Additionally, they concluded that while previous research has shown the importance of peer relationships for youth engaging in physical activity, further research was needed to explore peer relationships and health behaviors within the college population (Smith & McDonough, 2008; Ullrich-French et al., 2011).

A second study that was instrumental in the design of this project was conducted by Paredes et al., of the University of Minho, Portugal (2013). In their article, the researchers discovered that parents' engagement in health-promoting behaviors is significant in the parent-adult child relationship and that more securely attached college students will tend toward healthier behaviors (Paredes et. al, 2013).

Present Study

Students who do not get the recommended amount of vigorous physical activity may attribute their lack of exercise to intrapersonal, interpersonal, institutional, community or public barriers (Gyurcsik et al., 2004). In accordance to these findings, the current study was designed to provide students with both interpersonal and institutional support to increase their physical activity levels. The present study was designed within the context of an undergraduate course on fitness to assess the predictors of positive health behaviors within the undergraduate population. Additionally, students were encouraged to meet regularly with peers who share a common goal of maintaining physical fitness. Students may discover heightened interpersonal support for their exercise behavior goals. One of the group activities asked students to reflect on their relational attachment styles and the fitness behaviors modeled by their parents, in order to increase insights into their motivation to meet the recommended daily requirements of physical fitness. The variables assessed in this study included students' attachment styles, the role of peer influence and parental modeling on fitness behaviors.

The hypotheses tested were:

Hypothesis 1: Students' fitness behaviors would differ as a function of attachment style.

Hypothesis 2: Students who had both a secure attachment (rather than preoccupied, dismissive or fearful) and observed their parents/guardians participating in physical activity for the purpose of fitness prior to their enrollment in college, would display better overall fitness behaviors.

Hypothesis 3: Students' fitness behaviors would differ as a function of peer influence.

Chapter 2

Methods

Participants

Participants came from among the undergraduate students enrolled in a Life Long Fitness course ($N = 296$). The students included in this study were those who completed all the measures ($n = 137$; response rate of 46% of the total course enrollment). The final sample included 82 securely attached students and 55 insecurely attached students including 18 preoccupied, 17 dismissive, and 20 fearful students. Participants in the four groups did not differ in age ($M = 19.27$ years, $SD = 1.50$ years; $F(3, 91) = 0.18, p = .91$), gender (61% female; $X^2(3) = 5.46, p = .14$), year in school (40% first-year students; $X^2(3) = 1.75, p = .63$), or the number of active minutes per week at the start of the semester ($M = 246.67$ minutes per week, $SD = 324.35$ minutes; Brown Forsythe $F(3, 16.29) = 1.20, p = .34$).

Materials

Both qualitative and quantitative measures were utilized to obtain information about students' levels of attachment and modeling of health behaviors from parents/guardians prior to their enrollment in college as well as peer relationships and changes in health behaviors during the semester they took Life Long Fitness.

Adult Attachment Scale, Close Relationships Version (AAS; Collins & Read, 1990).

Consenting students were asked to complete the Adult Attachment Scale (AAS), which is an 18 item, 5-point Likert scale survey that assesses feelings about close relationships (see Appendix A). The survey can be taken in less than 30 minutes. The survey contains three subscales: Close,

Depend, and Anxiety. Each subscale is comprised of six items. Cronbach's alpha coefficient in 3 samples of undergraduate students (Collins & Read, 1990) range from .80 -.82 for the Close scale, from .78 - .80 for the Depend scale, and from .83 - .85 for the Anxiety scale. Within the current sample, the Cronbach's alpha coefficients were .77, .79, and .89 for the Close, Dependent, and Anxiety subscales, respectively. The Adult Attachment Scale has been shown to have concurrent validity with other attachment scales (Domingo & Chambliss, 1998).

Parent Modelling of Activity Level. In a lab meeting, students were assigned to write about specific physical activity behaviors which they observed their parents/guardians participate in prior to the student's beginning college, i.e., parental modeling of physical activity (see Appendix B). Questions about parental modeling of health behaviors were presented in a qualitative survey format in order to increase specificity of fitness behaviors observed and allow for individual interpretation of what qualifies as a fitness behavior. Following the qualitative description, students were asked to report their parents' typical activity level on a Likert scale from 1 (*sedentary*) to 10 (*very active daily*).

Peer Relationship. Within the context of the course, students were assigned to a small group of 3-5 students with whom they would interact during lab meetings. During the 15th week of the course, students responded to a survey which included questions about the small group component of the course. Specifically, students were asked how often they met with members of their group, and how much they liked meeting with their small group.

Measure of Fitness Behavior -Daily Steps. Within the context of the course, students used an electronic, clip-on fitness tracker to record the number of steps they took on a daily basis. Reports from the fitness tracker were downloaded monthly and provided a daily record of

the number of steps taken and the number of minutes of moderate/intense activity. A dependent variable, percent change in steps, was calculated by dividing the November mean step count by the September mean step count. Percent change in mean steps that have values closer to 1.00 indicate that the mean number of steps did not drop over the course of the semester while percent change in mean steps that have values below 1.00 indicate that the mean number of steps decreased over the course of the semester and the smaller the percentage, the more decline there was.

Demographic Questions. These included reports of age, year in school, and gender, as well as General Self-Efficacy (GenSE; Cronbach's alpha = .86 across 9 items), Quality of Life (QOL; 1 item), and General Health (GenHealth; 1 item).

Procedure

All students involved in the study were enrolled in Lifelong Fitness course. There were nine sections of this course. Students in all the sections were required to participate in six lab meetings, track their daily steps, and complete surveys and body composition measurements in the beginning and end of the semester. Human Subjects Research Committee, e.g., Internal Review Board, approval was obtained for this study and students were given the opportunity to sign an informed consent before agreeing to participate in the assessments. Students completed each survey or measurement as part of their involvement in the course. Students who indicated a desire to know the results of their attachment assessment were given the option to sign up for the researcher to send them this information after the researcher's final defense.

Each year, incoming freshman students are required to take a course that specifically teaches lifelong fitness as a way of promoting college students engagement in preventative

health behaviors. As a part of the class requirements, students were asked to meet in groups of four to five people for five meetings throughout the semester. Each group's meeting agenda included a discussion question to promote dialogue and engagement within the group, followed by a task assignment that students were expected to complete before the next group meeting. Two of the small group task assignments throughout the semester included answering questions about attachment styles in relationships and, in a different week, about what types of physical activity students observed in their parents or guardians prior to beginning college. Students completed the AAS and answer questions about the parental modeling of fitness behaviors as part of a lab meeting. Additionally, all students in the class were required to record their activity levels weekly through self-reports to the course instructor and daily using a fitness tracker. All students were invited to submit their fitness behaviors electronically through the course of the semester to an online portal. Finally, demographic and course effectiveness surveys were administered in the 1st and 15th weeks of the semester.

Chapter 3

Results

Hypothesis 1

The first hypothesis proposed in this study stated that fitness behaviors among college students would differ as a function of attachment style. Table 1 shows the mean percent retained in steps from September to November for students in the four attachment groups. Assumptions of the ANOVA were tested and met. An Analysis of Variance was used to investigate differences among the mean for each group to determine whether or not these results were statistically significant. Retention in percent of steps from September to November did not differ significantly as a function of attachment style, $F(3, 133) = .42, p = .74$.

Table 1

Mean Percent Retention in Daily Steps from September to November for Students in the Four Attachment Groups.

Attachment Style	Mean	SD	N
Secure	87.9	40.0	82
Preoccupied	86.4	26.8	18
Dismissive	80.2	20.5	17
Fearful	92.8	23.8	20

When the securely attached and dismissive groups were compared, the effect size was small, $d' = .24$. A small effect size like this would require approximately 350 participants per group to be able to identify a statistically significant difference. When the dismissive and the fearful groups were compared, the effect size was medium, $d' = .57$. A medium effect size like this would require 45 participants per group to be able to identify a statistically significant difference.

Hypothesis 2

The second hypothesis proposed in this study stated that fitness behaviors would differ as a function of modeling and attachment. A Chi Square analysis was conducted using SPSS to determine whether or not parental modeling of health behaviors differed among the four attachment groups. Table 2 shows this cross-tabulation table.

Table 2.

The Presence of Parent Modeling of Fitness Behaviors for Students in the Four Attachment Groups.

Attachment Style	Modeling		Total
	no	yes	
secure	11	50	61
preoccupied	1	15	16
dismissive	5	7	12
fearful	4	13	17

Results of a Chi Square analysis indicate that the presence of modeling did not differ significantly across the four attachment styles, $X^2(3) = 5.73, p = .12$.

Mean percent change in daily steps from September to November for students in the eight groups (i.e., students in four attachment groups, with and without modeling) are shown in Table 3. Because the number of students in some of the groups was small, a *t*-test comparing the percent change in steps for securely attached students with good parent modeling ($n = 47$) versus all other students ($n = 87$) was conducted. The percent change in steps from September to November did not differ for securely attached students who experienced good parental modeling of fitness ($M = 88.67$ retained steps, $SD = 41.8\%$) when compared with all other students ($M = 85.6\%$ retained steps, $SD = 22.9\%$), Welches $t(113.33) = -.55, p = .59$. Effect size analysis indicates secure attachment with modeling has no effect on percent change in steps, $d' = .09$.

Table 3

Mean Percent Change in Daily Steps from September to November for Students in the Four Attachment Groups Who Did and Did Not Have Parent Models.

Attachment Style	Modeling	
	no	yes
secure	83% (19)	94% (47)
preoccupied	100% ($n = 1$)	86% (29)
dismissive	86% (18)	82% (28)
fearful	81% (16)	91% (22)

Hypothesis 3

The third hypothesis proposed in this study stated that health behaviors would differ as a function of peer influence. Percent change in steps from September to November did not differ for students who liked their accountability team ($n = 76$, $M = 92\%$ retained steps, $SD = 40.5\%$) when compared with students who disliked their team ($n = 32$, $M = 83\%$ retained steps, $SD = 21\%$), $t(106) = 1.10$, $p = .28$. The effect of peer influence on percent change in steps is small, $d' = .26$.

Chapter 4

Discussion

The purpose of this study was to examine relational factors that might affect the fitness behaviors of college students, as evidenced by the number of steps taken throughout the course of one semester. Specifically, this study sought to examine whether attachment style, the fitness behaviors that college students observed in their homes prior to beginning college, and peer influence would impact the percentage of steps retained over the course of a semester. The results of the study indicate that attachment style had only a small impact on college students' fitness behaviors. Modeling in combination with secure attachment had no impact on students' fitness behaviors. In addition, students' meetings with peer-support groups and the amount that they liked meeting with those groups had only a small impact students' fitness behaviors.

The results of the present study are in conflict with past research which indicates that college students' relationship patterns do impact their fitness behaviors. Previous research by Paredes et al. (2014) and Ullrich-French et al. (2011) suggested that attachment styles are strongly correlated with college student health behaviors. Additionally, modeling of health behaviors by same gender parent-child dyads has been empirically supported for promoting healthier behavioral choices, (Beydoun & Wang, 2010; Jacobi et al., 2011). While the research on whether or not peer influence has a significant impact on college student health behaviors has not been clearly defined, past studies have demonstrated a significant relationship between peer influence on health behaviors of younger adolescents (Smith et al., 2006; Ullrich-French &

Smith, 2006). Additionally, research on how peers continue to impact behavioral choices throughout the lifespan suggest that these relationships are critical, as both health promoting and risk behaviors may be emulated by observant peers, (Barnett et al., 2013; Burk et al., 2011). Thus college students who observe their peers engaging in risky health behaviors, including sedentary lifestyles and poor eating habits, may be more likely to engage in these behaviors.

The results of the present study differed greatly from the literature on the role of attachment, parental modeling and peer influence in impacting the fitness behaviors of college students. These differences may have occurred because, unlike prior studies, students in this study were enrolled in a class that required physical activity, thus the course requirement more than relational patterns determined whether students were active.

Implications for Practice

Because no statistically significant differences were found in the present study, colleges seeking to identify patterns in student engagement in health activities may benefit from taking a different approach identifying students who need support to be physically active. Higher education institutions that want to encourage student participation in health behaviors may still benefit from examining other characteristics of students who are more and less likely to integrate exercise into their daily routines. Prior research suggests college students often face significant barriers to engaging in regular fitness activity, whether due to the demands of their new college schedules with classes and assignments, extracurricular engagements or limited access to facilities in which physical exercise may be done (Gyuresik et al., 2004). One of the most significant barriers found in previous research was institution's low emphasis on the physical fitness needs of students, and overall lack of encouragement by faculty and administration to

engage in healthy behaviors during college (Gyurcsik et al., 2004). Some universities have sought to remedy the low engagement in health behaviors of their students with the recommended daily amount of physical fitness for college-aged individuals by requiring freshman students to take courses that emphasize healthy living, including fitness and dietary instruction. Emphasizing healthy behaviors through systemic and campus-wide efforts, such as programming and outreach projects that encourage healthy behaviors might raise awareness of the importance of fitness during the college years.

Limitations of the Study

The present study was conducted in a small, private university in the Pacific Northwest of the United States. As a result of the geographic location of the institution, it is possible that the results do not adequately represent a broad range of ethnic and racial diversity, which are not widely represented in this region of the U.S. Additionally, the size of the institution and its freshman class must be considered when interpreting the results of this study, as institutions with larger class sizes may provide increased variability of results in the Adult Attachment Scale and parental modeling.

Another limitation of the present study is that self-report measures, including the qualitative measure utilized to assess modeling of physical activity by parents, require individuals to reflect on the behaviors of others and are largely based on perception, (Baker et al., 2003). While the Adult Attachment Scale (AAS) is an empirically validated self-report measure of attachment, limitations in assessing the efficacy of one's ability to correctly assess his or her own attachment style without bias pose a barrier to ensuring data accuracy, (Sperling, Foelsch & Grace, 1996). Despite the limitations inherent within self-report measures, the AAS

was a useful tool for the present study due to being inexpensive to use and replicate, and how quickly it can be taken. More thorough measures of attachment, such as the Adult Attachment Interview, might provide more in-depth information about attachment styles of participants. However, these measures may also take significantly more time to complete and require that only those who have been trained in their administration are giving them, according to standardized protocol. The determination of which attachment measure to use is therefore largely based upon the time, resources and training of the researchers.

Future researchers attempting to replicate this study may find stronger results about the importance of parental modeling by having both college students and their parents reflect on the attitudes and behaviors associated with physical activity in their homes.

A significant limitation in this study was the design of the intervention, which required students to meet regularly throughout the course of the semester to promote peer support and to assess the role of peer influence in college student health behaviors. Due to limited capacity for the researchers to implement these requirements and oversee the meetings of students, the researchers could not effectively implement the intervention and students did not meet as regularly as they were asked for this study. For effective replication of this study, future researchers may find it helpful to assign graduate students to different groups meeting throughout the course of the semester, who could then oversee these meetings, support students in their fitness goals, and facilitate group dialogue. Graduate students serving in the group facilitator role could gather formative data on the students' engagement in the project over time, reporting this information to the researchers and intervening when necessary to support students in meeting the required attendance.

Suggestions for Future Research

Colleges and universities may benefit from conducting research to further explore whether parental modeling plays a role in students' health behaviors, as students enter college from various backgrounds and with differing levels of emphasis placed on fitness behaviors in their respective families of origin. For example, future researchers may wish to examine any differences in modeling of fitness behaviors for first generation college students and students from lower socioeconomic backgrounds. Some students may be less inclined to actively seek out opportunities for physical exercise that might enhance their college experiences, such as intramural sports, and research focused on these students may yield ideas for resources to address students' needs.

As universities increase their awareness of the factors that contribute to student fitness and health behaviors, they can better ascertain the needs of their incoming freshman students, addressing these deficits of parental modeling through the implementation of faculty and administrative modeling of healthy lifestyles. Interdepartmental support for student health, including university counseling centers, might benefit from addressing health from multiple perspectives. As health centers, residential life and student support services gain a deeper understanding of the factors that contribute to college student health behaviors, they can better support students in meeting their goals, decreasing barriers to student fitness and promoting an environment on campus that values health.

Future researchers who wish to replicate this study may find that altering some of the research design utilized in this project, including the intervention of weekly peer meetings and the use of the Adult Attachment Scale (Collins & Read, 1990), would be beneficial for finding

statistically significant results. While results of the present study did not indicate a statistically significant relationship between attachment style, parental modeling, peer influence and fitness behaviors, future research may focus on the exact expressions of physical activity of college students to see if there is any difference of preferred exercise activities between groups of students who endorse differing attachment styles, exposure to parental fitness and peer relationships. If students tend to gravitate toward the health behaviors modeled for them in their families of origin, then future researchers may support universities in providing resources for the preferred exercise of its students (i.e., providing yoga classes, making bike riding trails available on campus). More research should be done to determine whether or not free access to exercise facilities (parks versus gyms where students must pay a fee) impacts engagement in health behaviors, (French, Story & Jeffery, 2001). In addition to the areas suggested for future research mentioned above, researchers may wish to continue exploring the role of peer influence on college student behaviors in order to determine what types of interventions are more likely to be effective with this population.

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Appendix A

Adult Attachment Scale (AAS)

The following questions concern how you generally feel in important close relationships in your life. Think about your past and present relationships with people who have been especially important to you, such as family members, romantic partners, and close friends. Respond to each statement in terms of how you generally feel in these relationships.

Please use the scale below by placing a number between 1 and 5 in the space provided to the right of each statement.

1-----2-----3-----4-----5

Not at all

Very characteristic characteristic of me of me

1 * How much would you agree with the following statement? (Let higher numbers indicate more agreement. so 5 = Very characteristic of me)

	1	2	3	4	5
I find it relatively easy to get close to people.	<input type="radio"/>				
I find it difficult to allow myself to depend on others.	<input type="radio"/>				
I often worry that other people don't really love me.	<input type="radio"/>				
I find that others are reluctant to get as close as I would like.	<input type="radio"/>				
I am comfortable depending on others.	<input type="radio"/>				
I don't worry about people getting too close to me.	<input type="radio"/>				
I find that people are never there when you need them.	<input type="radio"/>				
I am somewhat uncomfortable being close to others.	<input type="radio"/>				
I often worry that other people won't want to stay with me.	<input type="radio"/>				
When I show my feelings for others, I'm afraid they will not feel the same about me.	<input type="radio"/>				
I often wonder whether other people really care about me.	<input type="radio"/>				
I am comfortable developing close relationships with others.	<input type="radio"/>				
I am uncomfortable when anyone gets too emotionally close to me.	<input type="radio"/>				
I know that people will be there when I need them.	<input type="radio"/>				
I want to get close to people, but I worry about being hurt.	<input type="radio"/>				
I find it difficult to trust others completely.	<input type="radio"/>				
People often want me to be emotionally closer than I feel comfortable being.	<input type="radio"/>				
I am not sure that I can always depend on people to be there when I need them.	<input type="radio"/>				

Appendix B

Parent Activity Level Report

1. What health behaviors did you observe your parents doing?
2. How have those your parents' health behaviors influenced you?
3. Did you feel that your parents had expectations for your physical activity?
4. How do you feel that your current physical activity compares to that of your community, for example your peers?
5. How active were your parents in a typical week? (on a scale of 0 – 10)
0 = sedentary, not at all active
10 = engaged in moderate or intense activity daily

Appendix C

End of Semester Survey for Lifelong Fitness 2015

LLF Survey

Your Name and course section are only required to give you credit for completing this survey. None of your individual responses will be reported to your instructor. Your responses will be compiled with those of other students in Life Long Fitness, and will only be reported as group responses.

The purpose of this survey is two-fold. First, some of the information will be used to help us refine the course content in the Life Long Fitness course. Second, some of the information is included for research purposes. If you have questions about this research, please contact Kathleen Gathercoal, PhD at kgatherc@georgefox.edu.

* 1. Last Name

* 2. What section of Life Long Fitness do you attend?

- HHPA 120 A – Haldorson – MW 8-9 am
- HHPA 120 B – John Smith – MW 9-10 am
- HHPA 120 C – John Smith – MW 10-11 am
- HHPA 120 D – Jens K. – MW 11-12 am
- HHPA 120 E – Randy Dalzell – MW 1-2 pm
- HHPA 120 F – Randy Dalzell – MW 2-3 pm
- HHPA 120 G – Jens K – T Th 8:25-9:15am
- HHPA 120 H – Adam Haldorson – T Th 9:25-10:15 am
- HHPA 120 I – Mace Hamilton – T Th

* 3. Semester

4. Sex

- Female
- Male

5. Your Age

6. Year in school

- First Year/ Freshman
- Second Year/ Sophomore
- Third year / Junior
- Fourth Year / Senior
- other

7. Estimate you current weight

8. How many servings of fruits and vegetables do you have in a typical day?

9. How many 8-ounce glasses of water have you consumed per day?

10. How many minutes per week do you currently spend in moderate to vigorous physical activity?

11. How many times do you participate in moderate to vigorous physical activity in one week?

12. How many hours per day do you spend on Social Media (i.e. Twitter, Facebook, etc)?

13. How many hours (per night) have you slept this week?

14. How many high caffeine drinks (e.g. coffee, espresso shots, energy drinks, etc.) do you consume in a typical day?

15. How many times in the last week have you eaten beyond the feeling of fullness?

Lifestyle Questions

16. Respond to each of the questions below on the 1-7 scale.

	Strongly Disagree	Disagree	weak disagreement	Neutral	weak agreement	Agree	Strongly Agree
My faith is very important to me	<input type="radio"/>						
I have consistently made healthy food choices in the past month	<input type="radio"/>						
My current nutrition will impact my health 10 years from now	<input type="radio"/>						
The nutrition of a female college student impacts the health of the children she will have in the future	<input type="radio"/>						
I consistently track or monitor my fitness activities	<input type="radio"/>						
I consistently track or monitor my nutritional intake	<input type="radio"/>						
The information I learned in Life Lon Fitness improved my nutritional choices	<input type="radio"/>						
The information I learned in Life Lon Fitness improved my fitness activity choices	<input type="radio"/>						
Overall, my General Health is very good	<input type="radio"/>						
Overall, my Quality of Life is very good	<input type="radio"/>						

Nutrition

17. What is one serving size of rice, pasta , cooked beans or other grain (1/2 cup) closest to in size?

- Deck of cards
- Four dice
- Tennis ball
- Computer mouse

18. What is one serving of meat, fish or poultry (3 ounces) closet to in size?

- Deck of cards
- Four dice
- Tennis ball
- Computer mouse

19. I am an excellent source of fiber, complex carbohydrates and B vitamins.

- Celery
- Oatmeal
- Blueberry muffin
- Apple

20. The best fat to add to your diet every day is:

- Soybean oil
- Hydrogenated oil
- Sunflower oil
- Olive oil

21. A handy rule of thumb: Fill ____ your plate with vegetables.

- 1/8
- 1/4
- 1/2
- 3/4

Self - Efficacy

22. Respond to each question below on the 1-4 scale provided.

	Not at all true	Hardly true	Moderately true	Exactly true
If someone opposes me, I can find the means and ways to get what I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to stick to my aims and accomplish my goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I could deal efficiently with unexpected events.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thanks to my resourcefulness, I know how to handle unforeseen situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can solve most problems if I invest the necessary effort.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can remain calm when facing difficulties because I can rely on my coping abilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am confronted with a problem, I can usually find several solutions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I am in trouble, I can usually think of a solution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can usually handle whatever comes my way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Accountability Teams

23. How many times have you met with your accountability group?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8 or more times

24. What exercise behaviors did you observe your parents (or other important adults in your life) doing before you came to college?

25. How much would you agree with the following statement: "My parents (or other important adults in my life) had expectations for my physical activity behaviors."

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="radio"/>				

26. How much would you agree with the following statement: "My parents expectations for my physical activity influenced my level of physical activity?"

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="radio"/>				

27. How much would you agree with the following statement: "During the HHPA 120 labs, I would rather meet with my accountability team members than with the larger group."

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="radio"/>				

28. How much would you agree with the following statement: "During the HHPA 120 labs, There should be a tech-check [i.e. a lab to provide technical support for trackers, surveys etc.]"

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="radio"/>				

The Gratitude Questionnaire

Using the scale below as a guide, select a number beside each statement to indicate how much you agree with it.

1 = strongly disagree

2 = disagree

3 = slightly disagree

4 = neutral

5 = slightly agree

6 = agree

7 = strongly agree

29. I have so much in life to be thankful for.

1 2 3 4 5 6 7

30. If I had to list everything that I felt grateful for, it would be a very long list.

1 2 3 4 5 6 7

31. When I look at the world, I don't see much to be grateful for.

1 2 3 4 5 6 7

32. I am grateful to a wide variety of people.

1 2 3 4 5 6 7

33. As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history.

1 2 3 4 5 6 7

34. Long amounts of time can go by before I feel grateful to something or someone.*

1 2 3 4 5 6 7

GRAT-S

35. Please provide your honest feelings and beliefs about the following statements which relate to you. There are no right or wrong answers to these statements. We would like to know how much you feel these statements are true or not true of you. Please try to indicate your true feelings and beliefs, as opposed to

STUDENT FITNESS BEHAVIORS

what you would like to believe. Respond to the following statements by selecting the number that best represents your real feelings. Please use the scale provided below, and please choose one number for each statement.

	1 = I strongly disagree	2	3 = I disagree somewhat	4	5 = I feel neutral about the statement	6	7 = I mostly agree with this statement	8	9 = I strongly agree with this statement
I could not have gotten where I am today without the help of many people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life has been good to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There never seems to be enough to go around and I never seem to get my share.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oftentimes I have been overwhelmed at the beauty of nature.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Although I think it's important to feel good about your accomplishments, I think that it's also important to remember how others have contributed to my accomplishments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I really don't think that I've gotten all the good things that I deserve in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Every Fall I really enjoy watching the leaves change colors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Although I'm basically in control of my life, I can't help but think about all those who have supported me and helped me along the way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that it's important to "Stop and smell the roses."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More bad things have happened to me in my life than I deserve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1 = I strongly disagree	2	3 = I disagree somewhat	4	5 = I feel neutral about the statement	6	7 = I mostly agree with this statement	8	9 = I strongly agree with this statement
Because of what I've gone through in my life, I really feel like the world owes me something.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that it's important to pause often to "count my blessings."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think it's important to enjoy the simple things in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel deeply appreciative for the things others have done for me in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For some reason I never seem to get the advantages that others get.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think it's important to appreciate each day that you are alive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Positive and Negative Affect Scale

This scale consists of a number of words and phrases that describe different feelings and emotions.

Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way during the past 7 days.

Use the following scale to record your answers:

- 1 = very slightly or not at all
- 2 = a little
- 3 = moderately
- 4 = quite a bit
- 5 = extremely

36. Active

1 2 3 4 5

37. Afraid

1 2 3 4 5

38. Excited

1 2 3 4 5

39. Hostile

1 2 3 4 5

40. Interested

1 2 3 4 5

41. Ashamed

1 2 3 4 5

42. Guilty

1 2 3 4 5

43. Thankful

1 2 3 4 5

44. Determined

1 2 3 4 5

45. Proud

1 2 3 4 5

46. Irritable

1 2 3 4 5

47. Inspired

1 2 3 4 5

48. Enthusiastic

1 2 3 4 5

49. Nervous

1 2 3 4 5

50. Strong

1 2 3 4 5

51. Alert

1 2 3 4 5

52. Upset

1 2 3 4 5

53. Scared

1 2 3 4 5

54. Attentive

1 2 3 4 5

55. Distressed

1 2 3 4 5

56. Grateful

1 2 3 4 5

57. Grateful

1 2 3 4 5

58. Jittery

1 2 3 4 5

59. Appreciative

1 2 3 4 5

Appendix D

Curriculum Vitae

MAE ADAMS SHIRLEY

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EDUCATION

Doctor of Psychology, Clinical Psychology Emphasis in Health Psychology (<i>GPA 3.96</i>)	George Fox University <i>-APA Accredited-</i>	Anticipated May 2018
Master of Arts Clinical Psychology, GPA 3.96	George Fox University <i>-APA Accredited-</i>	May 2015
Master of Science, Mental Health Counseling, GPA 4.0	Lee University	December 2012
Bachelor of Arts Psychology; Religion Minor (<i>GPA 3.7</i>)	Lee University	May 2010

CLINICAL

Direct Client Contact

**Georgia Southern University Counseling Center
APA Accredited Doctoral Internship in Health Service
Psychology**

Supervisors: Drs. Jodi Caldwell and Mark Perez-Lopez

- Provided individual and group psychotherapy to a diverse caseload of full time GSU students
- Provided after hours consultation and crisis response to students presenting with acute risk
- Developed and provided active and passive outreach to various campus departments

Pacific University Student Counseling Center

Supervisor: Dr. Forrest Merrill

- Providing individual psychotherapy services for undergraduate and graduate students.
- Assisting with campus outreach programs to raise awareness of student health practices.

Indirect Clinical Work

Doctoral Intern

- Completed optional rotations in Outreach and Group Psychotherapy under the supervision of staff psychologists
- Utilized Titanium software for documentation
- Provided supervision to doctoral and master's level practicum therapists
- Conducted supervisory live and video review of sessions
- Participated in weekly didactic training

Pre-Intern

- Utilizing Titanium software for supervised documentation of sessions.
- Recording sessions for supervisory review under licensed clinical psychologist.

Supplemental Psychodynamic Practicum*Supervisor: Dr. Nancy Thurston*

- Providing individual, long-term therapy to two patients in the community .
- Receiving individualized supervision from a licensed clinical psychologist receiving psychoanalytic training.

Northwest ADHD Treatment Center*Supervisor: Dr. Timothy Neary*

- Provided individual and family psychotherapy services for patients with Oregon Health Plan insurance.
- Consulted with psychiatric nurse practitioners to provide quality mental health treatment.
- Conducted ADHD assessments for adolescent and adult patients.

Behavior Health Crisis Consultation Team*Supervisor: Dr. Mary Peterson, Dr. Bill Buhrow, Dr. Joel Gregor, Dr. Luann Foster*

- Providing consultation and risk assessments as a Qualified Mental Health Professional to patients with crisis presentations.
- Assessing risk to determine appropriate hospitalization and/or treatment referrals.

George Fox University Health and Counseling Center*Supervisor: Dr. William Buhrow*

- Provided individual psychotherapy to undergraduate students.
- Received weekly, individual supervision from a post-doctoral clinical psychologist as well as group supervision in GDCP clinical team.
- Attended weekly didactic training led by the counseling center director.

Pre-Practicum Psuedo-Therapy*Supervisor: Dr. Brian Goetsch*

- Provided pseudo-therapy to two undergraduate students as a first year PsyD student.
- Received 20 hours of clinical experience as pre-practicum student under supervision of a pre-intern student.

Supplemental Psychodynamic Practicum

- Utilizing SOAP note format to document sessions.
- Providing audio recordings of session for supervisory review.
- Utilized professional consultation with trained psychoanalysts in Portland, OR.

Practicum II Student

- Utilized Valant electronic health record system for supervised documentation.
- Corresponded with various insurance companies for treatment planning purposes.
- Gained report writing and debriefing skills with intellectual and cognitive assessments.

BHCC Team Member

- Utilizing Epic electronic health records for documentation.
- Coordinating patient care with county mental health system.
- Practicing HIPAA compliant protocol for releasing patient information to treatment providers and inpatient psychiatric hospitals.

Practicum I Student

- Utilized SOAP notes for documentation.
- Video supervision of clinical experiences provided as needed.
- Received additional support for documentation & video review from pre-intern oversight in GDCP.

Pre-Practicum Student

- Utilized basic SOAP note format to document 20 hours of clinical experience.
- Received both individual and group supervision, including video and file review.

Master's Level Therapist, Lee University*Supervisor: Lena Barber, LPC*

- Provided clinical services to case load of 14 individual clients under supervision of a licensed clinical psychologist.
- Facilitated the Women's Empowerment group.
- Led weekly didactic seminars for 4 interns on topics of diagnosis, crisis and grief counseling, self care, and multi-cultural competence in psychotherapy.

Master's Level Intern, Lee University*Supervisor: Dr. David Quagliana*

- Provided both individual and group counseling services in addition to campus outreach.
- Utilized an integrated theoretical approach for both short term and protracted outpatient treatment of students.
- Received 900 hours of direct client contact under the supervision of a licensed professional counselor.

Master's Level Practicum Student, Lee University*Supervisor: Nikki Crouse Young*

- Provided psychotherapeutic services to five individual clients throughout the spring semester as part of practicum experience at Lee University.
- Received group supervision for 100 hours of direct client contact. Developed brief therapy treatment plans for clients that desired consultation for academic, relational and grief related concerns.

Substance Abuse Recovery Group Co-Facilitator*Supervisor: Dr. Linda Wells*

- Worked with court mandated clients in both crisis and substance rehabilitation therapy. Served as co-facilitator in group therapy with individuals overcoming severe alcohol and drug addictions.
- Provided anti-drug education and suicide prevention seminars in local schools.

Adjunct Staff

- Effectively utilized Titanium for clinical documentation of both individual and group counseling services provided.
- Received joint supervision from a licensed professional counselor.
- Used empirically validated assessments for diagnostic purposes.

Internship

- Proficient in the use of Titanium for treatment summaries and diagnostic recording of individual and group clients.
- Able to illustrate a 5 Axis Diagnosis according to standards of the DSM-IV.
- Operated web-cam for visual and audio recording of individual counseling sessions for peer-review and supervisory purposes.

Internship and Practicum

- Employed SOAP note format for documentation client presentation and clinical objectives.
- Received individual and group supervision on appropriate use of clinical short hand for note-taking proficiency.
- Communicated with peers in graduate cohort to process counseling experiences and receive support in treatment plan development.

IOP Group Co-Facilitator

- Documented client presentation and treatment objectives through use of SOAP progress notes.
- Received individual supervision and guidance from clinical director regarding documentation.
- Assisted with administrative duties.

ASSESSMENTCompetency Achieved

- Wechsler Adult Intelligence Scale, Fourth Edition (WAIS-IV)
- Rorschach Exner Comprehensive System
- Test of Variables of Attention (TOVA)
- Suicide Adult Assessment Protocol (SAAP)
- Collaborative Assessment and Management of Suicidality (CAMS)
- Minnesota Multiphasic Personality Inventory, Second Edition (MMPI-2)
- Personality Assessment Inventory (PAI)

RESEARCH AND PRESENTATIONSDissertationDefended March 2016

Adams Shirley, M., Gathercoal, K., Peterson, M., Buhrow, B. (2016). *Examining the relationship between attachment, peer influence and parent modeling with student fitness*. Anticipated final defense January 2016.

OPA Poster PresentationMay 2016

Adams Shirley, M., Fisk B., Pace, A., Gathercoal, K., Peterson, M., Buhrow, B. (2016). *Health self-efficacy varies as a function of attachment styles*. Poster presented at the Oregon Psychological Association annual conference, Portland OR, May 2016.

Research AssistantAugust 2015-May 2017

Research Assistant on the George Fox University Nutrition Matters Initiative, a four-year wellness education program that is funded by the Bob and Charlene Moore Foundation.

Lee University Data CommitteeOctober 2011-April 2013

Collected and analyzed data related to the services provided by the Lee University Counseling Center with two team members. Recorded and submitted intake, crisis and group client data to inform university of counseling center services and areas of potential improvement.

Women's Collaborative Research CommitteeFebruary 2012-August 2013

Collected data and information from various college campuses regarding the utilization and purpose of women's centers and their respective services for undergraduate and graduate level students.

OUTREACH EXPERIENCE*Active Outreach Experience*First Year Experience: Stress Management DidacticSeptember-October 2017

Developed and conducted a presentation on stress management and counseling center services to multiple first year courses. Supervised by Dr. Katie Bigalke, Training Coordinator at Georgia Southern University Counseling Center.

Sexual Assault Student Educators ConferenceOctober 2017

Conducted a didactic presentation to undergraduate students in leadership on conducting outreach presentations. Supervised by Dr. Lauren Patterson.

Emotional Wisdom SeminarNovember 2017

Led two didactic seminars to undergraduate students on mindfulness based stress reduction techniques, cognitive restructuring and sleep hygiene. Supervised by Dr. Katie Bigalke.

Pacific University Body ProjectOctober 2016

Collaborating with campus wellness coordinator, Kathleen Converse, at Pacific University to facilitate a weekly group for discussion of body-image related concerns among diverse female students.

Sex and Chocolate: Conversations on Sexual HealthNovember 2012

Co-facilitated an outreach opportunity with Lena Barber, LPC on behalf of the Lee University Counseling Center to residence halls with female undergraduate students to discuss sexual health behaviors and promote relational wellness.

Lee University Health FairFebruary 2011

Assisted with an interdepartmental Health Fair to provide health resources to students and promote campus wellness.

Suicide Prevention DiscussionAugust 2010

Co-facilitated a discussion in Lee University undergraduate psychology course with colleagues of the Lee University Counseling Center to promote suicide prevention and awareness.

Passive Outreach Experience

- Conducted multiple tabling events at Georgia Southern University, including promotion of Counseling Center resources during Wellness Week and Pilates for Pink
- Attended Its On Us and other awareness-raising events at Georgia Southern University to provide a counselor presence for students
- Held table event for Lee University health fair as part of an interdepartmental team of healthcare providers

RELEVANT TEACHING EXPERIENCEGraduate Teaching AssistantNewberg, ORAugust 2016-Present

Currently serving as the graduate teaching assistant for Spiritual and Religious Diversity in Professional Psychology course, taught by Drs. Luann Foster and Benjamin Hartley.

Adjunct Faculty MemberPortland, ORJanuary 2016-May 2016

Developed and taught one semester of Educational Psychology course at Multnomah University to a class of ten undergraduate education students. Supervised by Dr. Elliot Lawless.

Graduate Teaching Assistant/SupervisorNewberg, ORAugust 2014-December 2014

Met weekly with a group of four undergraduate students in Advanced Techniques of Counseling course to provide supportive supervision and video review as they developed basic clinical skills. Course taught by Dr. Kris Kays.

Graduate Guest Lecture Newberg, OR November 4, 2013
 Guest lectured for undergraduate introductory psychology course on an introduction to social psychology. Course taught by Dr. Kelly Chang.

Graduate Guest Lecture Newberg, OR October 1, 2013
 Guest lectured for an undergraduate introductory psychology course on gender and sexuality issues in psychotherapy. Course taught by David Kays, M.A.

Graduate Teaching Assistant Cleveland, TN August 2012-December 2012
 Served as graduate teaching assistant to president of Lee University, assist with grading and class preparation for introductory level psychology course. Course taught by Dr. Paul Conn.

Graduate Personal Assistant Cleveland, TN January 2011-December 2012
 Assisted with grading undergraduate level Sociology exams, provide inter-departmental communication, and execute data entry for Dr. Ollie Lee.

Graduate Teaching Assistant Cleveland, TN August 2010-December 2010
 Worked for director of Lee University graduate counseling department. Corresponded with students for assistance in introductory level psychology course for Dr. Trevor Million.

Undergraduate Teaching Assistant Cleveland, TN August 2008-May 2010
 Assisted in grading, scheduling student appointments and guest teaching for developmental psychology courses at Lee University taught by Drs. Heather Quagliana and Susan Alford.

PUBLICATIONS

Adams Shirley, M. (2016, March 31). *Feminism and intersubjectivity: whose reality is it anyway?*. (Web log post). Retrieved from www.fempopculture.blogspot.com

Adams Shirley, M. (2015, October 9). *When the f-word became bad*. (Web log post). Retrieved from www.fempopculture.blogspot.com

Adams Shirley, M. (2015, June 3). *Courageous conversations: dismantling the work-life balance myth for female psychologists*. (Web log post). Retrieved from www.fempopculture.blogspot.com

Adams Shirley, M. (2014, November 24). *Media consumption*. (Web log post). Retrieved from www.fempopculture.blogspot.com

Adams Shirley, M. (2016, July, 4). *A family guide to the college transition*. Retrieved from <http://www.familywellnessministry.org>

CLINICAL COLLOQUIA

George Fox Department of Clinical Psychology

2015-2016

- March 16, 2016 Managing with Diverse Clients, presented by Sandra Jenkins, PhD
- February 17, 2016 Neuropsychology: What Do We Know 15 Years After the Decade of the Brain? and Okay, Enough Small Talk. Let's Get Down to Business!, presented by Trevor Hall, PsyD and Darren Janzen, PsyD
- October 21, 2015 Let's Talk about Sex: sex and sexuality with clinical applications, presented by Joy Mauldin, PsyD
- September 30, 2015 Relational Psychoanalysis and Christian Faith: A Heuristic dialogue, presented by Marie Hoffman, PhD

2014-2015

- March 18, 2015 Spiritual Formation and Psychotherapy, presented by Barrett McRay, PsyD
- February 18, 2015 Credentialing, Banking, the Internship Crisis, and other Challenges for Graduate Students in Psychology, presented by Morgan Sammons, PhD, ABPP
- November 19, 2014 Face Time in an Age of Technological Attachment, presented by Dorren Dodgen-McGee, PsyD
- October 15, 2014 Understanding & Treating ADHD in Children, presented by Erika Doty, PsyD and Learning Disabilities DSM5 – A New Approach, presented by Tabitha Becker, PsyD

2013-2014

- March 12, 2014 Evidenced Based Treatments for PTSD in Veteran Populations: Clinical and Integrative Perspectives, presented by David Beil-Adaskin, PsyD
- November 30, 2013 African American History, Culture and Addictions and Mental Health Treatment, presented by Danette C. Haynes, LCSW and Marcus Sharpe, PsyD
- September 25, 2013 Primary Care Behavioral Health, led by Brian E. Sandoval, PsyD and Juliette Cutts, PsyD

PROFESSIONAL COMMITTEE AND CONFERENCE EXPERIENCEGeorgia Psychological Association Intern Conference

November 29, 2017

Attended the GPA Intern Meeting for pre-doctoral interns in psychology in the state of Georgia.

CHADD Annual Conference

November 9-11, 2017

Attended the CHADD annual conference to gain education on current research for treatment of ADHD in college students.

APA Division 35 and 39 Joint Presentation

April 22, 2016

Co-facilitated a presentation titled *Gender, Power and Intersubjectivity: Relational Psychoanalysis, Feminism and Intersubjectivity* with campus representatives of APA's Division 39 and Division 35 to the Graduate Department of Clinical Psychology at George Fox University.

Oregon Psychoanalytic Center Student Liaison

August 2015-May 2016

Served as the student liaison for the Oregon Psychoanalytic Center for George Fox University students and faculty. Responsibilities included hosting events each semester at OPC in which doctoral students with an interest in psychoanalysis can engage in theoretical discussions

and case presentations with licensed mental health professionals specializing in psychoanalytic psychotherapy.

APA Division 35 Campus Representative

August 2014-May 2016

Served as the campus representative for the American Psychological Association's Division 35, Society for the Psychology of Women. Responsibilities included hosting bi-annual events within the GDCP to increase student awareness of gender-related issues in psychology, as well as contributing to the FemPOP blog for the division's website bi annually.

GDCP Admissions Committee

January 2014-August 2015

Served on the George Fox Department of Clinical Psychology Admissions Committee to collaborate with faculty and other student members on admissions decisions for prospective students, as well as organizing interview week activities, assisting with orientation, and co-conducting interviews.

Professional Seminar Series

September 2014-December 2014

Participated in weekly discussions of Michael Eigan's The Psychotic Core with local psychological professionals at the office of Robin Bagai, PsyD in Portland, OR.

GDCP Student Council

September 2013- August 2015

Served on the Student Council in the George Fox Department of Clinical Psychology. Assisted with inter-departmental communication and student advocacy, as well as organizing local service opportunities for at risk communities.

Northwest Assessment Conference

June 2014

Attended annual assessment conference at George Fox University, which offered an extensive training on the recent technological and administrative developments of various psychological and cognitive assessment materials.

Assessing and Managing Suicide Risk Conference

September 2012

Attended workshop on assessing and managing risk with clients presenting at various levels of suicidality, led by Michael McFarland, LMFT in Cleveland, Tennessee.

Transforming Traumatic Grief

July 2011

Attended grief counseling workshop led by a Courtney Armstrong, L.P.C. in Chattanooga, Tennessee. Received training on the utilization of evidenced-based approaches to grief counseling for individuals affected by traumatic grief.

Trauma-Focused Cognitive Behavioral Therapy Certification

March 2011

Received ten hours of direction on the implementation of the modality and its usefulness in the treatment of individuals recovering from traumatic experiences.

Undergraduate Observation Internship

June 2009-August 2009

Observed both individual and group therapy sessions for mental health and substance abuse treatment facilitated by mental health professionals at Avita Community Partners in Demorest, Georgia. Assisted Community Support Individuals in providing in-home treatment for

clients and families. Participated twice weekly in day camps provided for children presenting with behavioral and developmental disorders.

Volunteer Tutor at Boys and Girls Club

September 2006-December 2007

Provided volunteer tutoring services to children between ages 6 and 12 in mathematics and basic grammar. Co-led study groups and education programs designed to encourage habits for emotional and physical health in Cleveland, Tennessee.

MEMBERSHIPS AND HONORS

George Fox University Letter of Commendation Recipient 2014

Magna Cum Laude 2010

Campus Representative (2014-2016)

American Psychological Association Student Affiliate Member

American Psychological Association Div. 35 Society for the Psychology of Women Student Member

American Psychological Association Div. 39 Psychoanalysis Student Member

Christian Association for Psychological Studies

Psi Chi National Honor Society

REFERENCES

Mary Peterson, Ph.D.
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Graduate Department of Clinical Psychology
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Staff Clinical Psychologist, Northwest ADHD Treatment Center
503-255-2343, Ext. 4

William Buhrow PsyD
bbuhrow@georgefox.edu

Director, George Fox Health and Counseling Center
503-554-2340

Kathleen Gathercoal, Ph.D.
kgatherc@georgefox.edu

Director of Research, George Fox University
503-554-2376

Glena Andrews, PhD
gandrews@georgefox.edu

Director of Clinical Training, George Fox University
503-554-2386