

EXPLORING IDENTITY DEVELOPMENT IN A SUMMER RESIDENTIAL CAMP FOR
ADOLESCENT GIRLS

by

Ariel Hartman

April 2016

Director of Thesis: Clifton Watts, PhD

Major Department: Recreation and Leisure Studies

Adolescence is a transitional period between childhood and adulthood that is characterized by constant change. One of the major developmental tasks youth must address during this period is identity formation. The process of identity formation is aided by youth being exposed to more complex social and academic tasks of life during this period. Organized activities are often linked to positive identity development. However, there exists a need to investigate identity development more broadly across recreation experiences. Studies point to a wide variety of experiences (e.g., sports, creative activities, adventure activities) that positively impact youth identity. Youth residential camps offer campers a variety of experiences, and these settings are often identified as places where youth are positively impacted. The purpose of this study was to examine identity development within the context of a residential summer camp for girls. A convenience sample of adolescent girls ($N = 83$) from a camp in southwestern Virginia completed the sixth grade reading level version of the Identity Styles Inventory (ISI-6G) on their first and last day of camp to measure their identity styles (informational, normative, and diffuse/avoidant). This study used repeated measures ANOVA and multiple regression analyses to test if changes in identity style scores from pre- to post-test were linked to camp participation, length of stay at camp, and participation in adventurous activities. Results indicated that there

were no significant mean increases in identity style scores when considering camp participation. Furthermore, there were no between group differences when considering length of camp or participation in challenging activities. These findings demonstrate the importance of determining what elements of environments and activities contribute to identity development. A review of elements that affect identity styles in adolescents is offered as a starting point for those seeking to assess how recreational programs impact identity styles.

EXPLORING IDENTITY DEVELOPMENT IN A SUMMER RESIDENTIAL CAMP FOR
ADOLESCENT GIRLS

A Thesis

Presented to The Faculty of the Department of Recreation and Leisure Studies

East Carolina University

In Partial Fulfillment of the Requirements for the Degree of:

M.S. IN RECREATION SERVICES AND INTERVENTIONS

Concentration: Recreation and Park Administration

By

Ariel E. Hartman

April 2016

© Copyright 2016

Ariel E. Hartman

EXPLORING IDENTITY DEVELOPMENT IN A SUMMER RESIDENTIAL CAMP FOR
ADOLESCENT GIRLS

by

Ariel Hartman

APPROVED BY:

DIRECTOR OF THESIS: _____
Clifton E. Watts, Ph.D.

COMMITTEE MEMBER: _____
Nelson L. Cooper, Ph.D.

COMMITTEE MEMBER: _____
Natalia Sira, Ph.D., MD

COMMITTEE MEMBER: _____
Paige P. Viren, Ph.D.

CHAIR OF THE DEPARTMENT OF
RECREATION AND LEISURE STUDIES: _____
Matthew T. Mahar, Ed.D.

DEAN OF THE
GRADUATE SCHOOL: _____
Paul J. Gemperline, Ph.D.

ACKNOWLEDGEMENTS

This study would not have been possible without the generous support of Camp Carysbrook and their amazing staff. I feel very fortunate to have had the opportunity to observe and learn from a camp that is committed to the positive development of girls. I would like to acknowledge Colleen Hagan Egl for so patiently and generously working with me and supporting me.

I would like to thank all of my professors and fellow graduate students in the Recreation and Leisure Studies Department for helping me in so many ways. I would also like to thank Dr. Paige Viren, Dr. Nelson Cooper and Dr. Natalia Sira for serving on my committee and providing me with endless advice and encouragement. Specifically, I would like to express my deepest gratitude to Dr. Clifton Watts, my mentor and thesis chair. I would never have been able to finish my thesis without his guidance, patience and encouragement. I was very fortunate to work with these individuals and learn from them during my time at East Carolina University. Lastly, I would like to thank my family and friends for supporting me throughout my academic endeavors.

TABLE OF CONTENTS

LIST OF TABLES	vi
Introduction.....	1
Objectives of the Study	2
Background.....	3
Identity in Adolescence.....	3
Berzonsky’s Identity Styles	4
Recreation and Identity Development	6
Hypotheses.....	9
Methodology.....	11
Study Location.....	11
Sample.....	11
Instrumentation	12
Identity Styles Inventory.....	12
Procedure	13
Analysis of Data.....	13
Results.....	16
Demographic Information.....	16
Reliability Analysis.....	18
Measuring Informational Identity Styles	18
Measuring Normative Identity Styles	21
Measuring Diffuse Avoidant Identity Styles	24
Results for Hypotheses 1 and 2.....	27
Results for Hypothesis 3	27
Results for Hypothesis 4	28
Results for the Research Question	30
Conclusions and Discussion	32
Limitations and Recommendations for Future Study	37
References.....	40
Appendix A: Extended Literature Review.....	53
Appendix B: Pre- and Post-test Questionnaire	82
Appendix C: IRB Approval	91

LIST OF TABLES

Table 1 - <i>Demographics</i>	17
Table 2 - <i>Identity Style Scale: Informational (Pre-test)</i>	19
Table 3 - <i>Identity Style Scale: Informational (Post-test)</i>	20
Table 4 - <i>Identity Style Scale: Identity Normative (Pre-test)</i>	22
Table 5 - <i>Identity Style Scale: Identity Normative (Post-test)</i>	23
Table 6 - <i>Identity Style Scale: Diffuse Avoidant (Pre-test)</i>	25
Table 7 - <i>Identity Style Scale: Diffuse Avoidant (Post-test)</i>	26
Table 8 - <i>Change in Informational and Diffuse/Avoidant Scores</i>	27
Table 9 - <i>Change in Informational Scores According to Length of Stay</i>	28
Table 10 - <i>Change in Diffuse/Avoidant Scores According to Length of Stay</i>	29
Table 11 - <i>Predicting Change in Informational Style Scores According to Challenge</i>	30
Table 12 - <i>Predicting change in Normative Style Scores</i>	31

Introduction

Adolescence is a transitional period between childhood and adulthood that is characterized by constant change. It is a time when the tasks of life, both academic and social, increase in difficulty and complexity (Papadakis, Prince, Jones, & Strauman, 2006). While some children are able to move through adolescence without much difficulty, there are many that find adolescence to be tumultuous and challenging. This developmental period can be difficult for children to maneuver because it involves physical, social, and cognitive maturation (Lerner & Spanier, 1980). While there are many challenging aspects of adolescence, identity formation is one of the major developmental challenges that adolescents must navigate (Berzonsky, Cieciuch, Duriez, & Soenens, 2011).

Identity is a broad concept that refers to a sense of who one is as a person and how one contributes to society (Sokol, 2009). Identity consists of the internal beliefs, drives, and abilities that make up a person (Marcia, 1980). Identity formation refers to the development of social (the self in relation to others) and personal (individual and core qualities) identities (Kivel, 1998). The concept of identity development can be traced back to Erikson (1959). Erikson suggested that a key developmental task of adolescence is the formation of a stable identity. A clear sense of identity is vital for a smooth transition into adulthood, therefore it is important to understand and identify contexts that promote identity development (Duerden, Widmer, Taniguchi, & McCoy, 2009).

According to Erikson (1959; 1963) identity development is encouraged by experiences that allow for the expression of individuality and the opportunity to receive feedback from important peers. Opportunities for self-expression, new experiences, self-reflection, and the acquisition of new skills are also said to help encourage identity development (Kivel, 1998).

Although it has not been the topic of many studies, organized activities also appear to facilitate positive identity development.

Studies examining identity development within organized activities (Munson & Widmer, 1997; Shaw, Kleiber, & Caldwell, 1995) support the idea that recreation, specifically sports and creative activities, promote positive identity development. However, there exists a need to examine identity development more broadly within leisure service contexts. Identifying recreation and leisure service programs that facilitate the identity formation process is incredibly valuable to understanding what positive impact these programs are making, as well as what key in-program processes are linked to supporting this developmental task. Given this orientation, the purpose of this study is to examine differences in identity style scores from pre- to post-camp among adolescent girls who attend residential summer camp.

Objectives of the Study

The integral qualities of recreation make it an important context for positive identity development. Recreation provides young people with the opportunity for exploration, commitment, feedback, and the internal search for identity alternatives, all of which are essential for identity formation (Duerden et al., 2009). Recreational activities are the core of residential summer camp experiences. Although limited research has explored the relationship between residential summer camp and identity development, prior research suggests a positive relationship. When considering the identity development literature, a gap exists in understanding the types of experiences that assist in the identity development process. The current study seeks to examine identity development within the context of a residential summer camp for adolescent females.

Background

Identity in Adolescence

The process of identity development does not begin or end with adolescence. This process begins during early childhood and continues developing into old age. However, there are some stages in an individual's life that are more crucial for the identity development process than others, like adolescence (Marcia, 1980). Adolescence is the first stage in which physical, social, and cognitive development come together to guide young people through their childhood experiences and create a pathway towards adulthood (Erikson, 1963).

There are many components to identity, including ideological beliefs and vocational interests. This process is flexible, and therefore open to incorporate changes and views in society and relationships (Marcia, 1980). What young people affirm or choose throughout their identity process seems to be unknown, which is one of the reasons that many adolescents struggle to form an identity or only partially form one during adolescence. This is due to the risk of making decisions that could affect the future in an unknown way (Erikson, 1959; 1963). Individuation is another component of identity formation. Individuation refers to the process of separating from the ways and understanding of one's family to one's own understanding of the world. During this time, adolescents tend to separate themselves from families, in particular, parents. However, this leaves a gap in social relatedness, which is fulfilled by the peer group.

Decisions made in adolescence are not made once and for all. Rather, decisions made throughout adolescence, and other stages, must be made again and again (Marcia, 1980). Every decision an adolescent makes affects that person's identity, no matter how minor the decision may be. Whether the decision is who to date or whether or not to attend college, it has identity forming implications (Crocetti, Erentaite, & Zukauskiene, 2014). The decisions that young

people make and the foundations in which they make these decisions eventually lead to a pattern in future decision-making processes. This process can be transformed if an individual makes a decision based on peer pressure or parental values (Marcia, 1980).

There is an abundance of literature that supports the establishment of identity as a major task of adolescence (Lacombe & Gay, 1998). Many researchers have studied this developmental task, but research on adolescent identity development is traced back to Erikson's psychosocial growth model and Marcia's Identity Status Paradigm. Berzonsky's theory of Identity Styles is largely based off of both Erikson's and Marcia's work and works as a research tool to better understand the process of identity formation.

Berzonsky's Identity Styles

For many years, studies on identity development focused on Marcia's (1966) identity statuses paradigms, which has four different identity types: (a) identity achievement; (b) foreclosure; (c) identity diffusion; and (d) moratorium. More recently, researchers have become increasingly concerned with the process by which identity is formed rather than the individual differences in identity outcomes (Berzonsky et al., 2011). Berzonsky (1989) proposed a model of identity formation focused on the social-cognitive strategies that individuals prefer to adopt or avoid when processing, constructing, and maintaining a sense of identity. Three different social-cognitive identity styles are assumed in Berzonsky's model: informational, normative, and diffuse-avoidant (Berzonsky, 1989).

Adolescents with informational oriented styles are self-reflective and seek out self-relevant information before resolving identity conflicts (Berzonsky et al., 2011). They define themselves by means of personal attributes, like individual values and goals (Crocetti, Erentaite, & Zukauskienė, 2014). These individuals are interested in learning new things about themselves

and are willing to evaluate their identity structure when faced with harsh feedback. The informational style is often associated with open-mindedness, attentive decision-making, emotional autonomy, elevated commitment levels, and an achieved identity status (Berzonsky et al., 2011).

Adolescents with a normative style are more likely to adopt values and goals from significant others and conform to their peers' expectations. Individuals with this style are likely identified to be in the foreclosure identity status, because the normative style is associated with self-control and a sense of purpose but also a need for structure and inflexibility (Berzonsky, 1989; Crocetti, Erentaite, & Zukauskienė, 2011). Individuals within this style tend to define themselves in terms of collective self-attributes, such as family and religion (Berzonsky, Cieciuch, & Soenens, 2011).

The diffuse-avoidant style is associated with procrastination and attempting to postpone identity conflicts as long as possible. When faced with decisions, young people's behavior is driven by consequences and immediate demands. However, these situations tend to be short-term acts of defiance that do not necessarily have long-term adjustments to their identity (Berzonsky & Ferrari, 2009). These adolescents are not likely to explore identity alternatives and have the tendency to emphasize social aspects of their identity, such as their popularity and reputation, which positions them in the identity status of diffusion (Crocetti, Erentaite, & Zukauskienė, 2011). According to Berzonsky, diffuse-avoidant is more than just a confused self; it involves a deliberate attempt to evade and potentially negate self-relevant feedback (Berzonsky et al., 2011).

It is important to identify contexts that promote identity development because a sense of identity is crucial for a smooth transition into adulthood. Family, peers, and leisure contexts are

all contexts that research suggests may impact identity development (Duerden, Taniguchi, & Widmer, 2012). Research on leisure and recreation activities found results that suggested structured, challenging activities may promote identity development (Barber, Eccles, & Stone, 2001; Duerden et al., 2009; Groff & Kleiber, 2001; Shaw, Kleiber, & Caldwell, 1995). Sports (Groff & Kleiber, 2001) are also important contexts for identity development, maybe even more so for adolescent girls than for adolescent boys. Although the research is limited, findings suggest a positive relationship between recreation and identity development.

Recreation and Identity Development

A large amount of an adolescent's day is consumed by free time (Larson & Verma, 2003); therefore, the activities in which an adolescent participates during this period may greatly affect identity development. Activities that may be most beneficial for young people involve effort and challenge, because these bridge the gap between childhood play and adult responsibilities (Shaw, Kleiber, & Caldwell, 1995). Structured activities that challenge youth and require them to be committed and engaged facilitate positive identity development. These kinds of programs involve young people using their individual skills for external challenges, providing youth with the opportunity for self-affirmation and the acquisition of new skills (Kivel, 1998).

Experientially based outdoor programs may be one form of activity that helps to enhance a positive identity during adolescence. Experiential education recognizes that there are many ways to learn other than just attending school. Through experiential education, youth can learn through emotions, group activities, and physical activities. Experiential activities involve games that often result in girls liking themselves more and trusting themselves to make their own decisions (Gubitz & Kutcher, 1999). One of the most common forms of experiential education is a ropes course. Ropes course activities depend on relationships and communication for the

successful completion of challenges. Through these activities, youth learn through trust, communication, social changes, and responsibility, all of which are essential for identity development (Gubitz & Kutcher, 1999). In all-girls programs, these results may be even more positive because girls will not feel the need to hide their feelings and opinions from male participants (Gubitz & Kutcher, 1999). Gubitz and Kutcher (1999) suggested that programs must empower girls by using their unique strengths to help girls challenge stereotypical views of femininity.

According to Barber, Eccles, and Stone (2001), sports participation can predict positive developmental outcomes and lower levels of social isolation. Adapted sports programs have also predicted positive developmental outcomes. Groff and Kleiber (2001) found that adapted sports participation appeared to provide youth with a sense of competence and the opportunity for self-expression. Sports participation also facilitated the exploration of identity alternatives and expression of identity. This study provided support for the notion that sports participation has a positive relationship with identity development.

Different activities and gender account for variance in identity development during adolescence. Shaw, Kleiber, and Caldwell (1995) studied the relationship between participation in different categories of leisure activities and the level of identity development in tenth grade students. The students were surveyed about how much time they spent each day doing various activities, like homework and watching television. They were also given a questionnaire to measure their identity development. Additionally, a smaller subset of these students were interviewed about their identity, time use, and free time activities. The results suggested that for the female students, level of participation in sports and physical activities was positively correlated with identity development and psychological maturity. The researchers concluded that

physical challenges may be particularly important for young women whose social influences encourage fitting in and caring about what others think rather than their own strengths and individuality.

Adventure recreation is another form of physical activity that may affect identity development. Duerden, McCoy, Taniguchi, and Widmer (2009) examined the effects of an adventure recreation program on the identity development of adolescents between the ages of 11 to 15 years. The participants of the study completed a two-week adventure program that focused on backpacking, whitewater rafting, and exploration. A comparison group was recruited from the same middle school as many of the camp participants. The researchers used Erikson's Psychosocial Stage Inventory (EPSI) to examine growth among the industry, identity, and intimacy stages of development. Additionally, Berzonsky's Identity Styles Inventory (ISI) was used to measure change among the informational, normative, and diffuse-avoidant identity styles. The results suggested that the adventure program group experienced a significant pre- to posttest increase across Erikson's inventory compared to the comparison group. The results also suggested a significant pre- to post-test growth among the ISI subscale scores between the adventure program and comparison groups. Specifically, analysis suggested the adventure program participant scores showed a greater increase pre- to post-test growth differences among the informational and normative subscales and a decrease among the diffuse-avoidant subscales than the comparison group, whose scores remained relatively stable. The analysis suggested that a short-term adventure recreation program positively affected the psychosocial and identity development of the participants. The fact that a short, two-week adventure program with a modest sample size affected key factors of identity development, a process that occurs over a

long period, proposes a strong underlying process in this particular adventure recreation program.

The outcomes associated with identity development in recreation programs are important and cannot be overstated, however, less attention has been paid to the contextual elements that facilitate the identity processes. Using a qualitative design, Duerden, Widmer, and Taniguchi (2012) examined the same two-week adventure program mentioned above, but this time examined how contextual elements facilitate identity development in youth. Seven themes were found regarding how participants perceived the adventure program, they were: (a) new experiences; (b) challenge; (c) supportive relationships; (d) acquisition of new skills and knowledge; (e) increased self-confidence; (f) fun; and (g) new self-perception. Because evidence found in previous research that this program promoted identity development (Duerden, McCoy, Taniguchi, & Widmer, 2009), it is likely that these seven themes played a role in the positive growth in identity. These data suggests that the adventure program provided a supportive environment for new experiences and challenges.

Hypotheses

Based on findings from previous research, the following hypotheses are proposed:

H1: Program participants will experience a significant increase in informational style scores from pre- to post-test.

H2: Program participants will experience a significant decrease in diffuse/avoidant style scores from pre- to post-test.

H3: There will be positive relationship between length of participation and change in informational style scores from pre- to post-test.

H4: There will be a negative relationship between length of participation and change in diffuse/avoidant style scores from pre- to post-test.

H5: Campers who participated in more adventurous camp activities (e.g., rock climbing, canoeing) will experience a greater increase in informational style scores when compared to those who participated primarily in conventional camp activities (e.g., arts, crafts, team sports). In addition to these hypotheses, analyses will also address the basic research question: are there differences in normative identity style assessments at pre- and post-test based on the length of camp and participation in adventurous activities?

Methodology

Study Location

This study took place at Camp Carysbrook, a family-owned summer camp located in Riner, Virginia. Camp Carysbrook is an all-girls, residential summer camp serving girls from ages 6 to 16 years. Located on 200 acres of land, this camp provides a natural setting for girls to participate in a wide array of activities. The daily program allows campers to choose their preferred activities in camp. Campers are encouraged to create goals and try new activities based on their interests. This flexible programming allows girls to participate in numerous activities of their choosing while at camp.

Many conventional activities are available at Camp Carysbrook, such as: arts and crafts, drama, swimming, archery, soccer, softball, volleyball, and other recreational sports. In addition to traditional activities, this camp offers a variety of adventure activities. These activities include: hiking, overnight camping, backpacking, canoeing, caving, rappelling, and rock climbing. Adventure activities are organized and allow for group and individual challenges.

Sample

This study used a convenience sample from Camp Carysbrook. Involvement in this study was on a volunteer basis only and participants were limited to Camp Carysbrook campers. Parental consent forms were distributed on the first day of each camp session at the registration table. Campers who received parental consent were then asked to fill out an assent form, which was provided to them by the head counselor at the registration table. The head counselor then administered the questionnaires on the first and last day of each camp session. Campers who accepted to be in the study were tracked using an identification number provided by Camp Carysbrook. For the purpose of this study, no camper under the age of 12 years was asked to

participate in the study. Concerns for reading ability and availability of scales for adolescent populations necessitated these inclusion criteria.

Camp began June 21st, 2015 and ran until August 9th, 2015, and allowed girls the option to attend camp between one to seven weeks. The one-week session was an introduction to camp for new and typically younger campers, while the seven-week camp session was limited to counselors in training (CIT) who are in the tenth grade. The CIT program offered a variety of experiences designed to give the camper an understanding of leadership and independent thinking. Because the counselors in training have a different camp experience, they were not included in this study.

Campers in the one through six-week sessions ranged from first to ninth grade. Other than the CIT program, ages were mixed throughout the sessions. Shorter sessions often overlapped with longer sessions to round out the ages. There were typically around 200 campers throughout the entire camp session, with no more than 80 in a single week.

Instrumentation

For the purpose of this study, a written questionnaire was developed that included demographic information of the participants and measures of the individuals' identity statuses. Because this camp only served adolescent girls, only age and years of attendance at camp were collected for demographics. Copies of the pre- and post-test questionnaires can be found in Appendix B.

Identity Styles Inventory

Individual cognitive identity styles were assessed using the sixth grade reading level version of the ISI (ISI-6G). This revised version of the ISI was developed with simplified language and sentence structure to be more accessible for early and middle adolescents (White,

Wampler, & Winn, 1998). The ISI-6G consists of 30 items and uses a five-point Likert-type scale. Responses were coded as '1' = strongly disagree to '5' = strongly agree. Scores from the ISI-6G indicate the individual's identity style as either: informational, normative, or diffuse-avoidant (White et al., 1998).

In a study conducted by White, Wampler, and Winn (1998), the ISI-6G was found to be both valid and reliable when examining college students. The researchers tested the ISI-6G for construct, convergent, and criterion validity with positive results. They also found the subscales to be adequate in reliability with coefficient alphas for the diffuse/avoidant scale between .77-.78, the normative scale between .64-.67, and the information scale between .59-.64. Another study (Vaziri et al., 2014) found similar results and concurred that the ISI-6G was a valid and reliable instrument to measure identity styles. These results are similar to those reported by Berzonsky (1992) in his original paper on the measure.

Procedure

Each participant was asked to fill out a demographic questionnaire and the ISI-6G at pre-test. As the sample was limited to females, demographics only included questions about age and how many years they had attended Camp Carysbrook. At post-test, participants were asked to fill out the ISI-6G again, as well as a questionnaire about the level of challenge associated with activities. Challenge questions were included to gauge if differences related to challenge existed between adventurous activities and traditional recreation activities.

Analysis of Data

Data analysis utilized IBM SPSS 22 software. Descriptive statistics were collected for age and number of years attending camp. Data were analyzed for out-of-range responses,

skewness and kurtosis, as appropriate. Subscales for the ISI-6G were calculated as directed by White et al. (1998). Analyses were directed to test study hypotheses and a research question.

H1: Program participants will experience a mean increase in informational style scores from pre- to post-test. A repeated measures analysis of variance (ANOVA) tested change in the mean informational ISI scores for all campers from pre- to post-test.

H2: Program participants will experience a significant decrease in diffuse/avoidant style scores from pre- to post-test. A repeated measures ANOVA examined change in the mean diffuse/avoidant ISI scores for all campers from pre- to post-test.

H3: There will be positive relationship between length of participation and change in informational style scores from pre- to post-test. A repeated measures ANOVA examined pre- and post-test differences in the mean informational ISI scores by comparing groups who attend camp for one, two, three, and four weeks.

H4: There will be a negative relationship between length of participation and change in diffuse/avoidant style scores from pre- to post-test. A repeated measures ANOVA examined pre- and post-test differences in the mean diffuse/avoidant ISI scores by comparing groups who attend camp for one, two, three, and four weeks.

H5: Campers who participated in more adventurous camp activities (e.g., rock climbing, canoeing) will experience a greater increase in informational style scores when compared to those who participated primarily in conventional camp activities (e.g., arts, crafts, team sports). A hierarchical linear regression was conducted to examine if activity participation type (traditional vs. adventure) predicted change in informational styles scores from pre- to post-test. Past camp attendance served as a control variable to allow thorough investigation of this hypothesis.

RQ1: To what extent is the normative identity style affected by the length of camp and participation in adventurous activities? A hierarchical linear regression was conducted to examine if length of camp predicted change in normative identity styles scores from pre- to post-test. Past camp attendance served as a control variable to allow thorough investigation of this research question.

Results

Demographic Information

A total of 83 girls completed the pre- and post-test questionnaires. The age of participants ranged from 12 to 15 years, with an average age of 13.3 years. The majority of participants stayed at camp for two weeks (61.4%), with the second largest group staying four weeks (24.1%). Of the 83 participants, only 17.1% were first year campers, with the majority of campers returning to Camp Carysbrook for their third year (22%). Detailed results can be found in Table 1.

Table 1***Demographics***

	Total (<i>N</i> = 83)	
	<i>n</i>	Valid %
Age		
12	17	20.5
13	26	31.3
14	29	34.9
15	8	9.9
Missing ¹	2	
Weeks at Camp		
1 Week	6	7.2
2 Weeks	51	61.4
3 Weeks	6	7.2
4 Weeks	20	24.1
Years at Camp Carysbrook		
First Year	14	17.1
1 Year	7	8.5
2 Years	18	22.0
3 Years	16	19.5
4 Years	9	11.0
5 Years	7	8.5
More than 5	11	13.4
Missing ¹	1	
Mean Age (<i>SD</i>)	13.32 (0.97)	

¹ Missing data not part of percentage column but reflects the percentage of missing data from the total. For each demographic category, the percentage column for each demographic category reflects the valid percent of reported data. The total sample column reflects the percentage each row has from the total.

Reliability Analysis

Before hypothesis testing, all scales were reviewed for reliability using tests of internal consistency (i.e., Cronbach's Alpha). Specifically, scales measured informational, identity normative, and diffuse avoidant identity styles as stated in the Identity Style Inventory Sixth Grade (ISI-6G). These three scales were measured at pre- and post-test. Reports for the pre- and post-test measures for each scale follow.

Measuring Informational Identity Styles

Informational identity styles were measured at pre- and post-test. The scale consisted of 11 items and used statements to reflect styles that are self-reflective and willing to seek out help before making decisions. These statements align well with an identity style defined by personal attributes. Items were statements that reflected this identity style and participants were asked to rate on a scale of 1 to 5 how much they agreed or disagreed with the statement. Table 2 and 3 present the reliability statistics at pre- and post-test respectively.

Table 2***Identity Style Scale: Informational Pre-test (N = 85)***

Item	Mean	<i>SD</i>	Alpha if item deleted
I've spent a lot of time thinking about what I should do with my life.	3.74	0.89	.62
I've spent a lot of time reading and/or talking to others about religious ideas.	2.48	1.14	.64
When I talk with someone about a problem, I try to see their point of view.	4.14	0.66	.65
I've spent a lot of time reading and/or trying to understand political issues.	2.42	1.14	.66
I've spent a lot of time talking to people to find a set of beliefs that work for me.	2.45	1.09	.64
When I have a problem, I do a lot of thinking to understand it.	3.94	0.82	.64
It's best to get advice from experts (preachers, doctors, lawyers, teachers) when I have a problem.	3.26	1.03	.67
My problems can be interesting challenges.	3.52	0.92	.68
When I make decisions, I take a lot of time to think about my choices.	3.79	0.83	.64
I like to think through my problems and deal with them on my own.	3.67	0.86	.67
When I have to make a big decision, I like to know as much as I can about it.	4.25	0.74	.64
Total items	3.42	0.46	
Total reliability for scale	.69		

Note: Scale ranged 1 (Strongly Disagree) to 5 (Strongly Agree)

Table 3***Identity Style Scale: Informational Post-test (N=78)***

Item	Mean	SD	Alpha if item deleted
I've spent a lot of time thinking about what I should do with my life.	3.53	1.02	.56
I've spent a lot of time reading and/or talking to others about religious ideas.	2.44	1.16	.62
When I talk with someone about a problem, I try to see their point of view.	4.21	0.63	.60
I've spent a lot of time reading and/or trying to understand political issues.	2.50	1.19	.60
I've spent a lot of time talking to people to find a set of beliefs that work for me.	2.60	1.11	.59
When I have a problem, I do a lot of thinking to understand it.	3.96	0.63	.58
It's best to get advice from experts (preachers, doctors, lawyers, teachers) when I have a problem.	3.31	1.01	.67
My problems can be interesting challenges.	3.58	0.86	.64
When I make decisions, I take a lot of time to think about my choices.	3.85	0.97	.58
I like to think through my problems and deal with them on my own.	3.60	0.93	.62
When I have to make a big decision, I like to know as much as I can about it.	4.31	0.65	.60
Total items	3.44	0.44	
Total reliability for scale	.66		

Note: Scale ranged 1 (Strongly Disagree) to 5 (Strongly Agree)

Tests of internal consistency on the pre- ($\alpha = .686$) and post-test ($\alpha = .659$) informational identity style measures reflected modest reliability that was consistent with past tests of internal

consistency (White, Wampler, & Winn, 1998). Thus, these measures were used for hypothesis testing.

Measuring Normative Identity Styles

Normative identity styles were measured at pre- and post-test. The scale consisted of 9 items and used statements to reflect styles that are likely to adopt values and goals from important peers and conform to the expectations of others. Participants were asked to rate on a scale of 1 to 5 how much they agreed or disagreed with the statement. Tables 4 and 5 present the reliability statistics at pre- and post-test, respectively.

Table 4***Identity Style Scale: Identity Normative Pre-test (N = 85)***

Item	Mean	SD	Alpha if item deleted
I act the way I do because of the values I was brought up with.	3.99	0.91	.36
I was brought up to know what to work for.	3.44	1.04	.38
I've never had any serious doubts about my religious beliefs.	3.15	1.30	.45
I've known since I was young what I wanted to be.	2.32	1.26	.38
It's better to have a strong set of beliefs than to be open to different ideas.	2.12	1.01	.39
It's better to have one set of values than to consider other value options.	2.24	0.89	.36
Once I know how to solve a problem, I like to stick with it.	3.51	0.88	.32
I like to deal with things the way my parents said I should.	2.93	0.92	.30
It's best to get advice from friends or family when I have a problem.	4.02	0.85	.39
Total Items	3.08	0.53	
Total reliability for scale	.43		

Note: Scale ranged 1 (Strongly Disagree) to 5 (Strongly Agree)

Table 5***Identity Style Scale: Identity Normative Post-test (N = 75)***

Item	Mean	SD	Alpha if item deleted
I act the way I do because of the values I was brought up with.	3.88	0.89	.55
I was brought up to know what to work for.	3.31	1.10	.57
I've never had any serious doubts about my religious beliefs.	3.23	1.24	.60
I've known since I was young what I wanted to be.	2.49	1.20	.58
It's better to have a strong set of beliefs than to be open to different ideas.	2.19	1.04	.53
It's better to have one set of values than to consider other value options.	2.12	0.75	.54
Once I know how to solve a problem, I like to stick with it.	3.41	0.95	.56
I like to deal with things the way my parents said I should.	2.91	0.98	.54
It's best to get advice from friends or family when I have a problem.	3.97	0.79	.58
Total Items	3.06	0.53	
Total scale reliability	.61		

Note: Scale ranged 1 (Strongly Disagree) to 5 (Strongly Agree)

Tests of internal consistency on the post-test normative identity style measure ($\alpha = .606$) reflected modest reliability that was consistent with past tests of internal consistency (White, Wampler, & Winn, 1998). However, the pre-test reliability ($\alpha = .428$) was far below what is deemed acceptable (Cortina, 1993). The overall scale could be modestly improved ($\alpha = .450$) with dropping one item (i.e., I've never had any serious doubts about my religious beliefs);

however, the decision was made to keep the scale intact to reflect past application of the measure. Recognizing these limitations, hypothesis testing occurred with these measures.

Measuring Diffuse Avoidant Identity Styles

Diffuse Avoidant identity styles were measured at pre- and post-test. The scale consisted of 10 items and used statements to depict styles that are associated with procrastination and behavior driven by consequences. Participants were asked to rate on a scale of 1 to 5 how much they agreed or disagreed with the statement. Tables 6 and 7 present the reliability statistics at pre- and post-test, respectively.

Table 6***Identity Style Scale: Diffuse Avoidant Pre-test (N = 85)***

Item	Mean	SD	Alpha if item deleted
I'm not sure what I'm doing in life.	2.71	1.193	.71
I don't worry about values ahead of time; I decide things as they happen.	2.82	0.89	.64
If I don't worry about my problems they usually work themselves out.	2.38	0.91	.68
I'm not thinking about my future now – it's still a long way off.	2.13	0.99	.62
When I have to make a decision, I have to wait as long as I can to see what will happen.	2.76	0.90	.66
I don't take life too serious. I just try to enjoy it.	3.51	0.97	.70
I try not to think about or deal with problems as long as I can.	2.59	1.13	.61
I try to avoid problems that make me think.	2.32	1.06	.62
When I ignore a potential problem, things usually work out.	2.29	0.81	.66
When I know a problem will cause me stress, I try to avoid it.	3.05	1.194	.647
Total Items	2.66	0.17	
Total scale reliability	.68		

Note: Scale ranged 1 (Strongly Disagree) to 5 (Strongly Agree)

Table 7***Identity Style Scale: Diffuse Avoidant Post-test (N = 79)***

Item	Mean	SD	Alpha if item deleted
I'm not sure what I'm doing in life.	2.49	1.13	.84
I don't worry about values ahead of time; I decide things as they happen.	2.71	0.96	.80
If I don't worry about my problems they usually work themselves out.	2.30	1.05	.81
I'm not thinking about my future now – it's still a long way off.	2.24	1.09	.82
When I have to make a decision, I have to wait as long as I can to see what will happen.	2.58	1.05	.82
I don't take life too serious. I just try to enjoy it.	3.58	0.90	.83
I try not to think about or deal with problems as long as I can.	2.59	1.03	.79
I try to avoid problems that make me think.	2.24	1.02	.79
When I ignore a potential problem, things usually work out.	2.33	0.87	.81
When I know a problem will cause me stress, I try to avoid it.	2.96	1.07	.80
Total Items	2.60	0.17	
Total scale reliability	.83		

Note: Scale ranged 1 (Strongly Disagree) to 5 (Strongly Agree)

Tests of internal consistency on the pre- ($\alpha = .684$) and post-test ($\alpha = .829$) diffuse-avoidant identity style measures reflected modest reliability that was consistent with past tests of internal consistency (White, Wampler, & Winn, 1998). Thus, these measures were used for hypothesis testing.

Results for Hypotheses 1 and 2

The first two hypotheses sought to understand whether or not camp participants would experience an increase pre- to post-test in informational style scores (Hypothesis 1) and a decrease in diffuse/avoidant scores for this same time period (Hypothesis 2). Two repeated measures ANOVAs were conducted to determine differences in style scores for all participants from pre- to post-test. Results indicated that there were no differences between pre- and post-test scores when examining measures of informational and diffuse/avoidant identity styles. Detailed results can be found in Table 8.

Table 8

Change in Informational and Diffuse/Avoidant Scores

Hypothesis	Pre-test Mean (sd)	Post-test Mean (sd)	<i>F</i>	<i>p</i>	η^2
H1: Change in informational	3.399 (0.454)	3.446 (0.419)	.363	.549	.005
H2: Change in diffuse/avoidant	2.648 (0.627)	2.605 (0.627)	.269	.606	.004

Results for Hypothesis 3

The third hypothesis assumed that participants who had a longer stay at camp would experience a greater increase in informational style scores from pre- to post-test when compared to those who stayed fewer weeks. It was expected that campers who attended camp for four weeks would experience the greatest increase in informational style scores when compared to campers who attended camp for fewer weeks. These differences were expected to hold true when comparing campers who attended three weeks to those who attended fewer than three weeks, and two weeks to one week. A repeated measures ANOVA sought to determine if the hypothesized

differences in informational style scores from pre- to post-test existed between those attending one, two, three, and four weeks of camp. The results, found in Table 9, indicated that the hypothesis was not supported.

Table 9

Change in Informational Scores According to Length of Stay

Length of Camp	Pre-test Mean (sd)	Post-test Mean (sd)	<i>F</i>	<i>p</i>	η^2
One Week (<i>n</i> = 6)	3.336 (0.365)	3.379 (0.312)	.021	.996	.001
Two Weeks (<i>n</i> = 47)	3.388 (0.499)	3.442 (0.477)			
Three Weeks (<i>n</i> = 6)	3.439 (0.194)	3.454 (0.237)			
Four Weeks (<i>n</i> = 18)	3.434 (0.440)	3.475 (0.340)			

Results for Hypothesis 4

Hypothesis 4 posited that more weeks at camp would result in a decrease in diffuse-avoidant style scores. The fourth hypothesis compared campers who attended one, two, three, and four weeks of camp. It was expected that campers who attended camp for four weeks would experience the greatest decrease in diffuse/avoidant style scores when compared to campers who attended camp for fewer weeks. These differences were expected to hold true as we compared campers who attended three weeks to those who attended fewer than three weeks, and two weeks compared to one week. A repeated measures ANOVA determined that there was no significant difference in change in diffuse/avoidant style score based on the number of weeks spent in camp. Results are presented in Table 10.

Table 10***Change in Diffuse/Avoidant Scores According to Length of Stay***

Length of Camp	Pre-test Mean (sd)	Post-test Mean (sd)	<i>F</i>	<i>p</i>	η^2
One Week (<i>n</i> = 6)	2.411 (0.286)	2.517 (0.279)	.544	.654	.022
Two Weeks (<i>n</i> = 47)	2.652 (0.570)	2.593 (0.703)			
Three Weeks (<i>n</i> = 6)	2.783 (0.402)	2.617 (0.366)			
Four Weeks (<i>n</i> = 18)	2.672 (0.468)	2.661 (0.596)			

Results for Hypothesis 5

The fifth hypothesis posited that participating in more adventurous camp activities (e.g., rock climbing, canoeing) would be positively associated with change in informational style scores. Groups were developed to differentiate between adventure campers and traditional campers. Campers who participated in hiking, backpacking, canoeing, caving, rappelling, and/or rock climbing were considered adventure campers. Campers who did not participate in these activities were grouped together and labeled as traditional campers. A hierarchical linear regression was conducted to examine if activity participation type (traditional vs. adventure) predicted change in informational style scores from pre- to post-test. The results suggested that there was no association between change in informational styles scores and activity participation type. Detailed results can be found in Table 11.

Table 11***Predicting Change in Informational Style Scores According to Challenge***

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Model 1. Control Variables					
Constant	.780	.640		1.219	
Age	-.059	.050	-.152	-1.172	.245
Years at Camp	.015	.025	.075	.580	.564
Model 2.					
Constant	.905	.678		1.335	
Age	-.066	.052	-.169	-1.267	.209
Years at Camp	.017	.026	.085	.650	.518
Challenge Activities	-.015	.025	-.072	-.582	.562

Model 1. $R^2 = .020$, $p = n.s.$

Model 2. $R^2 = .025$, $R^2\text{Change} = .005$, $p = n.s.$

Results for the Research Question

The research question examined the normative style score, which was not studied in any of the hypotheses. This question sought to understand if the length of camp and participation in adventurous activities were associated with the normative identity style. A hierarchical linear regression was conducted to examine if length of camp attendance and activity participation type (traditional vs. adventure) predicted change in normative style scores from pre- to post-test. The results, found in Table 12, indicated that there was not a significant relationship between change in normative style scores with either participation in challenging activities or length of stay.

Table 12***Predicting change in Normative Style Scores***

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Model 1. Control Variables					
Constant	-.690	.699		-.986	
Age	.059	.055	.139	1.081	.283
Years at Camp	-.032	.028	-1.48	1.152	.253
Model 2.					
Constant	-.626	.738		-.849	
Age	.048	.056	.112	.846	.401
Years at Camp	-.043	.030	-2.02	-1.464	.148
Weeks at Camp	.084	.062	.183	1.354	.180
Challenge Activities	-.025	.029	-.112	-.868	.388
Model 3.					
Constant	-.938	.812		-1.155	
Age	.055	.057	.128	.958	.342
Years at Camp	-.045	.030	-.208	-1.504	.137
Weeks at Camp	.180	.121	.393	1.487	.142
Challenge Activities	.046	.082	.206	.560	.577
Weeks by Challenge	-.28	.031	-.443	-.924	.359

Model 1. $R^2 = .025$, $p = \text{n.s.}$

Model 2. $R^2 = .054$, $R^2 \text{Change} = .029$, $p = \text{n.s.}$

Model 3. $R^2 = .066$, $R^2 \text{Change} = .012$, $p = \text{n.s.}$

Conclusions and Discussion

This study examined the relationships between adolescent identity style development and summer camp participation. Results suggested that there was no support for any of the five study hypotheses. This study failed to observe significant differences from pre- to post-test in the informational (as posited in hypothesis 1) or diffuse/avoidant style scores (as posited in hypothesis 2). There was no support for the third and fourth hypotheses either because there were no differences in pre- to post-test change in informational (expecting an increase) or diffuse/avoidant (expecting a decrease) scores according to length of camp attendance. Specifically, there was no significant difference in the change of the two identity style scores of campers when comparing groups of participants who stayed at camp for one, two, three, or four weeks. The fifth hypothesis examined if camp participation type (traditional vs. adventure) was associated with change in informational style scores; again, there was no significant association detected and it was concluded that the hypothesis was not supported. The research question was consistent with the tested hypotheses, as change in normative identity score was not associated with either the length of camp or participation type.

This study attempted to build upon previous research on identity development in the recreational setting. The rationale for this study was based largely on a study conducted by Duerden, Widmer, Taniguchi, and McCoy (2009), which found positive identity development through adventure recreation in youth. Like the current study, the researchers examined the identity styles of adolescents who participated in a camp program. In contrast, their camp program lasted two weeks and involved extensive adventure recreation activities. Participants in this camp rotated between backpacking, whitewater rafting, and general exploration, each lasting three days. Besides exploration, the activities were outside of the camp setting. During the

backpacking and whitewater rafter rotations campers were taught necessary skills, first aid, fishing, and river safety. During the exploration rotation, campers participated in team building activities, similar to a traditional camp. At Camp Carysbrook, rock climbing was the only activity offered outside of the camp setting and it was only a half-day program. In addition, the campers at Camp Carysbrook were not given the opportunity to take a leadership position during outdoor pursuits, nor did they focus on important outdoor living skills. Although adventurous activities were offered at Camp Carysbrook, they were only offered as day programs and mostly inside of the camp setting. They were also not intense and may not have been as challenging as a multi-day trip that focuses on building skills.

One of the common beliefs about identity is that one can participate in activities and identify with the image of that activity. For example, a person who is a member of a band probably identifies as a musician (Kivel, 1998). However, many camp activities are unique to that environment, meaning that they are not typically traditional activities outside of the camp setting. Activities like archery and rock climbing are common camp activities, but they are not common sports that children participate in during the school year. Therefore, once campers finish their few weeks at camp, they are not likely to participate in the same activities until their next year at camp. Because of this, many of the activities offered at Camp Carysbrook did not strictly focus on skill building. Rather, camp leaders introduce the activities to campers and focus on fun. It is less likely that people will identify with an activity if they only try it once or twice, without building skill. With practice and through building skills, young people are more likely to feel self-affirmed because the activity begins to symbolize identity images (Haggard & Williams, 1991). Therefore, the activities that campers participated in and the amount of time they were able to practice that activity may not have affected their identity styles.

Creative activities, traditional sports, and adventure activities were offered at camp. In past studies, sports participation predicted positive identity formation outcomes (Groff & Kleiber, 2001; Shaw, Kleiber, & Caldwell, 1995). These were organized, structured activities in which athletes participated on a weekly basis. Weekly participation also allowed participants to build upon their skills.

Groff and Kleiber (2001) found results of positive identity formation when they examined an adapted sports program. Unlike Camp Carysbrook, this program was specifically for disabled youth, and involved organized sports that were designed to build skill. The researchers in this study also used a qualitative design and interviewed their subjects, allowing for broader and more in-depth responses.

Shaw, Kleiber, and Caldwell (1995) found that for high school girls specifically, participation in sports and physical activities was positively associated with identity formation. Once again, unlike camp, these activities were structured and organized. In addition, these activities happened during the school year, which was significantly longer than the typical stay at camp. At camp, sports activities were often not organized events between two teams, but rather alternative games that focus on fun rather than skill. It is important to note that Shaw, Kleiber, and Caldwell (1995) used a mixed methods design, surveying and interviewing their participants, allowing for broader and more in-depth responses. They also used a researcher-designed survey, which was different than this study's measure of identity.

For the experiential activities offered, their structure, intensity level and perceived challenge by the participants could explain the observed results. Creating a program that targets the unique needs of adolescent girls begins with choosing experiential activities that facilitate positive identity development. However, achieving positive outcomes from experiential activities

is not as simple as just providing challenging activities in the outdoors. According to Gubitz and Kutcher (1999), it is important that the process of debriefing is incorporated after activities, providing time for participants to process their experiences, express thoughts, and ask questions. Without the process of debriefing after challenging activities, it is easy for campers to move on to the next activity without considering the importance of their own actions during an activity. Debriefing is an intentional form of program facilitation that aims to stimulate reflection and internal dialogue. As Duerden and Gillard (2011) explain, intentional, theory-based programming is essential to making impacts in youth programs.

With any camp or recreational program, program theory and evaluation are incredibly important tools. Program theory is an evaluation framework comprised of a theory that describes how a program works to create outcomes and an evaluation of that theory (Jarvelin et al., 2015). Program theory framework was originally developed for programs that focused on social issues, yet its generic nature allowed it to be applied to a diverse array of programs (Jarvelin et al., 2015). The fundamental task of program theory development is to make obvious the reasoning behind how a program produces positive changes (Deane & Harre, 2014). Therefore, program theory evaluation assists to specify program outcomes, and how and why those outcomes were produced (Brousselle & Champagne, 2011).

Program theory can be created in many different ways for many different purposes. It can be developed before the implementation of a program or after a program has been running for a long time (Atsbury & Leeuw, 2010). If a camp wants positive identity development outcomes, it may be appropriate to designate a program theory for that specific outcome. Without this concept incorporated in a program theory framework, participants may not experience positive development in this area. As identity development is not mentioned in Camp Carysbrook's

mission statement, it cannot be assumed that identity development was meant to be a direct impact on campers.

To impact identity development in a residential camp setting, programmers may need to incorporate intentionally designed experiences for identity development. The theory of developmental intentionality is informed by research, theory, and practice, capturing the relationship between developmental outcomes, design, and the intentionality and delivery of the program supports and opportunities (Mahoney, Larson, & Eccles, 2005). The deliberate action to create opportunities for developmental outcomes, in this case identity development, are the responsibility of the program workers. If a camp programmer plans and implements a program based on a desired outcome, then that outcome is more likely to be obtained (Roark, Gillard, Wells, Evans, & Blauer, 2014). Therefore, intentional design to facilitate identity development is likely to lead to change in identity development. Identity development is theorized to be influenced by the dual processes of individuation and social relatedness (Josselson, 1980).

Individuation refers to the process of separating from the ways and understanding of one's family to one's own understanding of the world. During this time, adolescents tend to separate themselves from families, in particular, parents. However, this leaves a gap in social relatedness, which is fulfilled by the peer group. When considering how to best impact identity development, programs should offer adolescents a sense of autonomy and agency, while also fulfilling the needs of group identification.

Another aspect of intentionality is engagement. Engagement refers to a person's willingness to participate, become motivated and challenged, sense of belonging, and desire to stay involved. Engaging for an extended period of time optimizes the opportunity for developmental outcomes and signifies that the program is a good fit for youth. (Mahoney,

Larson, & Eccles, 2005). Duerden, Widmer, Taniguchi, and McCoy (2009) supported these elements by providing youth with the opportunity to lead adventurous activities, acquire new skills, and the time to practice and master new skills. All of these elements are likely to have supported identity development through engagement. These activities were intentionally designed to challenge and entertain youth, requiring their engagement to successfully complete new challenges.

The task of studying identity development is complex, as identity and identity development are complex topics that develop throughout life. At any given instance, adolescent identity development is occurring to some degree (Kerpelman, Pittman, & Baeder, 2008). Identity also forms slowly over the course of development, making it difficult to identify key factors that may affect development in a relatively short amount of time. With this in mind, it may be beneficial to consider other assessments more fitting for a short time period, or consider a longer time frame for research.

Limitations and Recommendations for Future Study

There are limitations to this study that may impact generalizability of the results. This study investigated a process that typically develops over a long period of time, within the context of one summer. Future studies should consider a longitudinal design that follows campers after multiple summers to examine whether or not their styles change over a longer period of time. Another limitation to the study was the administration of the questionnaire. The head camp counselor at the camp administered the questionnaires. As the head counselor, the administrator of the questionnaire knew the campers and interacted with them on a daily basis. This closeness could have affected the truthfulness within their self-reports, primarily during the post-test

administration. There were no assurances that participants were answering questions truthfully or rather responding in a manner that they perceived was appropriate.

The measurement tool was also a limitation as it has questionable reliability. The reliability estimates were relatively low (.70 and below) by most conventional standards of reliability. Although Cortia (1993) suggests that scales can use .60 and above for a cutoff on reliability, these recommendations are made for scales that have six or fewer items. As the scale used in this study had more than six items, the fairly low scores of reliability are problematic. The low reliability may indicate that a large portion of the variance is measurement error or due to chance, as low internal consistency is linked to poor correlations between items in the scale. It could impact validity of the measure if these items are not measuring the same concept.

Studying identity development in adolescents between the ages of 12 and 15 years is another limitation. Identity development is a process that develops throughout the course of life, not beginning or ending with adolescence. Therefore, it is difficult to study developmental differences within this short period of time. Also, various things other than just the camp experience can impact development at one time. Even if some changes are examined during the camp period, it cannot be determined that these changes are solely due to the camp experience without a true control sample. Identity development experienced at camp is not guaranteed to continue once a camper returns home. Although camp may or may not have an impact on identity development, it should not be expected to apply a large influence on identity development for a long period of time.

Another limitation to the study was the use of a convenience sample. As such, the findings cannot be generalized beyond the study sample. Randomly assigning different American Camp Association (ACA) accredited camps and campers might yield a better understanding of

how much camp settings affect identity development. In addition, it may be beneficial to use a control group to further understand what changes are due to camp, and what are due to other circumstances.

With respect to these limitations, the study suggests many recommendations for future research. Although mean comparisons were not statistically significant in this study, other research still provides support for positive identity development in the camp setting. Future studies may consider examining camps that are focused on outdoor adventure, rather than a traditional camp setting, when specifically investigating the development of identity styles. As found in Duerden, Widmer, Taniguchi, and McCoy's (2012) study, an outdoor adventure program that focused on backcountry skill building and exploration did yield positive development among the identity styles. Similar programs should be further explored to determine whether or not they have a more significant effect on identity.

It may be important to look at programs that value social relatedness and group work. Many camp programs provide group activities, but programs that are specifically designed for social relatedness and allow open group discussion may have more of an impact than camps that allow group free time. As discussed earlier, debriefing is a valuable tool that can aid in identity development; therefore, camps that use structured activities and the debriefing process may be more likely to facilitate a positive development of identity than camps that do not debrief after activities. Future research on identity development within a summer camp program needs to go beyond the scope of this study to examine the types of activities and strategies camp staff use to relay content to youth.

References

- Atsbury, B., & Leeuw, F. L. (2010). Unpacking black boxes: Mechanisms and theory building in evaluation. *American Journal of Evaluation, 31*, 363-381.
- Barber, B. L., Eccles, J. S., & Stone, M. R. (2001). Whatever happened to the jock, the brain, and the princess? Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research, 16*, 429-455.
- Berzonsky, M. D. (1989). Identity style conceptualization and measurement. *Journal of Adolescent Research, 4*, 268-282.
- Berzonsky, M. D. (1992). Identity style and coping strategies. *Journal of Personality, 60*, 771-788.
- Berzonsky, M. D., Cieciuch, J., Duriez, B., & Soenens, B. (2011). The how and what of identity formation: Associations between identity styles and value orientations. *Personality and Individual Differences, 50*, 295-299.
- Berzonsky, M. D., & Ferrari, J. R. (2009). A diffuse-avoidant identity processing style: Strategic avoidance or self-confusion? *Identity, 9*, 145-158.
- Brousselle, A., & Champagne, F. (2011). Program theory evaluation: Logic analysis. *Evaluation and Program Planning, 34*, 69-78.
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*, 98-104.
- Crocetti, E., Erentaitė, R., & Žukauskienė, R. (2014). Identity styles, positive youth development, and civic engagement in adolescence. *Journal of Youth and Adolescence, 43*, 1818-1828.
- Deane, K. L., & Harre, N. (2014). Program theory evaluation science in a youth development

- context. *Evaluation and Program Planning*, 45, 61-70.
- Duerden, M. D., & Gillard, A. (2011). An approach to theory based youth programming. *New Directions for Youth Development*, 1, 39-53.
- Duerden, M. D., Taniguchi, S., & Widmer, M. (2012) Antecedents of identity development in a structured recreation setting: A qualitative inquiry. *Journal of Adolescent Research*, 27(2), 183-202.
- Duerden, M. D., Widmer, M. A., Taniguchi, S. T., & McCoy, J. K. (2009). Adventures in identity development: The impact of adventure recreation on adolescent identity development. *Identity*, 9, 341-359.
- Erikson, E. H. (1959). *Identity and the life cycle: selected papers*. New York: International Universities Press.
- Erikson, E. H. (1963). *Youth: change and challenge*. New York: Basic Books.
- Groff, D. G., & Kleiber, D. A. (2001). Exploring the identity formation of youth involved in an adapted sports program. *Therapeutic Recreation Journal*, 35(4), 318.
- Gubitz, K. F., & Kutcher, J. (1999). Facilitating identity formation for adolescent girls using experientially-based outdoor activities. *TCA Journal*, 27(1), 32.
- Haggard, L. M., & Williams, D. R. (1992). Identity affirmation through leisure activities: Leisure symbols of the self. *Journal of leisure research*, 24(1), 1-18.
- Jarvelin, K., Vakkari, P., Arvola, P., Baskaya, F., Jarvelin, A., Kekalainen, J., ... Sormunen, E. (2015). Task based information interaction evaluation: the viewpoint of program theory. *ACM Transactions on Information Systems*, 33(1), 1-30.
- Josselson, A. (1980). *Handbook of adolescent psychology*. New York, NY: Wiley.
- Kerpelman, J. L., Pittman, J. F., & Baeder, F. A. (2008). Identity as a moderator if intervention

- related change: Identity style and adolescents' responses to relationships education. *Identity*, 8(2), 151-171.
- Kivel, B. D. (1998). Adolescent identity formation and leisure contexts: A selective review of literature. *Journal of Physical Education, Recreation & Dance*, 69(1), 36-38.
- Lacombe, A. C., & Gay, J. (1998). The role of gender in adolescent identity and intimacy decisions. *Journal of Youth and Adolescence*, 27, 795-802.
- Lerner, R. M., & Spanier, G. B. (1980). A dynamic interactional view of child and family development. In R. M. Lerner & G. B. Spanier (Eds.), *Child Influences on Marital and Family Interaction: A Life-Span Perspective* (pp. 1-20). New York: Academic.
- Mahoney, J. L., Larson, R. W., & Eccles, J. S. (2005). *Organized activities as contexts of development: Extracurricular activities, after-school and community programs*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Marcia, J. E. (1980). *Handbook of Adolescent Psychology*. New York, NY: Wiley.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3(5), 551.
- Munson, W. W., & Widmer, M. A. (1997). Leisure behavior and occupational identity in university students. *The Career Development Quarterly*, 46(2), 190-198.
- Papadakis, A. A., Prince, R. P., Jones, N. P., & Strauman, T. J. (2006). Self-regulation, rumination, and vulnerability to depression in adolescent girls. *Development and Psychopathology*, 18, 815-829.
- Roark, M. F., Gillard, A., Evans, F., Wells, M. S., & Marissa, M. B. (2012). Effect of

- intentionally designed experiences on friendship skills of youth: An application of symbolic interaction theory. *Journal of Park and Recreation Administration*, 30(3), 24-36.
- Shaw, S. M., Kleiber, D. A., & Caldwell, L. L. (1995). Leisure and identity formation in male and female adolescents: A preliminary examination. *Journal of Leisure Research*, 27, 245-263.
- Sokol, J. T. (2009). Identity development throughout the lifetime: an examination of Eriksonian theory. *Graduate Journal of Counseling Psychology*, 1(2), 14.
- Verma, S., & Larson, R. (2003). *Examining adolescent leisure time across cultures: Developmental opportunities and risks*. San Francisco: Jossey-Bass.
- White, J. M., Wampler, R. S., & Winn, K. I. (1998). The Identity Style Inventory: A revision with a sixth-grade reading level (ISI-6G). *Journal of Adolescent Research*, 13(2), 223-245.

Extended Literature Review References

- Autry, A. E. (2001). Adventure therapy with girls at-risk: Responses to outdoor experiential activities. *Therapeutic Recreation Journal*, 34(4), 289-306.
- Barber, B. L., Eccles, J. S., & Stone, M. R. (2001). Whatever happened to the jock, the brain, and the princess? Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16, 429-455.
- Bavarian, N., Lewis, K. M., Acock, A., DuBois, D. L., Yan, Zi, Vuchinich, S., ... Flay, B. R. (2016). Effects of a school based social emotional and character development program on health behaviors: a matched-air, cluster randomized controlled trial. *Journal of Primary Prevention*, 37(1), 87-105.
- Berzonsky, M. D. (1989). Identity style conceptualization and measurement. *Journal of Adolescent Research*, 4, 268-282.
- Berzonsky, M. D. (1992). Identity style and coping strategies. *Journal of Personality*, 60, 771-788.
- Berzonsky, M. D., Cieciuch, J., Duriez, B., & Soenens, B. (2011). The how and what of identity formation: Associations between identity styles and value orientations. *Personality and Individual Differences*, 50, 295-299.
- Berzonsky, M. D., & Ferrari, J. R. (2009). A diffuse-avoidant identity processing style: Strategic avoidance or self-confusion? *Identity*, 9, 145-158.
- Bialeschki, M. D., & Henderson, K. (1993). Expanding outdoor opportunities for women. *Parks & Recreation*, 28(8), 36-40.
- Bialeschki, M. D., Henderson, K. A., & James, P. A. (2007). Camp experiences and

- developmental outcomes for youth. *Child and Adolescent Psychiatric Clinics of North America*, 16, 769-788.
- Biro, F. M., Streigel-Moore, R. H., Franko, D. L., Padgett, J., & Bean, J. A. (2006). Self-esteem in adolescent females. *Journal of Adolescent Health*, 39, 501-507.
- Branch, C. W. (2001). The many faces of self: Ego and ethnic identities. *The Journal of Genetic Psychology*, 162, 412-429.
- Brown, M. (2003). *Girlfighting: Betrayal and rejection among girls*. New York, NY: New York University Press.
- Brown, T. A., Cash, T. F., & Mikulka, P. J. (1990). Attitudinal body-image assessment: Factor analysis of the body-self relations questionnaire. *Journal of Personality Assessment*, 55, 135-144.
- Bruner, M. W., Wilson, K. S., Eys, M. A., & Cote, J. (2014). Group cohesion and positive youth development in team sport athletes. *Sport, Exercise, and Performance Psychology*, 3(4), 219-227.
- Budbill, N.W. (2008). *Dirt divas: An examination of an outdoor adventure program's impact on the development of adolescent girls*. (Order No. 1456727, Prescott College). *ProQuest Dissertations and Theses*, 152-n/a.
- Clay, D., Vignoles, V. L., & Dittmar, H. (2005). Body image and self-esteem among adolescent girls: Testing the influence of sociocultural factors. *Journal of Research on Adolescence*, 15, 451-477.
- Cohen, P., Cohen, J., Kasen, S., Velez, C. N., Hartmark, C., Johnson, J., ...Streuning, E. L. (1993). *An epidemiological study of disorders in late childhood adolescence: Age and gender specific prevalence*. *Journal of Child Psychology and Psychiatry*, 34, 851-866.

- Cramer, P. (2000). Development of identity: gender makes a difference. *Journal of Research in Personality, 34*(1), 42-72.
- Crocetti, E., Erentaitė, R., & Žukauskienė, R. (2014). Identity styles, positive youth development, and civic engagement in adolescence. *Journal of Youth and Adolescence, 43*, 1818-1828.
- Crocker, J., & Wolfe, C. T. (2003). *Contingencies of self-worth. Psychology Review, 108*, 593-623.
- Culp, R. H. (1998). Adolescent girls and outdoor recreation: A case study examining constraints and effective programming. *Journal of Leisure Research, 30*, 356-379.
- Deane, K. L., & Harré, N. (2014). The youth adventure programming model. *Journal of Research on Adolescence, 24*(2), 293–308.
- Desrosiers, A., Miller, L. (2007), Relational spirituality and depression in adolescent girls. *Journal of Clinical Psychology, 63*, 1021-1037
- Dittmar, H., & Howard, S. (2004). Thin-ideal internalization and social comparison tendency as moderators of media models' impact on women's body-focused anxiety. *Journal of Social and Clinical Psychology, 23*, 768-791.
- Duerden, M. D., Taniguchi, S., & Widmer, M. (2012) Antecedents of identity development in a structured recreation setting: A qualitative inquiry. *Journal of Adolescent Research, 27*, 183-202.
- Duerden, M. D., Widmer, M. A., Taniguchi, S. T., & McCoy, J. K. (2009). Adventures in identity development: The impact of adventure recreation on adolescent identity development. *Identity, 9*, 341-359.
- Eisner, E. W. (1985). *Learning and teaching the ways of knowing*. Chicago, IL: National

Society for the Study of Education.

Erikson, E. H. (1959). *Identity and the life cycle: selected papers*. New York: International Universities Press.

Erikson, E. H. (1963). *Youth: change and challenge*. New York: Basic Books.

Essau, C. A., Lewinsohn, P., & Seeley, J. (2010). *Gender differences in the developmental course of depression*. *Journal of Affective Disorders, 127*(1), 185-190.

Essau, C. A., Conradt, J., & Peterman, F. (2000). Frequency, comorbidity, and psychosocial impairment of depressive disorders in adolescents. *Journal of Adolescent Research, 15*, 470-481.

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 219–239.

Frojd, S. A. (2008). Depression and school performance in middle adolescent boys and girls. *Journal of Adolescence, 32*, 485-498.

Gilligan, C. (1988). Two moral orientations: gender differences and similarities. *Merrill-Palmer Quarterly, 34*, 223-237.

Groff, D. G., & Kleiber, D. A. (2001). Exploring the identity formation of youth involved in an adapted sports program. *Therapeutic Recreation Journal, 35*(4), 318.

Gubitz, K. F., & Kutcher, J. (1999). Facilitating identity formation for adolescent girls using experientially-based outdoor activities. *TCA Journal, 27*(1), 32.

Harter, S. (1982). The perceived competence scale for children. *Child Development, 53*(1), 87-97.

Hemphill, M. A. (2014). Positive youth development through physical activity: Opportunities for physical educators. *Strategies, 27*(4), 39-41.

- Henderson, K. A. (1994). Broadening an understanding of women, gender and leisure. *Journal of Leisure Research*, 26(1), 1-7.
- Henderson, K. A., Bialeschki, M. D., & James, P. A. (2007). Overview of camp research. *Child and Adolescent Psychiatric Clinics of North America*, 16, 755-767.
- Hoyt, M. A., & Kennedy, C. (2008). Leadership and adolescent girls: A qualitative study. *American Journal of Community Psychology*, 42, 203-219.
- Hurtes, K. (2002). Social dependency: The impact of adolescent female culture. *Leisure Sciences*, 24, 109-121.
- Impett, E. A., Sorsoli, L., Schooler, D., Henson, J. M., & Tolman, D. L. (2008). Girls' relationship authenticity and self-esteem across adolescence. *Developmental Psychology*, 44, 722-733.
- Kivel, B. D. (1998). Adolescent identity formation and leisure contexts: A selective review of literature. *Journal of Physical Education, Recreation & Dance*, 69(1), 36-38.
- Kercher, A. J., Rapee, R. M., & Schniering, C. A. (2009). Neuroticism, life events and negative thoughts in the development of depression in adolescent girls. *Journal of Abnormal Child Psychology*, 37, 903-915.
- Lacombe, A. C., & Gay, J. (1998). The role of gender in adolescent identity and intimacy decisions. *Journal of Youth and Adolescence*, 27, 795-802.
- Lerner, R. M., & Spanier, G. B. (1980). A dynamic interactional view of child and family development. In R. M. Lerner & G. B. Spanier (Eds.), *Child Influences on Marital and Family Interaction: A Life-Span Perspective* (pp. 1-20). New York: Academic.
- Marcia, J. E. (1980). *Handbook of Adolescent Psychology*. New York, NY: Wiley.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality*

- and Social Psychology*, 3(5), 551.
- McDermott, L. (2004). Exploring intersections of physicality and female-only canoeing experiences. *Leisure Studies*, 23(3), 283-301.
- Mead, V. H. (1983). Ego identity status and self-actualization of college students (Order No. 8324347). Available from ProQuest Dissertations & Theses Global.
- Meeus, W. (1996). Studies on identity development in adolescence: An overview of research and some new data. *Journal of Youth and Adolescence*, 25, 569-598.
- Miles, J. C., & Priest, S. (1999). *Adventure programming*. State College, PA: Venture Publishing.
- Munson, W. W., & Widmer, M. A. (1997). Leisure behavior and occupational identity in university students. *The Career Development Quarterly*, 46(2), 190-198.
- Outdoor Foundation. (2013). 2013 Outdoor Participation Report. Retrieved from <http://www.outdoorfoundation.org/pdf/ResearchParticipation2013.pdf>
- Papadakis, A. A., Prince, R. P., Jones, N. P., & Strauman, T. J. (2006). Self-regulation, rumination, and vulnerability to depression in adolescent girls. *Development and Psychopathology*, 18, 815-829.
- Phillips, R. G., & Hill, A. J. (1998). Fat, plain, but not friendless: self-esteem and peer acceptance of obese pre-adolescent girls. *International Journal of Obesity and Related Metabolic Disorders*, 22, 287-293.
- Perry, D. G., & Pauletti, R. E. (2011). Gender and adolescent development. *Journal of Research on Adolescence*, 21(1), 61-74.
- Priest, S., & Gass, M. A. (2005). *Effective leadership in adventure programming* (2nd ed.). Champaign, IL: Human Kinetics.

- Remillard, A., & Lamb, S. (2005). Adolescent girls' coping with relational aggression. *Sex Roles, 53*, 221-229.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Sammet, K. (2010). Relationships matter: Adolescent girls and relational development in adventure education. *The Journal of Experiential Education, 33*(2), 151-165.
- Sandhu, D., & Tung, S. (2006). Gender differences in adolescent identity formation. *Pakistan Journal of Psychological Research, 21*(1), 29-40.
- Shaw, S. M., Kleiber, D. A., & Caldwell, L. L. (1995). Leisure and identity formation in male and female adolescents: A preliminary examination. *Journal of Leisure Research, 27*, 245-263.
- Shek, D. T. L., & Merrick, J. (2015). Positive youth development. *International Journal of Child Health and Human Development, 8*, 109-111.
- Sibthorp, J. (2003). Learning transferrable skills through adventure education: The role of an authentic process. *Journal of Adventure Education and Outdoor Learning, 3*(2), 145-157.
- Sibthorp, J., & Morgan, C. (2011). Adventure-based programming: Exemplary youth development practice. *New Directions for Youth Development, 130*, 105-119.
- Sokol, J. T. (2009). Identity development throughout the lifetime: An examination of Eriksonian theory. *Graduate Journal of Counseling Psychology, 1*(2), 14.
- Thurber, C. A., Scanlin, M. M., Scheuler, L., & Henderson, K. A. (2006). Youth development outcomes of the camp experience: evidence for multidimensional growth. *Journal of Youth and Adolescence, 36*, 241-254.
- Tolman, D. L., Impett, E. A., Tracy, A. J., & Michael, A. (2006). Looking good, sounding good:

- Femininity ideology and adolescent girls' mental health. *Psychology of Women Quarterly*, 30(1), 85-95.
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). *Stability of self-esteem across the lifespan*. *Journal of Personality and Social Psychology*, 84, 205-220.
- Ward, S., & Parker, M. (2013). The voice of youth: atmosphere in positive youth development program. *Physical Education and Sport Pedagogy*, 18, 534-548.
- Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. *Developmental Psychology*, 18(3), 341.
- White, J. M., Wampler, R. S., & Winn, K. I. (1998). The Identity Style Inventory: A revision with a sixth-grade reading level (ISI-6G). *Journal of Adolescent Research*, 13(2), 223-245.
- Whittington, A. (2006). Challenging girls' constructions of femininity in the outdoors. *The Journal of Experiential Education*, 28(3), 205-221.
- Whittington, A., & Mack, E. N. (2010). Inspiring courage in girls: An evaluation of practices and outcomes. *The Journal of Experiential Education*, 33(2), 166-180.
- Whittington, A., Mack, E., Budbill, N., McKenney, P. (2011). All-girls adventure programs: What are the benefits? *Journal of Adventure Education and Outdoor Learning*, 11(1), 1-14.
- Willer, E. K., & Cupach, W. R. (2008). When "sugar and spice" turn to "fire and ice": Factors affecting the adverse consequences of relational aggression among adolescent girls. *Communication Studies*, 59, 415-429.
- Wiseman, R. (2002). *Queen bees and wannabes*. New York, NY: Three Rivers Press.

Wittman, J. P. (1993). Characteristics of adventure programs valued by adolescents in treatment. *Therapeutic Recreation Journal*, 27, 44-50.

Vaziri, S., Kashani, F. L., Jamshidifar, Z., & Vaziri, Y. (2014). Brief report: The identity style inventory – validation in Iranian college students. *Social and Behavioral Sciences*, 128, 316-320.

Appendix A: Extended Literature Review

Extended Literature Review

Adolescence is a critical period of development, especially for identity development. Forming an identity may be easy for some youth, but for others it is a difficult task. Youth with difficulty developing their identity tend to display more deviant behavior than those without much difficulty (Duerden, Taniguchi, & Widmer, 2012). The adverse affects of identity conflicts make this area of study important. To make this process smoother for adolescents it is essential to discover and understand contexts and environments that support positive identity development. With regard to previous research, leisure and recreation contexts may supply the appropriate features to foster this development, specifically for adolescent girls.

Female Adolescent Development

Adolescence is a time when the tasks of life, both academic and social, increase in difficulty and complexity (Papadakis, Prince, Jones, & Strauman, 2006). During adolescence, girls begin to mature cognitively, physically, emotionally and socially while also beginning to question their values and experiment with their identities (Phillips & Hill, 1998). Starting in early adolescence, girls have a lower self-esteem and more depressive thoughts than boys (Biro et al. 2006; Papadakis et al. 2006; Perry & Pauletti, 2008). They also develop a poorer body image, which leads them to compare themselves negatively with other girls and images in social media (Perry & Pauletti, 2008; Clay, Vignoles, & Dittmar, 2005). Starting at around age 12, girls experience a pronounced need to be liked by their peers, which often prompts relational aggression (Willer & Cupach, 2008).

Self-Esteem. Self-esteem was defined by Rosenberg (1965) as a, “positive or negative attitude toward... the self” (p. 30). Self-esteem can be a major predictor of outcomes during adolescence and adulthood. According to Trzesniewski, Donnellan, and Robins (2003), high

levels of self-esteem are often associated with occupational success, well-being, and academic achievement. Crocker and Wolfe (2001) found that low self-esteem is correlated with depression, substance abuse, and antisocial behaviors. Additionally, it has been found that in Western cultures, like the United States, gender appears to affect self-esteem, with girls having a significantly lower self-esteem than boys (Clay, Vignoles, & Dittmar, 2005). However, it is important to note that these findings are relevant primarily for White and Latina girls, because between the ages of 9 and 14, African American girls experience a stable self-esteem (Biro et al. 2006).

Biro, Streigel-Moore, Franko, Padgett, and Bean (2006) examined girls between the ages of 9 and 10 and followed up with them until the ages of 21 and 22. The Harter Self Perception Profile (Harter, 1982) was administered every other year to monitor the participants' self-esteem. The results suggested that self-esteem was consistently higher in African American girls rather than white girls after age 11. In both groups, a lower BMI correlated with a higher self-esteem. It was also found that white girls experienced the lowest rates of self-esteem between the ages of 13 and 15. Through their analysis, the researchers concluded that race and BMI are important predictors of self-esteem and that adolescents with lower self-esteem are more prone to risky behaviors.

Adolescence is a critical time for the development of self-esteem and a variety of factors that influence the self-esteem of adolescent girls. Tolman, Impett, Schooler, Sorsoli, and Henson (2008) performed a five-year longitudinal study of girls who were surveyed in the eighth, tenth, and twelfth grades. Girls were surveyed on their relationship authenticity, self-esteem, race, socioeconomic status, religiosity, educational achievement, pubertal timing, and body satisfaction. The researchers found an average increase in self-esteem across the five years of

adolescence, showing that the lowest rates of self-esteem were experienced in early adolescence. However, there was a great deal of variation among the girls, whereas some girls showed an increase in self-esteem while others did not. Relationship authenticity proved to be a significant predictor in distinguishing between the girls who did and did not have an increase in self-esteem. Girls who felt more comfortable being honest and sharing their opinions in the eighth grade were largely the same girls who had an increasing self-esteem throughout adolescence. These findings suggest that girls who increase their relationship authenticity also increase their self-esteem.

Body image is another factor that affects the self-esteem of adolescent girls. Clay, Vignoles, and Dittmar (2005) studied how exposure to media images of thin female models affected the body image and self-esteem of 136 girls in the United Kingdom. The researchers exposed the girls to images of extremely thin models, average sized models, and no models (the control) and then compared the results. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) and Multidimensional Body Self-Elations Questionnaire (Brown, Cash, & Mikulka, 1990) were used to measure body satisfaction and self-esteem. The results indicated that viewing the extremely thin and average sized models resulted in a decrease in body satisfaction and self-esteem. These results contradicted a previous study (Dittmar & Howard, 2004) on adult women who showed relief upon seeing the average sized models. The researchers concluded that adolescent girls are more sensitive than boys to sociocultural ideas of beauty. The researchers acknowledged that these results showed only the short term effects of exposure to the thin and average sized models, but, they suggested that exposure likely results in long-term negative effects.

Many researchers and clinicians have become concerned with girls' mental health as they approach adolescence. Recent studies have documented how there are gender differences in both self-esteem and depression in adolescents. For instance, Tolman, Impett, Tracy, and Michael

(2006) studied how inauthenticity in relationships and body objectification can affect early adolescents girls' mental health. The researchers surveyed an eighth grade class of girls on their physical development, religiosity, femininity ideology, self-esteem, and depression. They found that inauthenticity in relationships and body objectification were more strongly related to mental health than any of the more commonly studied demographic factors. Both relationship inauthenticity and body objectification had a positive correlation with depression and lowered self-esteem in the eighth grade girls. The researchers concluded that the findings provided evidence that internalizing beliefs of what it means to be feminine is associated with girls' psychological health as they enter adolescence.

Depression. It has been consistently found that about twice as many girls as boys meet the standards for Major Depressive Disorder during their lives (Cohen et al., 1993; Essau et al., 2000). Additionally, studies have indicated that the greatest increase in the gender difference of depression occurs between the ages of 15 to 18 (Essau, Conradt, & Peterman, 2000). Essau, Lewinsohn, Seeley, and Sasagawa (2010) performed a longitudinal study that examined whether or not there are gender differences in the developmental course of depression. Their study, which followed up with participants for a period of 16 years, obtained major findings. The results suggested that females had more prevalent rates of Major Depressive Disorder than males during the last wave of data collection, which was done when participants were around 30 years old. Second, females were found to have more frequent and lengthier, depressive episodes throughout adolescence and adulthood than male participants. Third, a lower onset age of depressive symptoms in females predicted a worse course of depression throughout adolescence and adulthood when compared to males.

There is ample evidence that adolescent girls experience higher rates of depression than boys, yet there has not been a complete understanding of the risk factors that contribute to the gender difference. Papadakis, Prince, Jones, and Strauman (2006) studied whether self-regulation and ruminative coping styles could predict depression among adolescent girls. The researchers studied 223 females in grades 7-12 using a set of self-report questionnaires in a group testing session. They found that girls who had tendencies to self-regulate and cope ruminatively in response to stress were more likely to have depressive thoughts than girls who did not. The data also suggested that there was a positive relationship between age and depression symptoms in girls between the ages of 11 and 18, with the highest rate in girls who were entering middle school. The researchers stated that adolescence is a suitable time for intervention because it is a time of goal setting and identity exploration.

Other additional factors that affect depression in adolescent girls that have not received as much attention in the literature are school performance, neuroticism, and spirituality. School performance may cause depression in adolescent girls (Frojd, 2008). Frojd (2008) found that low grade point averages (GPAs), and GPAs that have decreased since a previous term, are correlated with depressive symptoms. This was true for both boys and girls, but the researchers found that subjective school performance was strongly associated with depression for girls rather than boys. Neuroticism, or tending to perceive negativity and threat, is another issue unique to girls. In one study it was found that adolescent girls with higher neuroticism were more likely to experience negative events, which led to depressive thoughts. They were also more likely to feel hopeless and have automatic negative thoughts regarding failure (Kercher, Rapee, & Schniering, 2009). In another study, Desrosiers and Miller (2007) found that depression might be associated with disruptions in a relational form of spirituality, which was unique only in girls.

There has been a relative lack of research done on adolescent girls and depression since the 1990's, but each study has consistently shown a higher rate of depression for girls than boys. One issue among adolescent girls that is raising a lot of concern among researchers and the general public is relational aggression.

Relational Aggression. Strong, authentic relationships are often associated with positive developmental outcomes for girls, however girls do not form these relationships due to *relational aggression*, a type of aggression that is intended to hurt or harm another person through damaging their relationships or social status (Sammet, 2010). Starting in adolescence girls feel a desire to fit in and achieve popularity in school and social media. This desire to be liked often leads to mean acts, like spreading rumors or excluding others to maintain status in a clique (Willer & Cupach, 2008). Acts of social exclusion, spreading malicious rumors, *silent treatment*, and friendship withdrawal are all examples of relational aggression. This type of aggression is particularly harmful because it is often hidden from adults since it does not manifest in a physical form, like hitting (Willer & Cupach, 2008).

There have been a number of books (e.g., Wiseman, 2009) that speak of relational aggression in an overwhelmingly negative light without considering what girls face during adolescence. Budbill (2008) found that within her study, 86% of girls said that cliques and gossip among other girls was a challenge they faced. Additionally, teasing and bullying from girls was rated as a higher challenge than teasing and bullying from boys. According to Brown (2003), "it is simply easier and safer and ultimately more profitable for girls to take out their fear and anxieties and anger on other girls rather than on boys or on a culture that denigrates, idealizes, or eroticizes qualities associated with femininity" (p. 6). Brown also stresses that instead of

stigmatizing relational aggression; parents, educators, and service providers should focus on the psychological stress that is causing these behaviors (Brown, 2003).

Willer and Cupach (2008) investigated factors that affected the harm of relational aggressive acts among adolescent girls. The researchers surveyed 127 high school girls who were asked about a time when another girl did something that was mean to them. The research suggested that aggressive acts done by girls who were more popular than the victim were accompanied by greater negative affects than girls who were less popular than the victim. This result suggested that girls who suffer from mean acts are more sensitive to the experiences that involved girls who have a higher social status. Willer and Cupach concluded that girls may perceive mean acts as negative depending on the response of the audience. If a girl is bullied and the audience laughs, the girl may be more likely to experience more negative affects than if the audience ignored the act.

Using the Revised Ways of Coping Scale (Folkman & Lazarus, 1985), Remillard and Lamb (2005) examined coping strategies for relational aggression in 98 female middle and high school students. The results suggested that 40% of girls not only remained friends with their aggressor, but also became closer friends after the event. The results also implied that the more angry a girl felt at the time of an aggressive event, the less likely it was that she would still consider that girl as her friend. The more hurt a girl felt, the more likely she was to blame herself and avoid the situation. When it came to coping, Remillard and Lamb proposed that social support was the most successful coping mechanism for the girls to resolve conflicts within their friendships. Their findings showed that girls who sought social support were more likely to remain friends after a relational aggression event.

Relational aggression, depression, and self-esteem are all side effects of adolescence that affect girls uniquely. All three of these concepts are detrimental to the positive psychological development of adolescent girls. They are also important for identity formation, which is one of the most important developmental processes during adolescence.

Identity in Adolescence

The process of identity development does not begin or end with adolescence. This process begins during early childhood and continues developing into old age. However, there are some stages in an individual's life that are more crucial for the identity development process than others, like adolescence (Marcia, 1980). Adolescence is the first stage in which physical, social, and cognitive development come together to guide young people through their childhood experiences and create a pathway towards adulthood (Erikson, 1963).

Identity is comprised of multiple components that work together to make up a person. These components include identity ideological beliefs and vocational interests. Identity formation is flexible, and therefore open to changes in society and relationships (Marcia, 1980). What young people affirm or choose throughout their identity process in adolescence seemingly unknown, making it one of the reasons that many young people do not form an identity or only partially form one during this time. This is due to the risk of making decisions that could affect the future in an unknown way (Erikson, 1959, 1963). The decisions made throughout adolescence must be made again and again (Marcia, 1980). Every decision an adolescent makes affects that person's identity. Now matter how minor the decision seems to be, it has identity forming implications (Crocetti, Erentaite, & Zukauskiene, 2014). The decisions that young people make and the foundations in which they make these decisions eventually lead to a pattern

in future decision-making processes. This process can be transformed if an individual makes a decision based on peer pressure or parental values (Marcia, 1980).

There is an abundance of literature that supports the establishment of identity as a major task of adolescence (Lacombe & Gay, 1998). Many researchers have studied this developmental task, but research on adolescent identity development is traced back to Erikson's psychosocial growth model and Marcia's Identity Status Paradigm. Berzonsky's theory of Identity Styles is largely based off of both Erikson's and Marcia's work and works as a research tool to better understand the process of identity formation.

Erikson's Psychosocial Growth Model

Erikson's psychosocial theory proposed a comprehensive model of human development comprised of eight successive stages. Each of these stages includes a conflict or crisis that must be overcome to successfully continue with development. The belief is that each stage has a successful and unsuccessful outcome. These stages are: (a) trust versus mistrust; (b) autonomy versus shame; (c) initiative versus guilt; (d) industry versus inferiority; (e) identity versus role confusion; (f) intimacy versus isolation; (g) generativity versus stagnation; and (h) ego integrity versus despair (Erikson, 1963). The industry, identity, and intimacy stages are the only stages that occur during adolescence. According to Erikson, the formation of a stable identity during adolescence is the key developmental task in this model (Duerden, Widmer, Taniguchi, & McCoy, 2009).

Adolescence is a transitional period of development that follows childhood and leads to adulthood. Young people are faced with a physiological evolution during adolescence, which causes many adolescents to be more concerned with how others perceive them, rather than how they perceive themselves (Erikson, 1959). This search for a sense of sameness often causes

individuals to confront crisis during their identity development (Erikson, 1963). If an individual is able to assess her own personal qualities and find ways to express these in her environment, she has achieved identity. If one cannot manage this, role confusion occurs (Sokol, 2009).

There are multiple aspects that affect the formation of identity. The onset of puberty is a large aspect of adolescence that leads to new cognitive and physical abilities (Sokol, 2009). In addition, increased autonomy leads to greater interactions with peers and allows individuals to explore aptitudes, ideologies, and relationships (Erikson, 1963). With the maturity that comes with adolescence, adulthood is on the horizon. New expectations of adult responsibilities cause emerging questions like “Who am I” and “What is my purpose” (Sokol, 2009). Searching for an answer to these questions often leads to the successful formation of identity and personality.

The importance of Erikson’s work cannot be overstated; however there have been many other researchers tackle the task of identity development. One of the most important elaboration of Erikson’s psychosocial growth model is Marcia’s (1966) identity status model.

Marcia’s Identity Status Paradigm

Erikson’s theoretical notions led to the development of four identity statuses by Marcia (1996). The identity statuses are: identity achievement, foreclosure, identity diffusion, and moratorium. These statuses are based on the amount of exploration and commitment that an adolescent has experienced (Meeus, 1996). The statuses are defined by crisis and commitment. Crisis refers to a period of struggle and questioning while commitment refers to making firm decisions (Waterman, 1982). The presence or absence of a crisis and the extent of the commitment in occupation and ideology defines an individual classified by one of these statuses (Marcia, 1980).

Individuals with high levels of exploration and commitment have achieved identity.

Individuals classified under Identity Achievement have experienced a crisis and are pursuing self-chosen ideological goals and occupations (Waterman, 1982). High levels of commitment and low levels of exploration lead to the Foreclosure status (White, Wampler, & Winn, 1998). Foreclosures are experienced by those individuals who are committed to ideological and occupational goals, but these commitments are not self-chosen. Most likely, this means that they were parentally motivated (Meeus, 1996). Identity diffusion is exemplified by individuals who have no occupational or ideological goals or directions, regardless of whether or not they have experienced a crisis. These individuals have low levels of commitment and low levels of exploration (White, Wampler, & Winn, 1998). Individuals classified in moratorium are those who are in an identity crisis and are struggling with ideological and occupational problems (Marcia, 1980). These individuals have low commitment but high exploration (White, Wampler, & Winn, 1998).

Berzonsky's (1989) Identity Styles Inventory is largely based off of Marcia's (1966) Identity Status Paradigm. Berzonsky developed his inventory to reflect another aspect of the identity crisis. The Identity Styles Inventory explores the cognitive processes involved in individual problem solving during various stages of identity crisis (White, Wampler, & Winn, 1998).

Berzonsky's Identity Styles

For many years, studies on identity development focused on Marcia's (1966) identity statuses paradigms with results in the four different identity types: (a) identity achievement; (b) foreclosure; (c) identity diffusion; and (d) moratorium. Recent researchers have become concerned with the process by which identity is formed rather than the individual differences in identity outcomes (Berzonsky et al., 2011). Berzonsky (1989) proposed a model of identity

formation focused on the social-cognitive strategies that individuals prefer to adopt or avoid when processing, constructing, and maintaining a sense of identity. Three different social-cognitive identity styles are assumed in Berzonsky's model: informational, normative, and diffuse-avoidant (Berzonsky, 1989). His process-oriented styles reflect the style differences in the process of decision making and problem solving.

The informational style typically represents committed individuals who have already experienced and resolved a personal crisis (Berzonsky, 1989). Adolescents with informational oriented styles are self-reflective and seek out self-relevant information before resolving identity conflicts (Berzonsky et al., 2011). They define themselves by means of personal attributes, like individual values and goals (Crocetti, Erentaite, & Zukauskienė, 2014). These individuals are interested in learning new things about themselves and are willing to evaluate their identity structure when faced with harsh feedback. The informational style is often associated with open-mindedness, attentive decision-making, emotional autonomy, elevated commitment levels, and an achieved identity status (Berzonsky et al., 2011).

Normative styles are associated with close-minded individuals that tend to conform to society and focus on standards (White, Wampler, & Winn, 1998). Adolescents with a normative style are more likely to adopt values and goals from significant others and conform to their peers' expectations. Because normative style is associated with self-control and a sense of purpose but also a need for structure and inflexibility, individuals with this style are likely identified to be in the foreclosure identity status (Berzonsky, 1989; Crocetti, Erentaite, & Zukauskienė, 2011). Individuals within this style tend to define themselves in terms of collective self-attributes, such as family and religion (Berzonsky et al., 2011).

The diffuse-avoidant style is associated with procrastination and attempting to postpone identity conflicts as long as possible. They tend to be reluctant to confront personal problem and decisions because of their avoidant disposition. When faced with decisions, young people's behavior is driven by consequences and immediate demands. However, these situations tend to be short-term acts of defiance that do not necessarily have long term adjustments to their identity (Berzonsky & Ferrari, 2009). These adolescents are not likely to explore identity alternatives and have the tendency to emphasize social aspects of their identity, such as their popularity and reputation, which positions them in the identity status of diffusion (Crocetti, Erentaite, & Zukauskienė, 2011). According to Berzonsky, diffuse-avoidant is more than just a confused self; it involves a deliberate attempt to evade and potentially negate self-relevant feedback (Berzonsky et al., 2011).

It is important to identify contexts that promote identity development because a sense of identity is crucial for a smooth transition into adulthood. Sandhu and Tung (2006) suggested that it is important to understand the identity development differences according to gender, because past studies show inconsistencies. They also suggested that it is important to consider culture when studying gender differences. Areas that are more male dominated may show different results than an area that is equal.

Gender and Identity Development

The examination of gender and identity development has received increasing attention and has provided varied results. Erikson (1968) was one of the first people to study identity development, and he was also the first to discriminate between the sexes. Erikson suggested that the womb was the basis for a positive identity for girls, while accomplishment of science fields

was the basis for boys (Sandhu & Tung, 2006). Erikson's identity paradigm was largely based off of boys while ignoring the processes of girls (Perry & Pauletti, 2011).

It has been suggested that females develop their identities through an interpersonal domain while males develop through an ideological domain. Female identity development is often described as focusing on issues of interpersonal processes and relationships with others (Branch, 2001). Gilligan (1988) suggested that women define themselves through their relationships with others. Eisner (1985) suggested something similar; concluding that women use a relationship oriented self-definition. Hurtes (2002) studied the critical elements of adolescent female culture and found that relatedness is the most critical concern for adolescent girls. Her results also suggested that girls view themselves in terms of their social relationships. These differences vary according to culture, and are found to be more significant in countries that encourage separateness in men and conformity in women (Sandhu & Tung, 2006).

Western researchers have found that females tend to perform better than males in regards to identity development, meaning they have higher identity achievement and moratorium rates (Schwartz & Montgomery, 2002). Using an Eriksonian based identity development instrument, Mead (1983) found that girls were more likely to be identity achieved. This may be due to the fact that girls are encouraged to participate in stereotypically female and male developmental paths, while males are more likely to be encouraged to participate in masculine developmental paths. This would make the range of identity possibilities much larger than that of boys (Cramer, 2000).

Positive Youth Development

Recent decades have brought about the notion that youth are individuals who should be encouraged and promoted, rather than viewing them as problems that need to be fixed. This

notion prompted the positive youth development (PYD) movement, resulting in a focus on the potential and talents of young people to facilitate better development (Shek & Merrick, 2015). This movement reflected society's desires for happy and healthy individuals, including children and adolescents (Ward & Parker, 2013). PYD is comprised of a process that provides the support needed for youth to conquer the challenges of adolescence and move towards adulthood. Youth can maneuver this process through organizations, communities, activities and opportunities. This process goes beyond simple problem prevention by creating opportunities for development (Bialeschki, Henderson, & James, 2007; Bavarian et al., 2016). It is essential that these activities are voluntary and structured, offering high intrinsic motivation and a variety of challenging opportunities (Thurber, Scanlin, Scheuler, & Henderson, 2007).

Youth need to have opportunities to grow outside of academic competence; they need to develop physical, social, emotional and social competence. Youth can develop this through familial support, their community and extracurricular activities (Henderson, Bialeschki, & James, 2007). Structured, extracurricular activities are an important aspect of PYD. Structured extracurricular activities are significant because they provide a unique environment with group settings for youth to develop (Larson, 2000). Youth are drawn to group settings because they provide them with their need of social belonging and their desire for a respected social status (Bruner, Eys, Wilson, & Cote, 2014). Adding physical activity and sports to extracurricular activities provides youth with even more opportunities for development. Physical activity engages youth in something fun and intrinsically motivating, while they are also learning transferable skills (Hemphill, 2014). Sports provide a team environment, which shapes social factors and behaviors of youth. Team members are influential peer groups who have the ability

to impact development (Bruner, Eys, Wilson, & Cote, 2014). Extracurricular programs can also impact development when they follow a PYD framework.

PYD programs respect the idea that every child has strengths that can be promoted, rather than focusing on their shortfalls that need to be fixed. Programs that follow a specific PYD framework are different than other programs because of their activities, the goals they set, and their atmosphere (Ward & Parker, 2013). PYD program providers also help differentiate between regular programs, because they attempt to build multiple developmental assets through youth's engagement in activities (Hemphill, 2014). Ward and Parker (2013) examined the atmosphere of a PYD program that used basketball as a medium. The researchers used focus groups, individual interviews and field notes to collect data from the twenty-three early adolescent participants. Results suggested four themes in respect to the program atmosphere: relatedness, learning, relaxed climate and enjoyment. Supporting the researchers hypotheses, the PYD program resulted in positive outcomes and provided an enjoyable atmosphere. However, the researchers emphasize that PYD programs must be designed so that they take intentionally teach youth, examine atmosphere and instructional teaching, and align each of these aspects with the overall goals of the program.

Positive Youth Development and Summer Camps

Youth have participated in organized camp programs for more than 150 years. Currently, more than 11 million people attend camp in the United States every summer. Almost 60% of those enrolled in summer camps are female, while only about 40% are male (2010 ACA Camp Compensation and Benefits Report). With such great attendance, camps are considered an important part of the positive youth development movement, as they offer distinctive developmental opportunities in unique settings, like the wilderness (Henderson et al., 2007).

Rather than narrowly decreasing a few unhealthy risk factors, camp provides an extensive range of positive outcomes for adolescents (Thurber et al., 2007).

Many camps focus on a specific theme or activity, whether it is outdoor adventure, dance or performing arts. No matter the focus, every camp uses activities and programs that challenge campers with new and exciting experiences, often resulting in positive development. Feenstra (2015) examined the influence a camp in Romania had on trust, empowerment, care for others and belief in the honesty of others. This specific camp focused on experiential education to encourage positive growth in youth. Feenstra evaluated the self-reported change of 490 campers in each of the four categories, finding positive results. Participants showed increases in trust, empowerment and belief in the honesty of others, yet there was no increase found in caring for others. These results should encourage those who work in camps and youth development; because they suggest that camp has numerous positive effects on development. The results of this study are especially unique because the study was set in Romania, while most of the research done on this topic is set in the United States, Canada, and Europe.

Well-designed and properly implemented programs that use youth development models have been found to be more likely to have positive outcomes for adolescents. Thurber, Scanlin, Scheuler, and Henderson (2007) examined youth development outcomes of 80 ACA accredited summer camps with campers between the ages of eight and fourteen. Self reported observation from the campers themselves and observer reported changes from camp staff and parents were examined among four domains of positive youth development: (a) positive identity; (b) social skills; (c) physical and thinking skills; and (d) positive values and spirituality. The results of this study suggested significant positive change in all four categories as perceived by parents and camp staff. In contrast to the observers, the campers themselves reported a significant decrease in

the construct of peer relationships. The researchers reasoned that the campers had a difficult time getting along with others in the camp setting. The results of this study demonstrated that accredited summer camps might provide the essential components to facilitate positive youth development for most children.

Positive youth development is a primary concern for camp staff, but it is also important for parents and guardians. Parental perceptions of youth development outcomes from summer camps are incredibly important, as parents are often the people responsible for sending their children to summer camps. Henderson, Whitaker, Bialeschki, Scanlin, and Thurber (2007) explored how parents perceived outcomes of both day and residential summer camps that were at least one week or longer. From an ACA accreditation list, 92 camps were randomly selected for this study. Almost 2,300 campers and their parents being questioned pre- and post-camp about 10 developmental outcomes: leadership, positive values and decision making, positive identity, making friends, spirituality, environmental awareness, social comfort, independence, peer relationships, and adventure/exploration. Through a detailed analysis, it was suggested that parents perceived that their children changed positively from the beginning of camp to the end of camp on all 10 of the youth development constructs. Campers also indicated a positive change on all constructs, however they suggested a less positive change than their parents. The researchers concluded that programs must consciously incorporate positive youth development models to advance the development of youth. In addition, they suggested that future research should look at multiple camp seasons, rather than just one summer.

Another recreational context that provides positive youth development is adventure programming. Whether a stand-alone adventure program or a program within a camp, this

specific style of programming provides a great environment for positive developmental outcomes.

Adventure Programming

Adventure programming is the use of adventurous experiences to foster learning in individuals and groups. Adventure as a pursuit involves a level of risk, which can be actual or perceived, and results in somewhat unknown outcomes or consequences (Priest & Glass, 2005). There are various positive outcomes of adventure programming for females specifically, such as increasing courage (Whittington & Mack, 2010), improving relational development (Sammet, 2010), challenging notions of femininity (McDermott, 2004; Whittington, 2006), increasing self-esteem (Budbill, 2009), and promoting the ability to freely share feelings and opinions (Autry, 2001).

Adventure programming is a broad term that encompasses adventure education, adventure recreation, and adventure therapy. Education programs seek to cultivate new knowledge and awareness; recreation programs promote enjoyment; and therapeutic programs attempt to remediate and make lasting changes in the lives of participants (Deane & Harre, 2013). The premise of adventure programming is to create a change in groups and individuals from exposure to challenging experiences. The purpose is to enhance the group and personal self-concept and improve social interaction. The product is personal growth and development, achieved by overcoming self-induced perceptions of their capabilities (Miles & Priest, 1999).

Physical challenges, problem solving, decision-making, small group sizes, and a facilitator that guides participants are the most common components of adventure programs. The natural environment of these programs gives participants the opportunity for engagement, learning, and meaningful and emotional experiences (Sibthorp & Morgan, 2011). Programs can

range from one day to several months, but traditional programs last one to two weeks and involve an outdoor expedition where participants experience interpersonal and intrapersonal growth (Deane & Harre, 2013). To facilitate interpersonal growth (i.e., how a person gets along with others), programs focus on communication, cooperation, trust and conflict resolution. Intrapersonal is the growth that occurs within a person and alters self-concept, self-efficacy, and confidence (Miles & Priest, 1999).

Sibthorp and Morgan (2011) studied the similarities and differences between typical youth development practices and adventure programming and found that adventure programs are designed to create supportive relationships, empowerment, and skill building. These programs intentionally target universal outcomes, a social experience, and program novelty. Adventure programs are often considered a place for personal growth and development, because the learning is genuine, raw and firsthand. According to Sibthorp and Morgan, a single month of adventure programming matches several years of seasonal sport participation.

Sibthorp (2003) studied what adolescents learned from a three-week adventure program and how they learned while in the program. Through interviewing 18 adolescents that were participants in a sailing and scuba diving course, Sibthorp learned what and how adolescents learned from their experience. The results suggested that the adolescents learned hard skills (scuba diving and sailing skills) and life skills (leadership, communication, and social skills). It was found that the participants learned these skills through experiential methods, social interaction, exposure to new people, task authenticity, and isolation and spatial constraints. Sibthorp concludes that adventure programs provide incomparable effects for adolescents that can be transferred to their daily lives at home.

There are many different forms of adventure programming that provide a truly unique experience to their participants. One form of adventure programming involves separating groups by their gender. The concept of separating adolescents according to their gender for adventure programming started in the early 1900's with the creation of the Girl Scouts and Boy Scouts of America (Boy Scouts of America, 2014; Girl Scouts, 2014). Benefits of single-sex adventure programs have been shown for both sexes, causing this idea to become widespread.

All-Girls Adventure Programming

There was an increase in research of single sex adventure programs for girls in the 1990's (Bialeschki & Henderson, 1993; Culp, 1998; Henderson, 1994; Wittman, 1993), but within the last ten years there have been relatively few such studies. Within the abundant research done in the 1990's, Wittman (1993) found that there were gender differences in adventure programs, with female participants valuing trust more than male participants. Culp (1998) found that single gender outdoor programs allowed girls to try new things and learn new skills that they might not normally try in a mixed gender environment. It was also found that experiential outdoor activities have the ability to transfer critical developmental skills to adolescent girls and support their ability to work together with their peers (Gubitz & Kutcher, 1999).

Whittington, Mack, Budbill, and McKinney (2011) combined data from three organizations, Passages Northwest, Girls Move Mountains, and GirlVentures, to examine how girls understood their experiences in all-girls adventure programs. All three of these programs were chosen due to their dedication to supporting the development of adolescent girls through adventure experiences. Participants were 361 girls who had completed an adventure program with one of the three organizations and completed a survey on their participation. Three themes emerged from the results: (a) feelings of safety and comfort; (b) increased connection to others;

and (c) freedom from stereotypes. The girls reported that the safety and comfort they felt in the all-girls program permitted them to share their feelings and be open and supportive with the other girls. The participants created a special connection with the other girls due to their shared experience, which allowed them to relate with one another. The respondents also reported that they were able to focus more on their experience because they did not have to worry about their appearance or impressing boys due to the single sex experience. The results confirmed that there are benefits and a need for single sex adventure programs for adolescent girls.

Adventure programs provide a place for participants to develop skills, be part of a team, and confront physical and mental challenges. Due to the seclusion and challenging nature of these programs, participants are affected in a large number of ways (Sammet, 2010).

Unfortunately, there is limited research on the effects of adventure programs for girls in a single sex environment. However, what has been researched on all-girls adventure programs shows an abundance of positive effects.

All-girls adventure programs affect girls in a number of ways. Some of those ways include increasing courage, self-esteem, and creating an overall more positive sense of self. Whittington and Mack (2010) studied the effectiveness of adventure-based programs to support the development of courage in adolescent girls. Using a mix of formative and summative methods, Whittington and Mack administered pre- and post- program questionnaires to 100 girls who participated in an adventure program at Passages Northwest. Following analysis of the data, the researchers concluded that the program increased the physical, expressive, and moral courage of the girls. Although this study was done specifically with Passages Northwest, certain elements of program planning and implementation may be valuable for other similar organizations for supportive development of courage in girls.

Budbill (2009) studied the effects of an all female outdoor adventure program, Dirt Divas, on 21 girls. Dirt Divas is a five-day mountain bike program designed to support the development of girls and help them navigate the challenges of adolescence. In this program, girls started with team building, goal setting, and journal writing before they began on their mountain bike adventure. Budbill examined the effects of this program by interviewing the girls and providing a survey to the girls and their parents. The results showed that the top three challenges for the girls were body image, cliques and gossiping, and teasing and bullying. A common theme among the results was self-esteem, which both parents and participants said had increased because of the program. The girls also gained confidence in what their bodies were capable of and discovered an alternative to the feminine image represented in the media. The research suggested that these results would not have occurred in a mixed gender setting, with the girls saying that having boys at Dirt Divas would have made the environment feel less safe and accepting.

Adventure programs also affect the relational development of adolescent girls. Sammet (2010) studied relational issues of early adolescent girls that arose during a two-week adventure education expedition with Camp Courage. Camp Courage strives to support the development of girls as individuals and prioritizes healthy relationship building to promote positive development. The structure of the course encouraged girls to develop healthy relationships while resisting relational aggression through group processing activities and private discussions. Interviews were conducted six to ten months after the expedition using a semi-structural interview protocol. Sammet concluded that the girls who embraced the program reported feeling more trustful of their peers, more able to share their feelings and opinions, and more optimistic about making friendships in the future than girls who did not embrace the program. However, it was found in

the self-descriptions that even the girls who did not develop positive relationships from the program reported their strongest memories were relationship centered.

Issues pertaining directly to gender can also be affected during all-girls adventure programs. Whittington (2006) studied how participation in an all-female wilderness program challenged adolescent girls' conventional notions of femininity. Participants were a group of nine girls, ages 13 to 18, who participated in a 23-day canoe trip in Maine. Interviews were conducted 4 to 5 months and 15 to 18 months after completion of the program. The results revealed that the girls developed in six ways: (a) strength and determination; (b) confidence in abilities; (c) feelings of accomplishment and pride; (d) questioning ideal images of beauty; (e) leadership skills; and (f) building significant relationships with other girls.

Adventure therapy programs also have an array of positive affects, similar to traditional adventure programs. Autry (2001) explored how outdoor activities in an adventure therapy context affected the feelings, attitudes, and perceptions of nine girls that were participants in a long-term residential wilderness program. The girls in the study were ages 13-18 and were placed in the program due to a combination of aggressiveness, depression, substance abuse, sexual abuse, eating disorders, and suicidal ideation or attempts. Each of the girls had participated in one or two backpacking trips and up to twenty-four ropes course programs. Using the qualitative method of interviewing, Autry found four themes constructed from the data: (a) outdoor activities brought out an awareness of trust in ones self and others; (b) teamwork improved during outdoor activities; (c) the girls gained a sense of empowerment through participation in the outdoor activities; and (d) the girls acknowledged personal values they gained from the experiences. Many of the girls found that they could face their fears on their backpacking trips and when on the high ropes course, which in turn helped them realize that they

could survive their treatment. Autry concluded that the girls constructed individual and group meanings through their adventure experiences that lead to a more positive sense of self.

Studying how single-sex adventure programs affect girls can explain what adolescence means for girls. Hurtes (2002) used qualitative methods to study the foundations of adolescent girls culture and how they impact the leisure behavior of girls in an adventure recreation setting. The participants were 15-year-old girls that were enrolled in a leadership-training program in a residential summer camp. During this three-week program girls went canoeing, backpacking, rock climbing, and participated in group initiatives and high ropes course activities. The results suggested there were six elements that effected the girls: (a) friends; (b) clothes and appearance; (c) boyfriends; (d) activities; (e) parents; and (f) leaders. The research indicated that the most important psychological need for the adolescent girls was relatedness, or social acceptance. Hurtes suggests that for future recreation programs to be successful, programmers must ensure that they are not intensifying problems faced by adolescent girls, namely social acceptance. To promote social acceptance, Hurtes proposes that it may be beneficial for girls to participate in adventure recreation programs with their preexisting friends.

Adventure recreation and other recreational activities may also have an effect on identity development. Research on leisure and recreation activities found results that suggested that structured, challenging activities may promote identity development (Barber, Eccles, & Stone, 2001; Duerden et al., 2009; Groff & Kleiber, 2001; Shaw, Kleiber, & Caldwell, 1995). Although the research is limited, the results suggested a positive relationship between recreation and identity development.

Recreation and Identity Development

A large amount of an adolescent's day is consumed by free time; therefore, the activities in which an adolescent participates during this period may greatly affect identity development. Activities that could be most beneficial for young people involve effort and challenge, because these bridge the gap between childhood play and adult responsibilities (Shaw, Kleiber, & Caldwell, 1995). Structured activities that challenge youth and require them to be committed and engaged facilitate positive identity development. These kinds of programs involve young people using their individual skills for external challenges, providing youth with the opportunity for self-affirmation and the acquisition of new skills (Kivel, 1998).

Experientially based outdoor programs and sports may be forms of activities that enhance a positive identity during adolescence. Experiential education recognizes that there are many ways to learn other than just attending school. Through experiential education girls can learn through emotions, group activities, and physical activities. Experiential activities involve games that often result in girls liking themselves more and trusting themselves to make their own decisions (Gubitz & Kutcher, 1999). One of the most common forms of experiential education is a ropes course. Ropes course activities depend on relationships and communication for the successful completion of challenges. Through these activities, girls learn through trust, communication, social changes, and responsibility, all of which are essential for identity development. In all-girls programs, these results may be even more positive because girls will not feel the need to hide their feelings and opinions from male participants (Gubitz & Kutcher, 1999). According to Barber, Eccles, and Stone (2001), sports participation can predict positive developmental outcomes and lower levels of social isolation. Adapted sports programs have also predicted positive developmental outcomes. Groff and Kleiber (2001) found that adapted sports participation appeared to provide youth with a sense of competence and the opportunity for self-

expression. Sports participation also facilitated the exploration of identity alternatives and expression of identity.

Different activities and gender account for identity development during adolescence. Shaw, Kleiber, and Caldwell (1995) studied the relationship between participation in different categories of leisure activities and the level of identity development in 73 tenth grade students. The students were surveyed about how much time they spent each day doing various activities, like homework and watching television. They were also given a questionnaire to measure their identity development. Additionally, 20 of these students were interviewed about their identity, time use, and free time activities. The results suggested that for the female students, level of participation in sports and physical activities was positively correlated with identity development and psychological maturity. The researchers concluded that physical challenges may be particularly important for young women whose social influences encourage fitting in and caring about what others think rather than their own strengths and individuality.

Adventure recreation is another form of physical activity that may affect identity development. Duerden, McCoy, Taniguchi, and Widmer (2009) examined the effects of an adventure recreation program on the identity development of adolescents between the ages of 11 to 15. The researchers used Erikson's Psychosocial Stage Inventory (EPSI) to examine growth among the industry, identity, and intimacy stages of development. Additionally, Berzonsky's Identity Styles Inventory (ISI) was used to measure change among the informational, normative, and diffuse-avoidant identity styles. The results suggested that the participant group experienced a significant pre- to posttest increase across Erikson's inventory compared to the comparison group. The results also suggested a significant pre- to posttest growth among the ISI subscale scores between the participant and comparison groups. However, analysis suggested the

participant scores showed a greater increase pre- to posttest growth differences among the informational and normative subscales and a decrease among the diffuse-avoidant subscales than the comparison group, whose scores remained relatively stable. The analysis suggested that a short-term adventure recreation program positively affected the psychosocial and identity development of the participants.

Conclusion

Young people are faced with a variety of developmental tasks during adolescence. Girls in particular must develop in a society that devalues some aspects of their personalities and social selves (Hoyt & Kennedy, 2008). Unique pressures are put on girls during adolescence that cause depressive thoughts, relational aggression, and a plummeting self-esteem. With over 90% of the people suffering from anorexia nervosa being female, there is no doubt that girls face unique pressures compared to boys in a society that sells them self-hate (Lamb & Brown, 2006). These negative aspects of female adolescence could also have an effect on the development of their identity. One way to combat these aspects may be through all-girls camps or adventure programs. These environments allow girls to understand their true potential in a stereotype-free environment, where they can master new skills and meet new friends. All-girl programs empower girls and increase their self-esteem, courage, ability to form authentic relationships and facilitate a positive environment for identity formation. Adventure liberates girls and makes things possible that they never knew they could do (Whittington, 2006). Despite the fact that adventure programs positively impact girls, males still dominate participation (Outdoor Participation Report, 2013). To promote the positive development of adolescent girls, it may be beneficial to provide a number of all-girls camps and adventure programs to girls of different race and class.

Appendix B: Pre- and Post-test Questionnaire

Camp Carysbrook Survey I: Summer 2015

Please read the following:

You are taking part in this study to help our camp understand camp programs add positive changes to camper's lives. This questionnaire should take no more than 10 minutes to complete. There are three important things you should know before you begin:

1. **All answers are confidential.** This means that your name and personal information is protected, and that no one else will know what you write on your paper. All of your answers will be combined with the other campers from Camp Carysbrook to help us understand how camp adds positive changes to camper's lives.
2. **Answering these questions is voluntary.** This means you can choose not to answer any question that makes you feel uncomfortable. You can also stop answering questions at any time. However, we would really appreciate it if you could fill out as much of the questionnaire form as possible.
3. **We would appreciate it if you answered your questions honestly.** THIS IS NOT A TEST. There are no right or wrong answers to these questions.

Question 1. What is your Camp ID number? *

If you do not know your ID number, please ask your camp counselor

Question 2. How old are you?

Please report the number of years below:

Question 3. How many years have you attended Camp Carysbrook?

Please circle the letter for number of years that you've attended this camp.

- a. This is my first time at Camp Carysbrook
- b. 1 year
- c. 2 years
- d. 3 years
- e. 4 years
- f. 5 years
- g. More than 5 years

About Me...

Please circle a number between 1 and 5 that best reflects how much you disagree or agree with each sentence. There are no right or wrong answers.

YOUR FIRST REACTION TO EACH QUESTION SHOULD BE YOUR ANSWER

Statement	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
1. I've spent a lot of time thinking about what I should do with my life.	1	2	3	4	5
2. I'm not sure what I'm doing in life.	1	2	3	4	5
3. I act the way I do because of the values I was brought up with.	1	2	3	4	5
4. I've spent a lot of time reading and/or talking to others about religious ideas.	1	2	3	4	5
5. When I talk with someone about a problem, I try to see their point of view.	1	2	3	4	5
6. I don't worry about values ahead of time; I decide things as they happen.	1	2	3	4	5
7. I was brought up to know what to work for.	1	2	3	4	5
8. If I don't worry about my problems they usually work themselves out.	1	2	3	4	5
9. I've spent a lot of time reading about and/or trying to understand political issues.	1	2	3	4	5
10. I'm not thinking about my future now—it's still a long way off.	1	2	3	4	5
11. I've spent a lot of time talking to people to find a set of beliefs that works for me.	1	2	3	4	5
12. I've never had any serious doubts about my religious beliefs.	1	2	3	4	5
13. I've known since I was young what I wanted to be.	1	2	3	4	5
14. It's better to have a firm set of beliefs than to be open to different ideas.	1	2	3	4	5
15. When I have to make a decision, I wait as long as I can to see what will happen.	1	2	3	4	5
16. When I have a problem, I do a lot of thinking to understand it.	1	2	3	4	5
17. It's best to get advice from experts (preachers, doctors, lawyers, teachers) when I have a problem.	1	2	3	4	5
18. I don't take life too serious. I just try to enjoy it.	1	2	3	4	5
19. It's better to have one set of values than to consider	1	2	3	4	5

other value options.					
20. I try not to think about or deal with problems as long as I can.	1	2	3	4	5

Statement	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
21. My problems can be interesting challenges.	1	2	3	4	5
22. I try to avoid problems that make me think.	1	2	3	4	5
23. Once I know how to solve a problem, I like to stick with it.	1	2	3	4	5
24. When I make decisions, I take a lot of time to think about my choices.	1	2	3	4	5
25. I like to deal with things the way my parents said I should.	1	2	3	4	5
26. I like to think through my problems and deal with them on my own.	1	2	3	4	5
27. When I ignore a potential problem, things usually work out.	1	2	3	4	5
28. When I have to make a big decision, I like to know as much as I can about it.	1	2	3	4	5
29. When I know a problem will cause me stress, I try to avoid it.	1	2	3	4	5
30. It's best to get advice from friends or family when I have a problem.	1	2	3	4	5

THANK YOU!!!

Camp Carysbrook Survey 2: Summer 2015

Please read the following:

You are taking part in this study to help our camp understand camp programs add positive changes to camper's lives. This questionnaire should take no more than 10 minutes to complete. There are three important things you should know before you begin:

4. **All answers are confidential.** This means that your name and personal information is protected, and that no one else will know what you write on your paper. All of your answers will be combined with the other campers from Camp Carysbrook to help us understand how camp adds positive changes to camper's lives.
5. **Answering these questions is voluntary.** This means you can choose not to answer any question that makes you feel uncomfortable. You can also stop answering questions at any time. However, we would really appreciate it if you could fill out as much of the questionnaire form as possible.
6. **We would appreciate it if you answered your questions honestly.** THIS IS NOT A TEST. There are no right or wrong answers to these questions.

Question 1. What is your Camp ID number? *

If you do not know your ID number, please ask your camp counselor

About Me...

Please circle a number between 1 and 5 that best reflects how much you disagree or agree with each sentence. There are no right or wrong answers.

YOUR FIRST REACTION TO EACH QUESTION SHOULD BE YOUR ANSWER

Statement	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
1. I've spent a lot of time thinking about what I should do with my life.	1	2	3	4	5
2. I'm not sure what I'm doing in life.	1	2	3	4	5
3. I act the way I do because of the values I was brought up with.	1	2	3	4	5
4. I've spent a lot of time reading and/or talking to others about religious ideas.	1	2	3	4	5
5. When I talk with someone about a problem, I try to see their point of view.	1	2	3	4	5
6. I don't worry about values ahead of time; I decide things as they happen.	1	2	3	4	5
7. I was brought up to know what to work for.	1	2	3	4	5
8. If I don't worry about my problems they usually work themselves out.	1	2	3	4	5
9. I've spent a lot of time reading about and/or trying to understand political issues.	1	2	3	4	5
10. I'm not thinking about my future now—it's still a long way off.	1	2	3	4	5
11. I've spent a lot of time talking to people to find a set of beliefs that works for me.	1	2	3	4	5
12. I've never had any serious doubts about my religious beliefs.	1	2	3	4	5
13. I've known since I was young what I wanted to be.	1	2	3	4	5
14. It's better to have a firm set of beliefs than to be open to different ideas.	1	2	3	4	5
15. When I have to make a decision, I wait as long as I can to see what will happen.	1	2	3	4	5

Statement	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
16. When I have a problem, I do a lot of thinking to understand it.	1	2	3	4	5
17. It's best to get advice from experts (preachers, doctors, lawyers, teachers) when I have a problem.	1	2	3	4	5
18. I don't take life too serious. I just try to enjoy it.	1	2	3	4	5
19. It's better to have one set of values than to consider other value options.	1	2	3	4	5
20. I try not to think about or deal with problems as long as I can.	1	2	3	4	5
21. My problems can be interesting challenges.	1	2	3	4	5
22. I try to avoid problems that make me think.	1	2	3	4	5
23. Once I know how to solve a problem, I like to stick with it.	1	2	3	4	5
24. When I make decisions, I take a lot of time to think about my choices.	1	2	3	4	5
25. I like to deal with things the way my parents said I should.	1	2	3	4	5
26. I like to think through my problems and deal with them on my own.	1	2	3	4	5
27. When I ignore a potential problem, things usually work out.	1	2	3	4	5
28. When I have to make a big decision, I like to know as much as I can about it.	1	2	3	4	5
29. When I know a problem will cause me stress, I try to avoid it.	1	2	3	4	5
30. It's best to get advice from friends or family when I have a problem.	1	2	3	4	5

Camp Experiences...

Please tell us how challenging you found activities you participating in camp. If you did not participate in the activity just circle N/A in the did not participate column.

Activity	Not Challenging	Somewhat Challenging	Challenging	Very Challenging	Did not participate
Arts and Crafts	0	1	2	3	n/a
Drama	0	1	2	3	n/a
Swimming	0	1	2	3	n/a
Archery	0	1	2	3	n/a
Soccer	0	1	2	3	n/a
Softball	0	1	2	3	n/a
Volleyball	0	1	2	3	n/a
Hiking	0	1	2	3	n/a
Overnight Camping	0	1	2	3	n/a
Backpacking	0	1	2	3	n/a
Canoeing	0	1	2	3	n/a
Caving	0	1	2	3	n/a
Rappelling	0	1	2	3	n/a
Rock Climbing	0	1	2	3	n/a

THANK YOU!!!

Appendix C: IRB Approval



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
 4N-70 Brody Medical Sciences Building · Mail Stop 682
 600 Moye Boulevard · Greenville, NC 27834
 Office [252-744-2914](tel:252-744-2914) · Fax [252-744-2284](tel:252-744-2284) · www.ecu.edu/irb

Notification of Initial Approval: Expedited

From: Social/Behavioral IRB
 To: [Ariel Hartman](#)
 CC: [Clifton Watts](#)
 Date: 6/9/2015
 Re: [UMCIRB 15-000832](#)
 Exploring Identity Development in a Summer Residential Camp for Adolescent Girls

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 6/9/2015 to 6/8/2016. The research study is eligible for review under expedited category # 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
Assent Form	Consent Forms
Parental Consent	Consent Forms
Post-Test	Surveys and Questionnaires
Pre-Test	Surveys and Questionnaires
Proposal	Study Protocol or Grant Application

The Chairperson (or designee) does not have a potential for conflict of interest on this study.



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building · Mail Stop 682
600 Moyer Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** · www.ecu.edu/irb

Notification of Initial Approval: Expedited

From: Social/Behavioral IRB
To: [Ariel Hartman](#)
CC: [Clifton Watts](#)
Date: 6/9/2015
Re: [UMCIRB 15-000832](#)
Exploring Identity Development in a Summer Residential Camp for Adolescent Girls

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 6/9/2015 to 6/8/2016. The research study is eligible for review under expedited category # 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
Assent Form	Consent Forms
Parental Consent	Consent Forms
Post-Test	Surveys and Questionnaires
Pre-Test	Surveys and Questionnaires
Proposal	Study Protocol or Grant Application