

2023

# Attachment and its Prediction of Emotional-Social Intelligence (ESI) of African American Females During Mid-to-Late Adolescence

Lauren N. Callahan  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [African American Studies Commons](#), and the [Psychology Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Education and Human Sciences

This is to certify that the doctoral dissertation by

Lauren N. Callahan

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

## Review Committee

Dr. Natalie Costa, Committee Chairperson, Psychology Faculty  
Dr. Livia Gilstrap, Committee Member, Psychology Faculty  
Dr. Steven Little, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost  
Sue Subocz, Ph.D.

Walden University  
2023

Abstract

Attachment and its Prediction of Emotional-Social Intelligence (ESI) of African

American Females During Mid-to-Late Adolescence

by

Lauren N. Callahan

MS, Walden University, 2018

BA, Georgia State University, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Developmental Psychology

Child and Adolescent Development

Walden University

May 2023

## Abstract

Attachment and emotional-social intelligence (ESI) have been an area of study among scholars since attachment has been shown to impact important areas of psychosocial development. This study involved exploring attachment or the adolescent bonding experience, and its prediction of ESI of African American females during mid-to-late adolescence. Researchers have demonstrated there are ethnic differences in terms of attachment and ESI but have not established predictive relationships among African Americans. The purpose of this study was to examine attachment and its prediction of ESI of African American females between 15 and 18. Using a quantitative design, the Adolescent Attachment Questionnaire and the BarOn Emotional Quotient Inventory: Youth Version-Short Form were completed by 75 participants. The theoretical frameworks that grounded this study were Ainsworth and Bowlby's attachment theory and Bar-On's ESI theory. Using a quantitative design, surveys were analyzed using a multiple regression analysis. Results indicated a significant regression model, with attachment accounting for variations in the ESI of African American females during mid-to-late adolescence. Goal-corrected partnership was found to be a significant predictor of ESI. By contrast, angry distress and availability were found not to be significant predictors of ESI. Study findings may be used by mental health specialists for positive social change to help African American females during mid-to-late adolescence through the development of research and resources tailored to improving attachment and emotional-social outcomes.

Attachment and its Prediction of Emotional-Social Intelligence (ESI) of African

American Females During Mid-to-Late Adolescence

by

Lauren N. Callahan

MS, Walden University, 2018

BA, Georgia State University, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Developmental Psychology

Child and Adolescent Development

Walden University

May 2023

## Dedication

This dissertation is dedicated to my daughters and my family. Thank you, my beautiful daughters, for your monumental role you both have taken in my journey to promote positive social change and my hopes to change the world for the greater. In addition, this dissertation is dedicated to my mother, you have supported me in ways unspeakable and I will always be appreciative of your contribution to my journey of service. Also, this dissertation is dedicated to my family, thank you all for your support and encouragement. Lastly, this dissertation is dedicated to the field of social science. The sole purpose of this dissertation is to explore and improve psychosocial wellness and outcomes within society.

## Acknowledgments

I would like to acknowledge individuals that have assisted in making this educational accomplishment possible. I would like to acknowledge and give appreciation to my committee members, Dr. Natalie Costa, Dr. Livia Gilstrap, and all the teachers and professors throughout my educational journey. Thank you for your support, guidance, and encouragement throughout this academic path.

## Table of Contents

List of Tables .....	iv
List of Figures .....	v
Chapter 1: Introduction to the Study.....	1
Background.....	3
Problem Statement .....	6
Purpose of the Study .....	7
Research Question and Hypotheses .....	8
Theoretical Framework of the Study .....	8
Nature of the Study .....	10
Definitions.....	11
Assumptions.....	12
Scope and Delimitations .....	12
Limitations .....	12
Significance.....	13
Summary .....	15
Chapter 2: Literature Review .....	17
Literature Search Strategy.....	18
Attachment.....	19
Secure Attachment .....	20
Insecure-Avoidant Attachment .....	20
Insecure-Restraint/Ambivalence Attachment .....	21



Insecure-Disorganized Attachment.....	21
Attachment and its Role in Development .....	21
Angry Distress .....	25
Availability .....	26
Goal-Corrected Partnership .....	27
ESI.....	30
Intrapersonal .....	33
Interpersonal .....	34
Adaptability.....	35
Stress Management.....	36
General Mood .....	37
Positive Impression.....	38
ESI and its Role in Development.....	39
Attachment and its Influence on ESI .....	41
Ethnicity, Demographics, and Culture and Their Role in Psychological	
Development .....	45
Summary and Conclusions .....	52
Chapter 3: Methodology .....	54
Research Design.....	54
Research Rationale.....	55
Population .....	56
Sample and Sampling Procedures.....	57

Procedures for Recruitment, Participants, and Data Collection .....	58
Instrumentation and Operationalization of Constructs .....	59
Data Analysis .....	62
Ethical Considerations and Procedures.....	63
Summary .....	64
Chapter 4: Results .....	65
Data Collection .....	65
Results.....	67
Summary .....	74
Chapter 5: Discussion, Conclusion, and Recommendations .....	76
Interpretation of the Findings.....	76
Limitations of the Study.....	81
Recommendations.....	82
Implications.....	83
Conclusion .....	85
References .....	86
Appendix A: Demographic Survey.....	99

List of Tables

Table 1. Multiple Regression Statistics for Attachment (Angry Distress, Availability, and Goal-Corrected Partnership) and ESI ..... 73

Table 2. ANOVA Statistics for Attachment (Angry Distress, Availability, and Goal-Corrected Partnership) and ESI ..... 73

Table 3. Coefficients Statistics for Attachment (Angry Distress, Availability, and Goal-Corrected Partnership) and ESI ..... 74

## List of Figures

Figure 1. P-P Scatterplot for Attachment (Angry Distress, Availability, and Goal-Corrected Partnerships) and Total ESI .....	69
Figure 2. Residuals Scatterplot Testing Homoscedasticity Using Attachment (Angry Distress, Availability, and Goal-Corrected Partnership) .....	70
Figure 3. Histogram of Normality .....	71
Figure 4. Scatterplot of Independence of Errors .....	72

## Chapter 1: Introduction to the Study

As developmental psychology involves examining and further understanding factors that influence the wellness and quality of life of individuals throughout their lifespan, it is important to examine parental attachments and their predictive relationships in terms of developmental outcomes. Within current society, African American female adolescents experience developmental as well as emotional and social disparities. For instance, African American female adolescents are at higher risk for depressive symptoms and diagnosis, as well as teen pregnancy (Barbee, 1992; Summers et al., 2017). These emotional and societal disparities are closely related to intrapersonal and interpersonal intelligence, abilities, and skills (Karibeeran & Mohanty, 2019). This research involved examining factors associated with intrapersonal and interpersonal intelligence, abilities, skills, and ultimately emotional and social developmental outcomes of African American females during mid-to-late adolescence.

As early as birth, attachment begins between parents and infants and continues throughout the lifespan (McLeod, 2017; Rahmani & Ulu, 2021). Early attachments are derived from the fundamental need to belong as humans and create a basis in which one understands and explores the world (Ainsworth & Bowlby, 1991; Cacioppo et al., 2019). These early attachment milestones influence psychosocial development throughout the lifespan (Bandura, 1977; Borelli et al., 2018; Karibeeran & Mohanty, 2019). Attachment, just as the need to belong, has been shown to influence psychological development, wellness, and the quality of life of individuals (Ainsworth & Bowlby, 1991). Fearon and Roisman (2017) suggested the important influences of attachment, which can be observed

not only in terms of psychological wellness of infants but by assessing current and future socioemotional development and wellness into adolescence.

In conjunction with attachment, emotional-social intelligence (ESI) and psychological wellness influence individuals' ultimate quality of life. Bar-On (2006) defined ESI as "individuals' emotional and social abilities, competencies, skills, and facilitators that determine how we understand and express ourselves, understand others and relate with them, and cope with daily demands" (p. 3). Intrapersonal and interpersonal skills and abilities are key competencies individuals need and use in everyday tasks, whether socially or cognitively, including task performance and memory abilities (Brabec et al., 2012; Farrelly & Austin, 2007). These competencies greatly influence and govern individuals' wellness in terms of several key areas of societal living, such as intrapersonal and interpersonal wellness, career paths, and overall wellness throughout life (Antonsich, 2008; Anwer et al., 2017; Borelli et al., 2018; Bretherton, 1994; Hirschi, 2009; Rahmani & Ulu, 2021).

Research has justified the importance of examining individuals' developmental and psychological development and wellness through a demographic lens, specifically in terms of ethnic diversity (Imtiaz & Naqvi, 2012; Aguilar-Luzón et al., 2014). Current emotional and social literature provides evidence for the need to examine psychological wellness and differences of diverse ethnicities, cultures, and populations (Irfan & Kausan, 2018; Irfan & Kausan, 2020). Esnaola et al. (2017) examined the development of ESI during adolescence in a primarily Mexican population, and suggested demographic or cultural differences were present cross-culturally. Within Dutch culture, ethnic

differences were also found to be influential factors of development (van Tubergen & Poortman, 2010). These findings suggest further attachment and ESI research specifically focused on African American communities is beneficial.

Examining attachment and how it predicts ESI of African American females during mid-to-late adolescence will lead to additional literature for scholars and professionals when seeking to explore factors and concepts that influence emotional-social wellness of adolescents from diverse cultures. This study will lead to positive social change by increasing the ESI of diverse populations, therefore decreasing many social disparities within African American communities. In Chapter 1, a description of the background of the study, problem statement, purpose of this study, research question, and overall summary are provided.

### **Background**

During individuals' developmental process, attachment and ESI are key areas that influence wellness throughout the lifespan (Ainsworth & Bowlby, 1991; Bar-On, 2006). During the first moments of life, all individuals experience a sense of needing to belong and form secure attachments, with this process continuing throughout the lifespan (Segrin & Flora, 2019). Within the first 2 years of life, parent-child relationships can predict emotional and social competencies and expressions throughout early childhood (Brown et al., 2017). Research suggests attachment can assist with predicting areas of ESI outcomes (Altaras Dimitrijević et al., 2020; Rahmani & Ulu, 2021; Strand et al., 2019). Individuals' ethnicity, cultural, demographic, and psychological characteristics develop most often

from early experiences, social learning, and psychological conditioning (Aguilar-Luzón et al., 2014; Antonsich, 2008; Bandura, 1977; Camille Hall, 2017; Irfan & Kausan, 2018).

Throughout American history, African Americans have experienced historical and social disparities. As a result, African American females have statistically experienced more and greater emotional and social disparities. For example, African American female adolescents have higher rates of teenage pregnancy and are more often required to take on the role of the sole provider, head of household, or be considered the sole patriarch and matriarch and teacher of the family (Summers et al., 2017).

Both past and current research support this study involving examining attachment and how it predicts ESI as I seek to further understand what factors or circumstances contribute to or influence these psychosocial disparities within diverse populations. Additionally, research findings suggest an increase in social influence, such as social media and other media outlets (Cacioppo et al., 2019). As adolescents' internet and social media interest and use increase, an examination of mitigating factors concerning influences of parent-adolescent attachment is imperative to decreasing negative developmental, emotional, and social outcomes. With findings suggesting the importance of parental attachment in terms of adolescents' engagement in antisocial behaviors, additional inquiries are beneficial (Claris, 2010; Cacioppo et al. 2019). Despite previous research reviewing how attachment influences ESI of individuals, there remains a lack of culturally relevant research within the African American population. Within this study, focusing on attachment has assisted in further understanding the predictive relationship of ESI on African American females during mid-to-late adolescence.



African Americans have faced increased hurdles or boundaries concerning attachment, due in part to their history concerning slavery and the disassociation of the family unit. Most often, understanding attachment involves learning through habitual experiences (Bandura, 1977). In the past, African Americans have faced issues with healthy attachments, but also higher social disparities, which influence the attachment process within family dynamics (Camille Hall, 2017; Summers et al., 2017). As a result of the history of African Americans and social outcomes associated with this population, they experience increased socioeconomic hardships (Lee et al., 2020). African Americans are incarcerated at higher rates, experience increased economic concerns, and have higher rates of teenage pregnancies (Rovner, 2021; Lee et al., 2020; Kost et al., 2017; CDC, 2021; Summers et al., 2017). Research has indicated 76 out of every 1000 African American females will experience an unplanned pregnancy (Finer et al., 2016). Although the rate of this population has shown a decline, teenage pregnancy rates have remained high, and as a result, can be costly for both families and society in the future (CDC, 2021). In 2020, for example, one in three African American children were identified as living under the poverty level (Children's Defense Fund, 2020).

Due to socioeconomic disparities, it is important to understand factors concerning attachment and their ability to predict emotional and social wellness of African American females during mid-to-late adolescence and beyond. Research is needed to further understand how attachment predicts ESI to understand and assist in mitigating social disparities within this community. Additional research focused on improving parent-adolescent relationships and ESI can lead to a decrease in social disparities, including

teen and unplanned pregnancy rates, engaging in antisocial behaviors, and incarceration rates.

Without additional research and mitigation resources, society as well as individuals pay costs. This population receives public assistance at higher rates than other populations, which furthers the importance of understanding what factors influence these social disparities (Summers et al., 2017). For example, African Americans are more likely to be incarcerated, but also are less likely to seek mental health resources or support when experiencing psychological and emotional-social issues (Mental Health America, 2021). Prior research has suggested examining developmental outcomes, with a focus on cultural and ethnic differences (Strand et al., 2019).

Without additional consideration of these unique cultural aspects of individual and community backgrounds, it is expected that these social disparities will continue to rise (Antonsich, 2008). Attachment and culture/ethnic differences influence individuals' ESI abilities and wellness (Antonsich, 2008) Therefore, it is beneficial for not only individuals and families, but also for society to continue examining factors that influence their emotional-social wellness, and ultimately the social wellness of society. Research such as this can ensure developmental scholars and professionals are improving individuals' wellness and quality of life, which will ultimately lead to positive change within society.

### **Problem Statement**

The issue that prompted this search of literature is the limited amount of attachment and ESI specifically focusing on African American adolescent females. Early

attachment styles influence psychosocial development involving adolescents' physical health and wellness, engagement in social or antisocial behaviors, peer and romantic relationships, job, and career attainment (Sánchez-Álvarez et al., 2016; Jones et al., 2017; Hirschi, 2009). For adolescents, attachment and ESI play a role in their psychosocial health and development (Sanchez et al., 2017).

Within this area of developmental psychology, researchers have suggested examining additional factors which influence female adolescents' ESI and wellness. These factors include family dynamics, peer relationships, and adolescents' intrapersonal experiences (Brown et al., 2017; Keizer et al., 2019). Though ESI research has made substantial progress concerning adolescents, this exploration of attachment and how this developmental factor predicts the ESI of African American females during mid-to-late adolescence will be beneficial. This study's objective is to address and examine how the unique attachment dynamics of the African American family impact this populations' developmental outcomes, specifically ESI.

### **Purpose of the Study**

The purpose of this study is to examine if attachment (IV) can assist in predicting ESI (DV) in African American females during mid-to-late adolescence. The goal of this study was to further explore factors such as attachment and how this aspect of development can assist in predicting ESI of African American females during mid-to-late adolescence. This may offer additional opportunities for researchers, scholars, and professionals to assist individuals and families with improving social outcomes for African American females during mid-to-late adolescence.

Previous research involving this area of developmental psychology suggest the predictive relationship between attachment and ESI and suggest further examinations of demographic or cultural aspects that influence this relationship (Aguilar-Luzón et al., 2014). Despite extended research concerning this topic, there remains limited studies with a focus on African American females during mid-to-late adolescence. Therefore, this study was designed to examine the predictive relationship of attachment and ESI in conjunction with unique ethnic and cultural backgrounds of this population. This research is an extension of previous research with a focus on African American females between 15 and 18.

### **Research Question and Hypotheses**

RQ1: Does attachment as assessed using the Adolescent Attachment Questionnaire (AAQ) predict ESI as assessed using the BarOn Emotional Quotient Inventory: Youth Version-Short Form (BarOn EQ-i:YV (S)) in African American females during mid-to-late adolescence?

H<sub>0</sub>: Attachment as assessed using the AAQ does not predict ESI as assessed using the BarOn EQ-i:YV (S) in African American females during mid-to-late adolescence.

H<sub>a</sub>: Attachment as assessed using the AAQ does predict ESI as assessed using the BarOn EQ-i:YV (S) in African American females during mid-to-late adolescence.

### **Theoretical Framework of the Study**

The theories that grounded this research were Ainsworth and Bowlby's (1991) theory of attachment and Bar-On's (2006) theory of ESI.

Ainsworth and Bowlby (1991) suggested early attachments are derived from the fundamental need to belong as humans in order to create a basis in which one understands and explores the world. These early attachment milestones influence psychosocial development throughout the lifespan (Rahmani & Ulu, 2021; Karibeeran & Mohanty, 2019). Attachment or the need to belong has been shown to influence psychological development, wellness, and quality of life of individuals. Within this study, attachment variables are angry-distress, availability, and goal-corrected partnership. Bowlby and Ainsworth suggested attachment fundamentally influences several key milestones including ESI.

In addition, Bar-On's theory of ESI draws on the idea individuals' traits, disposition, abilities, and competencies influence individuals' emotional outcomes both intrapersonally and interpersonally (Kanesan & Fauzan, 2019). Specifically, Bar-On (2006) argued a comprehensive examination of individuals' intrapersonal and interpersonal traits and abilities should be comprised of examining ESI as one theoretical concept or model. According to this theory, ESI is comprised of positive impression, intrapersonal, interpersonal, stress management, adaptability, and general mood (Bar-On, 2006). These competencies greatly influence and govern individual wellness and quality of life in terms of interpersonal, intrapersonal, and achievable quality of life (Bretherton, 1994; Szalai et al., 2016).

This study involved further exploring how these foundational frameworks inform the predictive relationship of attachment on the ESI of African American females during mid-to-late adolescence. This predictive relationship has been observed and facilitates

many key aspects of emotional and social wellness (Crowne, 2009; Segrin & Flora, 2019). This study is an extension of current attachment and ESI literature involving the influence of parent-adolescent attachment on the predictive relationship of developmental variables within this specific population.

### **Nature of the Study**

To address the research question for this quantitative study, I used a correlative analysis. Creswell (2013) suggested a quantitative analysis is an adequate method to use when seeking to understand phenomena by examining how one variable influence other variables that researchers suggest are scientifically associated. This study involved examining whether attachment predicts ESI of African American females during mid-to-late adolescence.

For this study, I used the AAQ (West et al., 1998), to examine attachment of participants. The AAQ is comprised of nine items of assessment, which are scored on a 5-point Likert scale. The AAQ consists of 3 subscales of attachment (Angry Distress, Availability, and Goal-Corrected Partnership). Also, I used the BarOn EQ-i:YV (S) (BarOn & Parker, 2000), which was used to assess the ESI of participants. The BarOn EQ-i:YV (S) is a 30 item self-reporting instrument, which includes six emotional-social competency dimensions (positive impression, intrapersonal, interpersonal, stress management, adaptability, and general mood). Each of the six dimensions of ESI is scored using a 5-point Likert scale. As directed by the BarOn EQ-i: YV technical manual, positive impression/general mood items #3, #4, #7, #10, #11, and #15 are excluded.

Participants completed each questionnaire during a single time. Data were analyzed via overall scores for each instrument.

### **Definitions**

*Attachment:* The parent-child and parent-adolescent emotional bonding experience which is a primary component of human interactions and connections throughout the lifespan. Bowlby (1980) suggested attachment or the need to belong is a foundational and evolutionary process which assists individuals with predicting and understanding their social environments and the world. Ainsworth and Bowlby's (1991) theory of attachment examined parent-child relationships with a focus on environmental reactions and caregiver security.

*Culture:* "The cumulative deposit of knowledge, experiences, beliefs, values, attitudes, meanings, hierarchies, religion, notions of time, roles, spatial relations, concepts of the universe, and material objects and possessions acquired by a group of people in the course of generations through individual and group striving. Culture is the systems of knowledge shared by a relatively large group of people" (Li & Karakowsky, 2001, p. 501).

*Demographic characteristics:* Demographic characteristics are distinguishing attributes of a population. The demographic characteristics utilized in this research included age, gender, race/ethnicity, and grade level. (Longley, 2020).

*Emotional-social intelligence (ESI):* Intrapersonal and interpersonal abilities, skills, and competencies that assist individuals with dealing with daily demands. Key

concepts of ESI include positive impression, intrapersonal, interpersonal, stress management, adaptability, and general mood (Bar-On, 2006).

### **Assumptions**

Within this research, there were two primary assumptions. First, I assumed attachment (angry distress, availability, and goal-corrected partnership) would predict ESI of participants. In addition, I assumed scores reflected genuine attachment and ESI levels and/or competencies of African American females during mid-to-late adolescence.

### **Scope and Delimitations**

First, this study involved examining parental attachment. Throughout their lifespan, individuals continue forming attachments, which as a result, can impact African American females during mid-to-late adolescence and their attachment scores. The focus population within this study was African Americans, which has the potential to exclude additional culturally unique populations. Lastly, I sought to examine females and excluded males during mid-to-late adolescence.

### **Limitations**

There are limitations, barriers, and challenges present within this research. One important limitation is that attachment and ESI scores are solely based on self-reporting data tools, which may lead to biased reporting or deviations in terms of true attachment and ESI scores. An additional limitation is the correlational nature of this study. A barrier for this study is accessibility or difficulty of obtaining parental consent and youth assent which potentially affected my ability to obtain a sufficient sample size. One challenge within this study is the limited sample of the chosen population, which may impact



external validity or my ability to generalize findings. The sample population includes African American females during mid-to-late adolescence.

### **Significance**

In the study, I provided evidence to support the importance of attachment during mid-to-late adolescence as it relates to ESI. I examined attachment and its effects on ESI of African American females during mid-to-late adolescence. My goal was to examine the predictive relationship between attachment and ESI. Attachment is a foundational process all individuals experience, which makes understanding its influence on ESI beneficial, especially among African American females between 15 and 18. Furthermore, there are no previous studies that explore predictive relationships between attachment and ESI of African American females during mid-to-late adolescence.

Findings from this study include evidence-based support that can guide parents, pediatricians, counselors, and scholar-practitioners in terms of improving parent-adolescent relationship dynamics in conjunction with improving ESI outcomes. For example, promoting healthy parent-adolescent relationships early in development could mitigate emotional-social disparities associated with insecure attachments. Furthermore, my goal was to stress the importance of early secure attachments and positive parent-child relationships as well as throughout adolescence. During mid-to-late adolescence, individuals seek increased independence and depend less on their parents or caregivers. Ensuring adolescents continue to receive positive parental support and mutual guidance and understanding can foster positive intrapersonal and interpersonal wellness and increase ESI during mid-to-late adolescence.

This study's findings can be used to increase awareness for parents, pediatricians, counselors, and scholar-practitioners regarding attachment and its influence on ESI of African American females during mid-to-late adolescence. Results of this research can provide significant contributions because these findings stress the importance of developing and maintaining healthy parent-child attachments for African American females throughout adolescence. Based on the literature search, there are no previous studies to inform parents, doctors, counselors, and scholar-practitioners concerning attachment and its influence on ESI development and success of African American females during mid-to-late adolescence.

This research will lead to positive social change in terms of creating relationship-building, awareness, and preventive resources for parents and adolescents based on promoting healthy and secure attachment relationships and promoting healthy ESI. With parents and caregivers having early access to information regarding the influence of attachment on ESI during mid-to-late adolescence and resources to build and maintain parent-adolescent relationships, adolescents are more likely to have higher ESI and improved intrapersonal and interpersonal developmental outcomes. This study provides health providers and scholar-practitioners with information that can promote awareness and assist those who treat and develop resources for adolescents with improving ESI from a family-centered perspective. This could lead to future research and development of resources for schools and organizations that seek to improve adolescent outcomes involving peer relationships, academic achievement, and vocational and career success.

This study has several positive social change implications for adolescents, parents, and their communities.

### **Summary**

Developmental psychology involves examining human psychological growth processes and experiences throughout the lifespan. Within this field, researchers examine each stage of development in order to further explore and understand factors that influence individuals' psychological wellness and ultimately their quality of life.

The infancy stage is when individuals grow, develop, and build (Ainsworth & Bowlby, 1991). During this developmental stage, all individuals experience the need for attachment and belonging. Initial parent-child attachments are the catalyst through which all individuals begin their emotional and social skills, abilities, and competencies and develop their perspectives of the world (Ainsworth & Bowlby, 1991). According to Emmerling and Boyatzis (2012), individuals' emotional and social expectations and competencies are derived from ethnic or cultural upbringings and experiences. Initial parental attachments are influenced by specific factors such as culture, which influence individuals' psychosocial outcomes throughout the lifespan (Bodfield et al., 2020; Strand et al., 2019; Aguilar-Luzón et al., 2014; Irfan & Kausar, 2020). With these research implications, it is imperative the developmental stage of mid-to-late adolescence is examined concerning the predictive relationship between attachment and ESI. Therefore, due to the importance of this developmental stage, there is a need for additional developmental psychology literature assessing the predictive relationships of attachment on ESI of African American females during mid-to-late adolescence.

Within this chapter, an overview of the study was provided. Background information, a statement of purpose, limitations, and scope and delimitations were provided to justify this study's contribution to the field of developmental psychology. In Chapter 2, a literature review involving attachment, ESI, ethnicity, demographic, and culture is provided. Chapter 3 includes methodological procedures to examine research. I address the study's research design, population, procedures, and methods of analyzing data gathered from study participants. Next, Chapter 4 includes results and statistical findings of this study. Finally, Chapter 5 includes a discussion of the significance and implications for future research based on the results and findings of this research study.

## Chapter 2: Literature Review

Within developmental psychology, the study of African Americans during mid-to-late adolescence is understudied in terms of attachment and its prediction of ESI. For adolescents specifically, attachment and ESI play a fundamental role in their psychosocial health and wellness (Sanchez et al., 2017). Early attachment styles influence psychosocial development in terms of adolescents' physical health and wellness, engagement in social or antisocial behaviors, peer and romantic relationships, and job and career attainment (Sánchez-Álvarez et al., 2016; Jones et al., 2017). The social problem that prompted this research is the lack of literature involving African Americans females during mid-to-late adolescence. The research problem that prompted me to search the literature is the limited developmental psychology research on the influence of attachment on the development of ESI of African American females during mid-to-late adolescence. It is useful to explore diverse cultures when examining attachment and its prediction of ESI of African American females during mid-to-late adolescence. Culture is an influential factor of psychosocial development and can be helpful in understanding attachment and ESI of diverse populations.

This chapter includes a literature review involving attachment and ESI. First, this chapter starts with an overview of literature search strategies. Next, I provide a historical overview and background information about the attachment theory. In addition, an overview and background of the ESI theory is discussed. Last, I provide an overview and hypothesize connections between ethnicity and attachment and its predictive relationship on ESI of African American females during mid-to-late adolescence.

### Literature Search Strategy

Within this section, an overview of the literature search techniques is provided.

Within this section, peer-reviewed literature is reviewed and analyzed to examine African American females during mid-to-late adolescence in terms of parent-adolescent attachment and its effect on ESI. I used peer-reviewed literature that was published between 1977 and 2022. Key search terms were *attachment, Ainsworth, Bowlby, initial attachment, need to belong, emotional intelligence, social intelligence, Bar-On, emotional-social intelligence, emotional competencies, social competencies, social skills, social abilities, career, job, education, developmental milestones, mental health outcomes, psychosocial, demographic characteristics, early childhood, late childhood, adolescence, mid-adolescence, late adolescence, ethnic difference, demographic differences, culture, cultural differences, racial differences, parent-child relationships, parent-adolescent, peer relationships, teen pregnancy, anti-social behaviors, social-disparities, socioeconomic differences, American history, African American history, slavery, African Americans, African American females, multiple regression, and predictive relationships*. Electronic databases accessed for this study were: EBSCOHost, ScienceDirect, SocINDEX, MEDLINE, Gale Academic Onefile Select, PsycInfo, Journals@OVID, PsycExtra, PsycArticles, and Google Scholar. Nationally accredited organizational websites for Mental Health America and the NAMI were used in the review and examination of current national statistics, among other information relating to the purpose of this study.

## **Attachment**

The attachment theory has a long foundational history within developmental psychology, dating back to the 1920s. Bowlby and Ainsworth assisted in laying the foundation for attachment, psychological, and social relationship research (Bretherton, 1994).

Attachment, as a developmental concept, continues to play a role in individuals' quality of life, specifically ESI (Karibeeran & Mohanty, 2019). For many individuals, initial emotional bonding or attachment style during early development plays a monumental role in their future wellness and quality of life (Bodfield et al., 2020; Coats & Blanchard-Fields, 2008; Li et al., 2016). Attachment involves closeness, support, attentiveness, teaching, safety, and protectiveness of parental figures or caregivers. It is an evolutionary, longstanding, and influential factor in terms of individual psychosocial development (Ainsworth & Bowlby, 1991; Fearon & Roisman, 2017; Karibeeran & Mohanty, 2019). Using the attachment framework, analysts and scholars observe and examine how attachment or initial bonding interactions influence their expression of emotional and social understanding, abilities, and competencies (Crowne, 2009; Soars & Blanchard-Field, 2008; Wenzel et al., 2005;). Bodfield et al. (2020) examined attachment in 303 United Kingdom adolescents utilizing the AAQ and found external validation regarding attachment and its influence throughout infancy and into adolescence. Four categories were developed and used to identify conditions involving parent-child attachment between parents and their infants. Current literature continues to suggest the

external validity of the foundational theory to examine various attachment styles and developmental outcomes.

### **Secure Attachment**

Infants with initial secure attachments experience a trusting base, where their basic needs are met by parents or caregivers in a caring and supportive manner. Initial attachments are identified as secure if infants exhibit abilities and competencies that foster positive connections, resilient characteristics, intrapersonal and autonomous adaptability, and the interpersonal belief their parents or caregivers will tend to their emotional, social, and physical needs (Ainsworth & Bowlby, 1991; Bretherton, 1994; McLeod, 2017).

### **Insecure-Avoidant Attachment**

Infants with initial insecure-avoidant attachments experience an untrusting base, where their basic needs are inconsistently met, and parents' or caregivers' 'manner of social, emotional, and physical bonding is insensitive. Insecure-avoidant attachments vary in terms of exhibition and expression of emotional and social references and initially learned skills and behaviors. These infants exhibit avoidance when interacting with caregivers and exhibit little distress when separated. In addition, these infants often turn away during intimate interactions with their caregivers and exhibit no interest in attempting or remaining in close proximity with their parents or caregivers (Ainsworth & Bowlby, 1991; Bretherton, 1994; McLeod, 2017).



**Insecure-Restraint/Ambivalence Attachment**

Infants with initial insecure restraints or ambivalent attachments experience an untrusting base, where their basic needs are met by their parents or caregivers in a manner that exhibits distance and unsupportiveness. Insecure restraint or ambivalence attachment is identified as infants exhibiting no interest in connecting with their caregivers and characterized by fear of no reciprocity from their caregivers. These infants experience little to no response from their caregivers, and they exhibit resisting social interactions with caregivers (Ainsworth & Bowlby, 1991; Bretherton, 1994; McLeod, 2017).

**Insecure-Disorganized Attachment**

Infants with initial insecure-disorganized attachments experience a frightening base, where their basic needs are either not met or met by their parents or caregivers in a manner that exhibits or expresses fear. Insecure-disorganized attachments are identified when infants experience unreliable or confusing emotional signals and cues from their parents or caregivers, such as parents expressing frightening or confusing emotions and behaviors. These infants exhibit social behaviors lacking clear motives and trust, such as freezing, tantrum, and other contradictory behaviors when connecting with their parents or caregivers (Ainsworth & Bowlby, 1991; Bretherton, 1994; McLeod, 2017).

**Attachment and its Role in Development**

These theoretical concepts of attachment or individuals' idea of needing to belong have been shown to cross cultural lines, which has assisted in defining attachment as an evolutionary theory (West et al., 1998). Nevertheless, developmental psychology

literature continues to explore differences present within various populations. These literary developments have assisted in further understanding the process, mechanisms, and outcomes of attachment, which furthers the need for culturally relevant literature with a focus on attachment and its prediction on the ESI of African American females during mid-to-late adolescence.

According to the American Psychological Association (2020) and notable psychological scholars, attachment is foundationally and currently defined as individuals' initial bonding experience, which is facilitated by parental figures or caregivers' conditioning of expressing a sense of a safe base that provides emotional and social reassurance, support, and protection.

Furthermore, the attachment theory provides additional knowledge of specific mechanisms and of outcomes that can assist in understanding how foundational experiences and interactions influence psychological wellness for individuals throughout the developmental process. For example, resilience within new or indifferent environments and individuals' abilities or competencies to express their needs and emotions are highly correlated with the underlining mechanics of establishing initial attachments with parental figures and caregivers (Bonab & Koohsar, 2011).

Attachment, like other basic needs, is an essential cornerstone of all individuals' development. Findings concerning early attachment dynamics suggest the importance of early emotional and social support and wellness in individuals perceived and actual quality of life (Li et al., 2016). Previous research offers further assistance for examining developmental outcomes associated with insecure attachments early in development, and

the role attachment plays in individuals' psychological, social, romantic, and various areas of the developmental process (Ainsworth & Bowlby, 1991; Bretherton, 1994).

The theory of attachment is inspired by the idea, individuals' initial bonding, emotional, and social experiences with their parental figures or caregivers provide the foundational base for future experiences, understanding, and one's skills to have positive interpersonal and intrapersonal wellness and experiences (Ainsworth & Bowlby, 1991). Further examinations of the mechanisms that contribute to the understanding of attachment are provided by Ainsworth and Bowlby (1991) and scholars that have assisted in the development of a singular definition or theoretical model of attachment and contributed an in-depth explanation of the influential processes of the initial emotional and social foundational base (Rahmani & Ulu, 2021).

Bowlby suggested attachment is an important process, which assists with predicting and understanding individuals' social environments and the world (Bowlby, 1980). In conjunction, Mary Ainsworth defined attachment with a focus on environmental reactions and caregiver security, which has assisted in the well-known attachment definition utilized within research today (Ainsworth & Bowlby, 1991). Other notable scholars, such as Schaffer and Emerson (1964), examined unique differences in initial parental attachment, and suggest individual factors were fundamental to understanding attachment and its foundational roots within individuals' development (Rahmani & Ulu, 2021). While Kagan (1984) theorized attachment was a fluid process, which was influenced by several factors throughout the lifespan. With each theoretical perspective contributing to the field of developmental psychology, Bowlby and

Ainsworth's theory of attachment continues to be the cornerstone for research within this field of study.

The attachment theory has aided the field of developmental psychology and social science and has provided significant scientific contributions. This theory has been utilized in the study and examination of many areas of development and remains a key component when seeking to understand human behavior (Szalai et al., 2016). Within the African American culture, individuals are impacted by factors such as attachment or closeness, and security within emotional and socially protective barriers. Cultural components of development, specifically, initial bonding and emotional-social experiences are found to highly influence individuals' psychosocial well-being and intelligence (Aguilar-Luzón et al., 2014). Research suggests, similar to the need to belong, initial parent attachments assist in laying the foundation for intrapersonal and interpersonal competencies and continue to be a key indicator of success and the quality of life for individuals (Keizer et al., 2019).

Attachment continues to be examined as a factor of influence within developmental. Researchers have continued to find attachment styles as a predictor in several areas of development, health, and social wellness (Fearon & Roisman, 2017). Nevertheless, continued research within this area of developmental science can offer additional insight concerning attachment and its significance in human development. As research seeks to further examine individuals' unique developmental sphere, additional attachment research can be beneficial in filling the gap in the literature concerning

attachment and its prediction of the ESI of African American females during mid-to-late adolescence.

Historically, attachment has been utilized in the examination of early developmental stages and the formation of initial bonds between parental figures and their children. This concept is also utilized to examine outcomes later in individuals' development (Rahmani & Ulu, 2021). Furthermore, researchers are increasingly utilizing the concept of attachment to study potential predictive relationships to influential factors related to developmental outcomes. For example, attachment has been linked to individuals' interpersonal outcomes. Liu and Wang (2021) recruited 1380 adolescents from a middle school in China and sought to examine attachment and its relationship to adolescents' character strength. Researchers concluded secure parental attachments are a key predictor of higher levels of character strength during adolescence. In addition, findings suggest early parental attachment quality can assist in predicting peer attachment in adolescence (Hazel et al., 2014; Liu & Wang, 2021). In recent years, scholars have begun to examine attachment and its role in individuals' development throughout their lifespan. For example, Bodfield et al. (2020) utilized the AAQ to examine the theory of attachment within an adolescent population. Researchers utilized the below concepts to examine attachment.

### **Angry Distress**

Within the AAQ, the construct of angry distress assists with exploring attachment during adolescence. Angry distress is defined as individuals' expression of hostility, anger, and the feeling of distress toward their parents or caregivers (Bodfield et

al. 2020). This representation of attachment can be seen within infancy and throughout adolescence. Within the attachment theoretical model, literature theorizes attachment styles influence infants' ideas of support, emotional and social skills, and competencies. For example, secure attachment is associated with decreased levels of angry distress and returning to a positive or neutral base. Angry distress is also associated with the idea of needs not being met. It is hypothesized higher angry distress levels are associated with insecure attachments, which include insecure disorganized, insecure-avoidant, and insecure restraint/ambivalence attachment styles. It is hypothesized to be associated with an initial untrusting base, in which their belief is their basic needs will not be met or met in an unsupportive manner in which exhibit or express fear by their parents or caregivers. (Ainsworth & Bowlby, 1991; Bretherton, 1994; McLeod, 2017). Secure attachment within infants is theorized as experiencing less angry distress levels. In contrast, infants with insecure-avoidant attachment experience an untrusting base, where their basic needs are inconsistently met, which are associated with or hypothesized to be associated with higher levels of angry distress. It is hypothesized that adolescents with an initial insecure-avoidant attachment will exhibit higher levels of angry distress (Ainsworth & Bowlby, 1991; Bretherton, 1994; McLeod, 2017).

### **Availability**

Within the AAQ, the construct of availability assists with examining attachment during adolescence. Availability is defined as adolescents' internal perspectives of parents' or caregivers' ability to understand and meet their emotional needs (Bodfield et al. 2020). This representation of attachment can be seen within infancy and throughout

adolescence. Within the theoretical model of attachment, literature theorizes initial bonding experiences influence adolescents' perspectives of parental support, and ultimately their emotional-social competencies. For example, infants identified as securely attached are associated with increased levels of availability. While lower levels of availability are suggested to be influenced by insecure attachments during infancy. Within the AAQ, availability is associated with the idea of adolescents' needs being met and the perspective of having a supportive base. Research findings suggests, higher availability levels are associated with secure attachments, while lower levels of availability are hypothesized to be associated with insecure attachments, specifically insecure-avoidant and insecure-restraint/ambivalence attachment styles (Ainsworth & Bowlby, 1991; Bretherton, 1994; McLeod, 2017).

### **Goal-Corrected Partnership**

Within the AAQ, the construct of goal-corrected partnership has assisted with understanding attachment during adolescence. Goal-corrected partnership is defined as adolescents' ability to be understanding and cooperative with parent or caregiver's needs, in conjunction with their own needs and wants (Bodfield et al. 2020). For example, goal-corrected partnership is exhibited during parent-adolescent goal or need differences. It is hypothesized, securely attached adolescents make or seek to make decisions that mutually support both the parent and adolescents' goals or needs through mutual understanding. This representation of attachment can also be seen during infancy and throughout adolescence. Within the theoretical model of attachment, the literature suggests attachment styles influence individuals' idea of interpersonal mutuality and

understanding, as well as one's emotional and social abilities. For example, secure attachment is associated with increased levels of goal-corrected partnership and working for a common or mutual goal. While, lower scores relating to goal-corrected partnership or behaviors are associated with insecure-avoidant and insecure insecure-restraint/ambivalence attachment styles (Ainsworth & Bowlby, 1991; Bretherton, 1994; McLeod, 2017).

In addition, Li et al. (2020) examined mother-child attachment in relation to psychological and emotional-social outcomes. Researchers hypothesized adolescents with healthy maternal attachments would experience fewer psychosocial risks associated with intrapersonal and interpersonal distress and insecure-avoidant attachment. Li et al. (2020) recruited 425 Chinese adolescents, ages 12 years to 17 years. This research utilized the Italian Inventory of Parent and Peer Attachment (IPPA-R), the Family Allocentrism-Idiocentrism Scale (FAIS), and the Children's Depression Inventory (CDI) and found that mother-child attachment greatly influences the psychosocial impressions during adolescence (Li et al., 2020). Current literature suggests parental attachment has predictive characteristics, which can assist in examining developmental outcomes and mitigating risk factors seen throughout the developmental process (Khaleque, 2003; Szalai et al., 2016; Balan et al., 2018). In contrast, Bodfield et al. (2020) examined United Kingdom adolescents and found parent-adolescent attachment as measured by the AAQ found external validation concerning attachment and its predictive relationship on developmental outcomes through infancy and into adolescence. Research findings such



as these continue to suggest, additional research is needed in relation to attachment and diverse populations.

Furthermore, researchers have begun to examine attachment concerning to specific areas of development, such as emotional-social outcomes. Within developmental psychology, attachment continues to be a topic of discussion, which provides additional justification for the increased need for additional attachment-focused literature.

Attachment, though a foundational formed early in the lifespan, has been shown to influence several areas of development, important to living a well, balanced, and successful quality of life.

With the intention of this research being to further understand how attachment predicts the ESI of African American females during mid-to-late adolescence, the attachment theory has provided a theoretical basis for understanding the early experiences which influence emotional and social development. The rationale for choosing the attachment theory is individuals' early experiences with parental figures and caregivers have been shown to provide the basis for future emotional and social communication and behaviors. Past literature has determined early attachment experiences influence individuals' interpersonal and intrapersonal skills, abilities, and the quality of social interactions (Altaras Dimitrijević et al., 2020). The attachment theory provides a relationship between attachment styles and individuals' emotional and social intelligence outcomes.

In conclusion, the theory of attachment was selected as a theoretical framework due to its exploration of attachment experiences, its foundational milestone outcomes,

and its impact on individuals' development throughout their lifespan. Within this study, it was theorized the attachment or the initial bonding experiences of African American females during mid-to-late adolescence will influence this population's interpersonal and intrapersonal path, and the quality of life. The theory of attachment proposes the psychological framework, in which, this study has supported and further explored attachment and its prediction on African American females' ESI during mid-to-late adolescence.

### **ESI**

Developmental psychology has sought to explore developmental milestones and factors that influence the quality of these developmental stages and ultimately individuals' quality of life throughout their lifespan. ESI or individuals' abilities relating to the intrapersonal and interpersonal aspects of psychological development have been a long-lasting, important, and forthcoming investigation as it relates to attachment and cultural aspects of development in African American females during mid-to-late adolescence.

ESI has a foundational and influential role in the developmental and societal success of all individuals. Within all social environments, individuals encounter emotional and social interactions, which are important to individuals' developmental success. These factors of psychological development are often foundationally formed during early social interactions, specifically parental attachments and bonding experiences. The development of emotional and social skills and competencies are foundational, but also fundamental for adolescents during emerging adulthood.

Within previous literature, early experiences were suggested to be the catalyst in which these developmental areas are influenced and exhibited within interpersonal and social interactions during adolescence. Bar-On (2006) has been identified as the father of ESI, but further than this exploration of these developmental outcomes, senior researchers have theorized individuals' initial attachment, but also social learning, influence the emotional and social development during infancy and into adulthood (Ainsworth & Bowlby, 1991).

Recently, researchers have begun to examine ESI in conjunction with human development. Throughout their lifespan, individuals' experiences and interactions assist in the development of individuals' psychological foundations and growth (Rahmani & Ulu, 2021). This foundation is utilized by individuals to explore and understand their later experiences and the world around them. The emotional intelligence theory suggests individuals' emotional abilities and competencies contribute to individuals' intrapersonal experiences, outcomes, and ultimately individuals' achievable quality of life.

Consequently, this theory was expanded upon, with the addition of social or interpersonal aspects of psychological outcomes (Bar-On, 2006). The examination of emotional and social intelligence began in 1935 with its first formal introduction as emotional and social competencies, but also a cross-relationship of individuals' emotional and social competencies, skills, and natural disposition (Edgar, 1935). Research suggests these concepts are key components to the interpersonal and intrapersonal psychological wellness of individuals throughout their lifespan, and ultimately their quality of life.

Earlier ESI research suggests the importance of examining both emotional and social aspects of individuals' development, in hopes of further understanding the roles each play in psychological wellness (Edgar, 1935; Rahmani & Ulu, 2021; Al-Khateeb et al., 2020). These literature contributions have further assisted researchers in the exploration of emotional and social intelligence and its importance in individuals' development throughout the lifespan. For example, Arghode (2013) found higher levels of social competencies and emotional intelligence led to students experiencing increased positive interactions within the classroom, which ultimately leads to educational, career, and socioeconomic success. Research has shown these factors directly influence individuals' idea of self-obtainment and ultimately their perceived quality of life (Hirschi, 2009; Segrin, 1993).

Bar-On suggested ESI facilitates different aspects of individuals' social wellness development and ultimately their quality of life. Emotional intelligence and social intelligence have been shown to influence many key areas of psychological and socioeconomic wellness, for example, career success and work relationships are often impacted and influenced by ESI (Segrin & Flora, 2019; Schröder-Abé & Schütz, 2011). With research providing evidence that many areas of development are impacted by emotional and social intelligence, researchers suggest additional exploration of how additional factors may influence the ESI of individuals. Furthermore, as society continues to develop, change, and become increasingly more diverse, it is important to continue the examination of human developmental and psychosocial wellness within diverse populations. This research inquiry has assisted and filled the gap that remained within

developmental psychology, concerning attachment and its prediction of the ESI of African American females during mid-to-late adolescence.

Bar-On (2006) defines ESI as a cross-relation of emotional and social competencies, skills, and facilitators, which assist individuals in communicating and understanding their emotions, relating with others, and coping with daily and social demands. Bar-On identified key concepts of ESI, which included (a) the ability to recognize, understand and express emotions and feelings; (b) the ability to understand how others feel and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage, modify, adapt and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive affect and be self-motivated (Bar-On, 2006). In-depth investigations suggest the concepts below are important to the interpersonal and intrapersonal psychological wellness of individuals throughout their lifespan, and ultimately their quality of life (Snow, 2009; Rahmani & Ulu, 2021). The ESI concepts above, assist in examining and defining the following BarOn EQ-i:YV (S) subscales utilized in this research.

### **Intrapersonal**

Within individuals' developmental experiences, intrapersonal abilities and skills are core areas that influence individuals' quality of life. Intrapersonal abilities are competencies that assist individuals with monitoring and maintaining their psychological and emotional health and wellness (Rahmani & Ulu, 2021). Intrapersonal abilities and skills are essential within the theoretical framework of ESI, in that the intrapersonal is associated with the following ESI components: (a) the ability to recognize, understand

and express emotions, and feelings, (b) the ability to manage and control emotions; and (c) the ability to be self-motivated.

Bar-On and additional research findings suggest these ESI components assist with the individuals' intrapersonal abilities, competencies, and success within a given psychosocial experience (Bar-On, 2006; Rahmani & Ulu, 2021). These competencies create the success or indifference of one's mental and internal wellness components. Intrapersonal skills allow individuals to have positive internal experiences and assist with resilience within indifferent circumstances, situations, and environments (Borelli et al., 2018). Higher intrapersonal levels in adolescents are associated with lower levels of depression and at-risk and self-harming behaviors, such as suicide, substance abuse, and sexually risky behaviors (Riley & Schutte, 2003). Intrapersonal abilities and competencies are vital due to the importance and regard for self and personal wellness and health. Within research intrapersonal wellness has been a determining factor for how individuals deal with stress, interpersonal relationships, and times of solitude (Sanchez-Alvarez et al., 2016; Sellnow et al., 2021).

### **Interpersonal**

Interpersonal competencies are vital for many areas of life. Throughout the lifespan and foundational to the theoretical model of ESI, interpersonal abilities are vital, in that this aspect of ESI is associated with the following intelligence components: (a) the ability to recognize, understand, and express emotions and feelings; (b) the ability to understand how others feel and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage change, adapt and solve problems of a personal and

interpersonal nature; and (e) the ability to generate positive affect and be self-motivated (Bar-On, 2006).

This ESI concept is important in family dynamics, academic and education, career, and romantic interactions (Hirschi, 2009). Individuals with higher levels of interpersonal abilities and competencies are hypothesized to experience increased success in social interactions and other fundamental areas that influence the quality of life within societal conditions. Irfan and Kausar (2020) examined adolescents' emotional intelligence concerning to demographic factors. Findings suggest individuals' demographic or cultural environment influence and assist with interpersonal skills and abilities, particularly concerning adolescents. Interpersonal communication and competencies are important in all social interactions and environments throughout the lifespan.

### **Adaptability**

Adaptability, as one of the main concepts measured within emotion and social intelligence, is a key component throughout individuals' development and personal developmental path. Adaptability competencies and skills are vital to the theoretical model of ESI, in that adaptiveness in social sectors is a critical aspect of high ESI and healthy living. Adaptability is associated with Bar-On's ESI components: (a) the ability to recognize, understand and express emotions and feelings; (b) the ability to understand how others feel and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive affect and be self-motivated.

This component of adjustment, specifically during adolescence, is important as adolescents navigate through indifferent environmental and developmental changes, which further assist with the overall success of individuals' emotional and social intelligence during each stage of development and throughout the lifespan.

### **Stress Management**

Stress management has been a key indicator of success within not only adolescence but also all stages of development. In addition, this key component has assisted in mitigating risk factors within mental health including lower self-esteem and depression and mitigates suicide (Szalai et al., 2016). Stress management has been extended and utilized in many different areas of medical and psychological research. Within current society, stress management within all areas is closely related to the success of individuals' interpersonal and interpersonal developmental outcomes. This concept allows individuals to not only maintain balance but also be resilient in the face of the adversities previously and/or currently face (Gloppen et al., 2019). Stress management skills are vital to the theoretical model of ESI, in that this component influence one's ability to manage indifferent circumstances. This ESI component is associated with the following ESI components: (a) the ability to recognize, understand and express emotions and feelings; (b) the ability to manage and control emotions; (c) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (d) the ability to generate positive affect and be self-motivated (Bar-On, 2006).



Bar-On (2006) and additional research findings suggest this ESI component assists with individuals' wellness, intrapersonal, and interpersonal competencies, and success within a given internal or external experience. Higher stress management skills and abilities are a key component of emotional and social intelligence because stress and the management of it are important to having a high level of emotional intelligence and ultimately a positive quality of life.

### **General Mood**

General mood is a fundamental component of ESI and wellness. General mood is defined as the habitual or baseline psychological state of an individual. Higher levels of general mood can assist individuals in several areas of development, including intrapersonal, stress management, positive expression, and interpersonal relations. Individuals' general mood is vital to the theoretical model of ESI, in that, general mood is associated with the following ESI components: (a) the ability to recognize, understand and express emotions and feelings; (b) the ability to manage and control emotions (c) the ability to manage change, adapt, and solve problems of a personal and interpersonal nature; and (d) the ability to generate positive affect and be self-motivated.

General mood has a history within early development due to attachment and the various areas in which secure and indifferent attachments influence the social learning or conditioning of an individual within general or balance circumstances. This area of emotional social intelligence is vital due to the importance of individuals not only intrapersonal wellness but also general mood or disposition, which influences individuals'

emotional baseline state, but furthermore social aspects and the quality of individuals' life.

### **Positive Impression**

Positive impression, while not included in the ESI total score, is an important component of individuals' social interactions and wellness. Bar-On (2006) suggests positive impression is associated with (a) the ability to recognize, understand and express emotions and feelings; (b) the ability to understand how others feel and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive affect and be self-motivated (Bar-On, 2006).

Positive impression is a necessary component of development, but also has foundational developmental roots within social learning. The cultural differences seen in this ESI component make this investigation important, due to the variations seen within cultivated ways of thinking. Positive impression within different cultures differs and are worthy of examination when seeking to understand differences in the early stages of development, specifically attachment and its prediction of emotional and social intelligence. Positive impression, for all individuals, is imperative to all social or interpersonal relations.

Positive impression is defined as individuals' perspective or understanding of emotional and social experiences and circumstances (Bar-On, 2006). Positive impression can influence several areas of individuals' life including individuals' intrapersonal, social, and environmental perceptions, interactions, and communication. For example,

positive impression has been shown to influence adolescents' relationships with parental figures, peers, but also teachers, and authority figures. Positive impression is a vital component, specifically during adolescence, due to the emergence into adulthood and other areas of societal living and interactions, such as secondary education or career path. Furthermore, positive impression has been shown to influence individuals' interpersonal relationships with friends, family, and romantic interests into adulthood.

### **ESI and its Role in Development**

Developmental psychology literature continues to examine ESI in conjunction with human development. Early in the lifespan, individuals' experiences and interactions assist in the development of individuals' intrapersonal and interpersonal foundation (Borelli et al., 2018). A foundation which individuals utilize to explore and understand their later experiences and the world around them. Emotional and social competencies along with cultural components are suggested to influence several key areas of individual's lives, therefore an examination of the emotional and social intelligence of African American females during mid-to-late adolescence can assist in filling the gaps in the literature and further understanding these specific areas of individuals' developmental psychology.

Recently, researchers have begun to examine ESI in relation to different areas of developmental psychology (Segrin & Flora, 2019; Rahmani & Ulu, 2021). Researchers have examined the predictive relationship of emotional and social intelligence in not only job success and educational attainment, but also interpersonal relations and discovered a relationship between the quality of intrapersonal relations and the ESI of individuals

(Wenzel et al., 2005; Schröder-Abé & Schütz, 2011). Also, researchers have begun examining emotional and social intelligence within different aspects of social living. Anwer et al. (2017) examined emotional and social intelligence among university students in hopes of further understanding the impact it has on degree obtainment. Furthermore, researchers have begun examining emotional and social intelligence within different areas of career obtainment and career choice. For example, within law enforcement, Researchers found that the ESI of law enforcement officers have a great impact on their ability to analyze, read, and respond to a volatile situation (Mathews et al., 2006; Lane, 2000; Segrin, 1993; Albarello et al., 2021). Findings such as this suggest additional examination of emotional and social intelligence can further assist in filling gaps in literature within this area of psychology and assist scholars, professionals, and researchers in further examining key factors that can mitigate the increase in social problems and injustices. These findings also suggest higher levels of ESI lead to better communication, better interpersonal interactions and relationships in diverse situations, better job attainment, and ultimately a better quality of life (Crowne, 2009).

ESI research suggest the importance of examining both emotional and social aspects of individuals' development, in hopes of further understanding the roles each play in psychological wellness (Edgar,1935). These literature contributions have further assisted researchers in the exploration of emotional and social intelligence and its importance in individuals' development throughout their lifespan. For example, Arghode (2013) found higher levels of social competencies and emotional intelligence led to students experiencing beneficial interactions within the classroom, which ultimately is

influential to educational, occupational, and socioeconomic success (Albarell et al., 2021). Research has shown these factors directly influence individuals' idea of self-obtainment and ultimately their perceived quality of life (Segrin, 1993).

Furthermore, Bar-On suggested ESI facilitates different aspects of individuals' social wellness development and ultimately their quality of life. Emotional intelligence and social intelligence have been shown to influence many key areas of psychological and socioeconomic wellness, for example, career success and work relationships are often impacted and influenced by emotional- social intelligence (Segrin & Flora, 2019; Schröder-Abé & Schütz, 2011). With research showing many areas of development are impacted by emotional and social intelligence, researchers suggest additional exploration of how other factors may influence the emotional and social intelligence of individuals (Al-Khateeb et al., 2020). Research findings such as these suggest additional examinations of emotional and social intelligence can further assist in filling the gaps in literature within this area of psychology concerning parent-adolescent attachment and its prediction on ESI. This research inquiry has assisted and filled the gap that remained within developmental psychology concerning African American females during mid-to-late adolescence.

### **Attachment and its Influence on ESI**

Early in development, individuals begin to develop their view and understanding of the world, which suggest early attachment or parent-child attachments are important to understanding how individuals interact and understand the world. Attachment, the innate and affectionate connection between a parent and their infant have been shown to

influence several areas of development including emotional and social development (Ainsworth & Bowlby, 1991; Bar-On, 2006; Altaras Dimitrijević et al., 2020). With research continuing to develop within these areas of social science it is beneficial to explore the predictive relationship between attachment and emotional- social intelligence in African American females during mid-to-late adolescence.

Bowlby, not only suggests parent-child attachments influence the way individuals interact, but also the impression and expression of emotions, while Ainsworth and additional scholars suggest attachment influences how individuals deal and adjust to life's problems, hardships, and separations throughout their lifetime (Altaras Dimitrijević et al., 2020).

Ainsworth and Bowlby (1991), suggest the expression of emotions, interaction with others, and the resilience of individuals are influenced primarily by initial supportive and affectionate attachments. In conjunction, Bar-On (2006) suggests that ESI or a combination of abilities and competencies assists individuals with interpersonal and intrapersonal interactions. Past and current literature suggest, populations' cultivated ways of thinking and living continue to largely influence the developmental process and the ESI development, success, wellness, and quality of life of individuals. With previous scholars' suggestions of the importance of parent-child attachments on individuals' ESI, additional research is vital to continue the review, discussion, and further understanding of the relationship between early social experiences and ESI. This research sought to understand the predictive relationship attachment has on the development of emotional and social abilities and competencies during mid-to-late adolescence.

Bohab and Kooshar (2011) analyzed a sample of 75 adolescents, with the intent of exploring the relationship between attachment, and emotional-social competencies within adolescents engaging in anti-social activities. Researchers administered three instrumental scales, which include Salovey and colleagues' 1995 Trait Meta-Mood Scale and Collins's 1996 Revised Attachment Scale, to adolescents aged from 13-25 years of age, attending a remedial program in Iran. Findings from this research offer a further explanation concerning the predictive relationship between individuals' attachment, emotional-social competencies or intelligence, and their wellness and quality of life throughout their lifespan (Brabec et al., 2012; Crowne, 2009). Research continues to suggest attachment in conjunction with emotional-social competencies influences on adolescents' risk for engaging in delinquent and anti-social behaviors (Bonab & Kooshar, 2011). With research suggesting attachment predicts emotional-social intelligence and competencies, it is vital to continue exploring, to further extend the literature concerning the relationship between these vital developmental psychological concepts and milestones.

Furthermore, current research suggest parent-adolescent attachments influence the interpersonal and intrapersonal health and wellness of adolescents, especially adolescents' self- esteem and interpersonal satisfaction. Szalai et al. (2016) examined the above interpersonal and intrapersonal concepts among 5214 adolescents identified as being closely affiliated with or of a Hungarian culture or background. Scholars found parent-adolescent attachments greatly influence the interpersonal and intrapersonal beliefs concerning body image acceptance and satisfaction within adolescent females

(Irfan & Kausar, 2020). Nevertheless, attachment and emotional-social intelligence literature offer evidence-based support concerning the predictive relationship between attachment and ESI of individuals throughout their lifespan. Current findings show individuals' attachment experiences or their "self-management build" can influence several vital areas throughout the lifespan (Das et al., 2021).

Das et al. (2021) found these emotional- social building blocks had a great influence on how working adolescents continue to develop and express their ESI and abilities, specifically, emotional awareness, emotional self-regulation, and empathy. These findings suggest, parent-child attachment greatly influences individuals' ESI throughout the lifespan, but furthermore individuals' intrapersonal, interpersonal, and occupational growth and success, and individuals' ultimate quality of life.

Current research findings suggest additional inquiries concerning early attachments and their influence on several areas of emotional- social intelligence. Furthermore, with this predictive connection being made within the literature, scholars suggest further examination of what factors influence attachment, especially populations with unique cultural characteristics. This research inquiry has provided further assistance and understanding of the predictive relationship between attachment and emotional-social intelligence. This study is unique in that this study has assisted in filling the gap in the literature which remained concerning the influence of attachment and therefore the emotional and social intelligence of female adolescents of an African American ethnicity or culture.



## **Ethnicity, Demographics, and Culture and Their Role in Psychological Development**

Within developmental psychology, literature stresses the importance of examining populations or cultures' unique developmental paths, which includes individuals' social learning experiences.

Literature defines culture as a community's cultivated way of thinking, believing, behaving, and socially interacting (Durik et al., 2006; Strand et al., 2019; Ainsworth & Bowlby, 1991; Szalai et al., 2016). Scholars suggest these influential factors impact individuals' developmental psychology throughout their lifespan (Strand et al., 2019). Furthermore, research findings urge the noteworthiness of additional examination of cultural factors, as developmental psychology seeks to further understand how these unique factors influence individuals' developmental wellness and ultimately individuals' quality of life (Van Rooy et al., 2004).

Ethnic and cultural aspects of individuals' developmental process have long been an interest or topic of discussion within the developmental psychology and social science scholar community (Szalai et al., 2016). It is hypothesized, ethnic differences and culture or cultivated ways of thinking greatly influence individuals' worldly lenses and their perceptions and understanding of the world (Strand et al., 2019). Van Rooy et al.'s (2004) research inquiry sought to examine unique aspects shown to be characteristically different and influential within populations, in hopes of further understanding how developmental psychology literature can assist on a universal level. This research examines the role culture, gender, and age plays in the development or scores of individuals' emotional intelligence. Within, this research the sample population includes

60 Caucasians, 50 African Americans, and 135 Latin Americans, which researchers suggest would assist in examining group differences seen relating to emotional intelligence within the current literature. Research findings suggest culture and gender are significant factors of influence concerning the process and levels of emotional intelligence and social expression (Van Rooy et al., 2004; Strand et al., 2019; Schulze & Roberts, 2004; Irfan & Kauser, 2020). Specifically, females, Hispanics, and Blacks scored higher in emotional intelligence. These findings suggest further research inquiries are important to continue to expand literary knowledge within the developmental psychology and social science field, as scholars seek to assist in our goal of positive and universal social change.

Currently, developmental psychology and social science research suggest many noteworthy differences exist within various populations (Strand et al., 2019). Cheung et al. (2018) examined a group of adolescents' family dynamics and its prediction of the resilience of adjusting to new social environments in a specific population. As hypothesized, findings suggest family dynamics are positively associated with adolescents' adaptability competencies. In addition, Cheung et al. (2018) proposed the importance of examining different cultures and populations, in relation to psychosocial adjustment. Findings suggest adolescents within this population's abilities or competencies to adjust to a new social or contextual environment are mediated by adolescents' emotional intelligence. Researchers' implications suggest further examinations of cultural components as scholars seek to understand additional factors that influence individuals' psychological development. Furthermore, as developmental

psychology and social science seeks to further understand how culture influences populations' psychological growth, research suggest examining the African American culture, to explore this population's unique developmental social learning experiences.

Within previous research African American adolescents are understudied, though several social disparities and trends suggest examining this unique and at-risk population (Camille Hall, 2017). For example, national statistics offer important areas of distinction concerning social and psychological differences, where African Americans are more likely to experience mental health crises and not seek professional assistance (Mental Health of America, 2021). Research has found culture and cultivated ways of thinking within a community play an influential role in the developmental process of humans (Strand et al., 2019).

Within current developmental literature, researchers suggest examining additional variables that influence individuals' attachment styles and emotional-social outcomes throughout the lifespan (Van Rooy et al., 2004). Therefore, this research inquiry has sought to examine attachment and ESI within the African American community.

Historically within the United States, African Americans have experienced several different setbacks, risk factors, and multiple social disparities, which not only impact developmental outcomes but also the quality of life this culture can achieve. With this exploration of African American traditions, several differences stand out and highlight this population's cultural experience, cultural expression, and cultivated way of thinking, believing, and socializing. It is important to understand how cultural factors and the developmental psychology of populations influence one another, specifically the

emotional and social outcomes of African American females during mid-to-late adolescence.

Furthermore, researchers suggest emotional competencies are overall consistent throughout the lifespan. Brown et al. (2017) examined attachment and the emotional expression of African Americans from low-income communities and found parent-child attachment and the expression of emotions are relatively consistent through early childhood. Similarly, research provides positive implications concerning the importance of healthy parent-child attachment and positive social interactions and expressions of individuals' during adolescence and into merging adulthood (Riggo, 2006; Butler et al., 2019). Literature suggest this population is at greater risk for certain psychological and social disparities relating to emotional intelligence, therefore this research inquiry sought to assist in further exploring unique cultural aspects of individuals' development can provide guidance for improving developmental outcomes. Gignac and Ekermans (2010) recruited 786 adolescents within a South African community, in hopes of examining how cultural factors influence adolescents' emotional intelligence. Research findings suggest differences are present within the emotional intelligence of Black and White South Africans. With research suggesting cultural differences exist within adolescent populations, scholars suggest researchers continue examining these unique cultural differences, in hopes of further understanding how different factors influence the developmental process throughout the lifespan (Gignac & Ekermans, 2010; Van Rooy et al., 2004; Irfan & Kausar, 2020).

Throughout adolescence, African American females must balance both their unique individuality and cultural components. This stage of development, in addition to the unique societal influences, faced during adolescence, suggest the emotional and social intelligence of African American females is an important examination as I seek to fill this gap in the literature (Gloppen et al., 2019). Intrapersonal identity and wellness are fundamental parts to achieving a better quality of life for African American females. African American adolescent females are more likely to experience interpersonal and self-esteem issues which is an essential component to individuals' quality of life. Research shows African American females experience higher identity issues which are important to individuals' psychological wellness and African American female adolescents' emotional- social wellness and their long-term quality of life (Sanchez et al., 2018).

Intrapersonal health and a positive life experience throughout the lifespan have been shown to influence both the Individual and those to come. This research sought to further enhance developmental psychology literature. This study sought to fill the current gap in the literature concerning African American females during mid-to-late adolescence, as social science seeks to further understand the unique cultural characteristics, specifically, African American adolescent females' unique attachment and emotional- social experiences and outcomes (Irfan & Kausar, 2020).

Current research literature suggest African American females exhibit higher levels of emotional intelligence but also exhibit lower levels of intrapersonal and interpersonal skills, abilities, and competencies (Van Rooy et al., 2004). For example,

African American adolescent females are statistically found to have higher domestic violence issues than their counterparts, such as White Americans in the United States (Petrosky et al., 2017). These findings and others similar suggest additional examination is needed concerning the components that influence the emotional- social intelligence of specific cultural groups.

During adolescence, parent-adolescent attachments are shown to influence adolescents' ESI experiences (Aguilar-Luzón et al., 2014; Bar-On, 2006; Segrin & Flora, 2019; Szalai et al., 2016). In contrast research findings suggest intrapersonal or emotional regulation have inconsistent findings concerning cultural aspects, but in addition, research suggest developmental stages are worthy of examination (Antonsich, 2008). During adolescence, individuals are emerging into adulthood, where there is a transition from dependence to independence, and with this major developmental transition, it is important to examine factors, which influence the success and wellness of African American adolescent females.

Within this specific population, interpersonal skills and abilities have been seen to vary in relation to cultural or racial counterparts. African American female adolescents are more likely to experience teenage pregnancy and to become the head of the household within their family. Interpersonal skills and competencies often assist with social interactions and relationships. African Americans also are less likely to have positive interpersonal relationships within a career or work/vocational environments (Thomas & Au, 2002). These and similar findings suggest an understanding and an investigation of

African American adolescent females would be beneficial to improving this population's emotional and social intelligence and wellness within several key areas of development.

In addition to the above emotional-social intelligence components, stress-management is also included, as it is a significant component of healthy emotional and social wellness. Skills and competencies concerning stress management are required in every area of life throughout the lifespan and are important component to investigate within this specific population. African American female adolescents have a higher rate of living in impoverished or dangerous environments and domestic violence situations. In addition to social economic concerns, Edmunds and Alcarza (2021) suggest this component of emotional and social intelligence predicts these competencies in adolescence and throughout the lifespan. Stress management abilities and competencies are ESI skills that assist in dealing with circumstances that cause intrapersonal and interpersonal disequilibrium. This component of ESI is important within this population's early development specifically concerning parent-child attachment or care from parents or caregivers. As this population continues to progress within society, stress management is a key component to examine and understand as it relates to attachment in African American female adolescents.

Current research on African American females during mid-to-late adolescence suggest many future implications concerning this population. Curran et al. (2016) examined African American females, and the findings determine higher risk factors concerning social and physical health outcomes. Research reveals African American females account for higher numbers of HIV cases, experience higher social and racial

stigma, and account for higher numbers concerning teen pregnancy (Loflin & Barry, 2015; Camille Hall, 2017; Butler et al., 2019). These research findings suggest key differences are present within this population and suggest further examination of developmental variables as scholars seek to further understand the factors that influence African American females' psychological development and wellness during mid-to-late adolescence, and throughout their lifespan. The above research implications suggest it is noteworthy to continue investigating diverse populations within developmental psychology, specifically African American females during mid-to-late adolescence. This study has assisted in increasing the universal aspects of developmental psychology and social science literature as scholars seek positive social change and the development of mitigating resources to assist individuals in improving their developmental wellness and quality of life.

### **Summary and Conclusions**

Researchers within developmental psychology have continued exploring attachment and its relationship with human development. Literature on attachment has shown predictive relationships involving key areas of developmental psychology. I examined African American females during mid-to-late adolescence and predictive relationships between attachment and ESI. As a result, this research will contribute additional data within the developmental psychology field, which can assist scholars, researchers, and professionals with further mitigating social disparities within African American communities as they relate to attachment and ESI of females during mid-to-late adolescence.



Within this chapter, a literature review involving attachment, ESI, and African American females during mid-to-late adolescence was provided. In addition, culture and its relevance were reviewed. In Chapter 3, a detailed description of the research methodology used within this study is provided.

### Chapter 3: Methodology

In this chapter, a detailed description of this study and research methodology used to examine the research question is provided. First, a description of the overall research design and design rationale is provided. Next, a description of the population and specific sample is outlined. Third, an explanation of survey instruments is provided. Last, a description of data collection procedures, ethical concerns and considerations, and efforts taken to address these concerns is provided.

The purpose of this study was to examine attachment (IV) and its prediction of ESI (DV) among African American females during mid-to-late adolescence. The goal of this study was to further explore parent-adolescent attachment and how this developmental concept can assist in predicting ESI of African American females during mid-to-late adolescence.

Previous research indicates further examination of the predictive relationship between attachment and ESI. Early attachment experiences predict or influence emotional and social abilities, competencies, and outcomes (Brown et al., 2017). This study was designed to examine the predictive relationship of attachment and ESI on African American females during mid-to-late adolescence.

#### **Research Design**

The research design used in this study was quantitative. The quantitative method was chosen due to my intention of examining variables with statistical or numerical parameters. The goal of this study was to examine the relationship between attachment and ESI in a unique population, which required a quantitative research approach.

Quantitative research provides several benefits involving examining different phenomena within specific populations. This research design includes multiple approaches to examining independent, dependent, mediating, and moderating variables. Anwer et al. (2017) examined social competencies in relation to attachment styles and ESI and concluded both ESI had a positive correlation with healthy attachment, but also high social intelligence was a moderating factor for both attachment and emotional intelligence in young adults. This specific research involves examining the predictive relationship between an independent and dependent variable within a specific group. Attachment and ESI were explored using the survey method, which was administered to participants. This specific method of examination assisted in exploring predictive relationships between attachment and ESI among African American females during mid-to-late adolescence.

In addition, I used a multiple linear regression analysis to examine existing relationship between African American females' parental attachment and their ESI during mid-to-late adolescence. This approach assisted with examining the independent variable in relation to its influence or impact on the dependent variable.

### **Research Rationale**

The goal of this study was to examine the relationship between attachment and ESI in a unique population, which required a quantitative research approach.

A qualitative design can assist in exploring specific human or individual experiences. By contrast, a mixed methods design involves exploring both statistical data and individualized experiences. For this research, a quantitative research method was

used to examine predictive relationships between attachment and ESI of African American females during mid-to-late adolescence.

Quantitative research provides several benefits when seeking to examine different phenomena within specific populations. This research design includes multiple approaches to examining independent, dependent, mediating, and moderating variables. Both ESI had a positive correlation with healthy attachment, but also high social intelligence was a moderating factor for both attachment and ESI in young adults. This study involved examining predictive relationships between independent and dependent variables within a specific group, which required a quantitative analysis. Attachment and ESI were explored using a survey which was administered to the population under study. This specific method of examination assisted in exploring predictive relationships between attachment and ESI in African American females during mid-to-late adolescence.

### **Population**

This study required a specific population to examine the research question. The target population is African American females during mid-to-late adolescence between 15 and 18 years old. African Americans were selected due to limited research data and the importance of examining developmental outcomes for this population. Females were selected due to my intent to examine a specific population. Furthermore, there is a lack of psychological literature on females within this population. Mid-to-late adolescents were selected due to limited literature concerning adolescence and the importance of examining this population prior to adulthood.

Participants utilized in this research were high school students and high school graduates. Also, social media recruitment was utilized to reach the focal group, with the intent of the benefit of parents' increased usage of social media. This method of recruitment was selected due to the increased number of focal group's participation in social media platforms and the feasibility of reaching large groups of potential participants.

### **Sample and Sampling Procedures**

This research utilized a non-probabilistic sampling method to examine the predictive relationship between attachment and the ESI of African American females during mid-to-late adolescence. This methodology is utilized to explore a specific population in conjunction with the quantitative research design method. Within psychological research, the probability sampling method is primarily utilized in research inquiries that seek to examine nonspecific populations or groups of individuals. This method of sampling is beneficial for research studies that seek to explore a phenomenon in conjunction with society. In contrast, the non-probabilistic sampling method offers an examination on an introspective level, which provides a specific exploration of a population of interests. The non-probability sampling method was utilized for this research inquiry due to the purpose of examining a specific population, African American females during mid-to-late adolescence. Furthermore, this study on African American females during mid-to-late adolescence utilizes a convenience sample, due to its purpose of examining a specific ethnic group or culture. In contrast, the random sampling method examines phenomena with non-specific samples or populations. To ensure the population

in this research study was representative of the population of interest, this study has ensured the recruitment method allowed a sufficient number of diverse African American females during mid-to-late adolescence to participate in the research study, which has increased the generalizability of this study's findings. The recruitment method utilized in this study was social media. Previous research studies indicate the convenience sampling method is sufficient when examining a specific population in conjunction with a phenomenon of interest. The convenience sampling method offers a perspective for research studies that seek to examine the phenomenon in a specific population.

This research study's sampling population inclusive criteria included: 1) African Americans, 2) females, and 3) ages 15-18. The exclusion criteria for this study included: 1) individuals identifying as race groups not African American, 2) individuals identified as male, 3) age groups 14 and under, and age groups 19 and older.

In addition, the G-Power analysis suggested a minimum sample size requirement of 77 participants for this research study.

### **Procedures for Recruitment, Participants, and Data Collection**

As this study sought to examine African American females during mid-to-late adolescence, the procedure for recruitment, participants, and data collection was as followed. The procedure for recruitment consisted of utilizing social media platforms, such as Facebook which serves parents and guardians of African American females during adolescence. The procedure for confirmed parental consent consisted of parents of participants receiving a detailed form on the purpose of the study and signing a confirmed parental consent form to allow the child to participate in the study. In addition,

participants reviewed and completed a consent or an assent form for research. A demographic survey was administered to participants. The demographic survey assisted with the inclusion criteria, which will include sex, ethnicity/race, age, and grade level. The procedure for data collection utilized self-administered questionnaires. Within this study, participants accessed the AAQ (West et al., 1998) and the BarOn EQ-i:YV (S) (Bar-On & Parker, 2000) questionnaires using a link or QR code directing the participant to Survey Monkey. Survey Monkey offers the convenience of recruiting utilizing a method relevant or easily accessible to the age group which this study seeks to examine. The exit procedures for participants in this study consisted of participants completing the demographic, self-administered questionnaires or surveys, and obtaining the consent and assent forms for their records. The debriefing information will assist participants with understanding the intent of the study and examples of questions posed within the self-administered questionnaires or surveys. Furthermore, in conjunction with this research, participants did not need to return for additional follow-up or treatment procedures.

### **Instrumentation and Operationalization of Constructs**

To assist with the intent of this research, a demographic survey was administered to participants. The demographic survey has assisted with the inclusion criteria, which will include sex, ethnicity, age, and grade level. In addition, the AAQ (West et al., 1998) and the BarOn EQ-i:YV (S) (Bar-On & Parker, 2000) questionnaires were utilized within this research design. The AAQ was utilized to examine the attachment of participants and consist of nine questions. Angry distress, availability, and goal-corrected partnership are comprised of three questions per subscale. The scores for each subscale were examined in

conjunction with BarOn's total ESI score. According to West et al. (1998), as cited by Bodfield et al., (2020), the AAQ offers reliability and validity as the following; demonstrated internal consistency (Cronbach's  $\alpha$  angry distress = .62, availability = .80, and goal-corrected partnership = .74), test-retest reliability across a 3-month period (angry-distress  $r = .68$ , availability  $r = .73$ , and goal-corrected partnership  $r = .72$ ) and convergent validity with the AAI (secure classifications = availability  $p = .031$ , preoccupied classifications = angry distress:  $p = .011$  and dismissing classifications = goal-corrected partnership:  $p = .01$ ). However, despite the AAQ being used in many empirical studies (e.g., Cawthorpe et al., 2004; Elgar et al., 2003; Schober et al., 2004), the factorial validity of the AAQ has not been established in additional diverse populations; The AAQ, which has been utilized within this study. The AAQ is comprised of 9-items of assessment, which are scored on a 5-point Likert scale. The AAQ consists of three subscales of attachment (Angry Distress, Availability, and Goal-Corrected Partnership). The subscales examined by the AAQ have assisted with examining attachment in African American females during mid-to-late adolescence.

In addition, the BarOn EQ-i:YV (S) (Bar-On & Parker, 2000) was utilized to assess the ESI of participants. The BarOn EQ-i:YV (S) is a self-reporting instrument, which reviews six emotional- social competency dimensions (positive impression, intrapersonal, interpersonal, stress management, adaptability, general mood, and a total ESI). This study utilized the total ESI score to examine to research hypotheses, which is comprised of intrapersonal, interpersonal, stress management, and adaptability. The BarOn EQ-i:YV (S) exclude positive impression and general mood scores from the total



ESI score. Prior to calculating the total ESI score, Items #5, #8, #9, #12, #17, #26, #27, and #29 were reverse scored. According to Dawda and Hart (2000), the BarOn EQ-i offers reliability and validity as the following concerning the examined normative sample population ( $M=100$ ;  $SD=15$ ) on most EQ-i scales. The reliability was significant for the EQ Total score, as well as the EQ composite scales for both genders (t-tests corrected for unequal variances, all  $p<01$ ). Internal consistency for the EQ-i overall score was found to have high reliability, though the overall scores were less homogeneous than individual subscale scores. All composite scales correlated highly with EQ-i overall scores, ranging from 0.67 to 0.93, which provides validity in combining the three sub-scales into a total score EQ-i. Also, the correlations among the composite scales generally were moderate, ranging from 0.32 to 0.83 (Mdn=0.57). BarOn EQ-i overall scores had a pattern of convergent and discriminant validities similar to that of all the composite scales, with the possible exception of Interpersonal EQ. In general, people with high EQ-i total scores had low levels of negative affectivity and high levels of positive affectivity. Most convergent/discriminant validity results were very similar for women. In addition, Gilar-Corbi et al. (2021) suggested the following concerning the internal validity of the total BarOn EQ-i: YV (S), considering the Positive Impression scale, Cronbach's alpha ( $\alpha$ ) and McDonald's Omega ( $\Omega$ ) are 0.76. When this scale is omitted, the value of  $\alpha$  is 0.73, which would increase to 0.74 if Item 12 were eliminated; the value of  $\Omega$  is 0.747, which would increase to 0.751 if Item 12 were eliminated. For the Intrapersonal scale,  $\alpha$  was 0.74, and  $\Omega$  was 0.77; for the Interpersonal scale,  $\alpha = 0.63$  and  $\Omega = 0.63$ . For the Stress Management scale,  $\alpha = 0.79$  and  $\Omega = 0.80$ , and the Adaptability scale shows  $\alpha$  and  $\Omega$

values of 0.80. The internal consistency of the Positive Impression scale is  $\alpha = 0.50$  and  $\Omega = 0.52$ . The BarOn EQ-i:YV (S) was utilized in this study. The BarOn Short Form offers participants a shorter format of the original BarOn EQ-i: YV. Each of these six dimensions of ESI are scored on a 5-point Likert scale within the BarOn EQ-i:YV (S) and is comprised of 30 items. Within the BarOn EQ-i:YV (S), items #3, #4, #7, #10, #11, and #15 are excluded to calculate a total ESI score.

The specific data points needed to answer this research question were the AAQ and the BarOn EQ-i:YV (S). The AAQ provided theoretical support for examining the initial infant attachment style and experiences to predict the ESI of African American females during mid-to-late adolescence. The BarOn EQ-i:YV (S) provided theoretical support for examining the ESI of African American females in conjunction with overall scores during mid-to-late adolescence, in conjunction with scores from the AAQ. Participants will complete each questionnaire at 1-time point. The data were analyzed as independent scores and an overall score for each instrument to assist with establishing the reliability of sub-scales scores.

### **Data Analysis**

This research utilized a multiple linear regression analysis. With the purpose of this study being to explore the predictive relationship between attachment and ESI of African American females during mid-to-late adolescence, this statistical analysis method has assisted in examining this possible predictive relationship. Attachment has been examined as a three-factor variable, while ESI was examined as one overall score. Linear

regression analyses have the primary purpose of examining a relationship among a population utilizing linear and predictive variables, and one dependent variable.

### **Ethical Considerations and Procedures**

Within research, ethical considerations and procedures are important to ensure the participants' well-being and human rights are respected. Within this research study, the following ethical considerations are included: 1) Recruitment consideration, 2) Participants' right to consent to participate in the research study. 3) Participants' right to exit or withdraw from the study at any time. 4) Participants' right to privacy and confidentiality. 5) Participants' understanding of the research study's purpose and intent. 6) Participants' understanding of research usage and treatment of data for further examination of developmental constructs within this study.

To ensure the above ethical considerations are addressed, the following procedures were utilized: I provided a brief introduction to the study, which included the inclusion and exclusion criteria for this research study, during the recruitment, consent and assent stage of the study. Participants and/or parents or guardians have received an introduction to the study, its purpose, and intent for research findings. Participants, parents or guardians have provided their consent and/or assent. Participants were directed to obtain the consent and assent forms for their records.

In addition, the following procedures were utilized to address ethical considerations related to data collection. Participants' personal identification information will remain anonymous and confidential, aside from the demographic information needed for the purpose and intent of this research study. The treatment of data will include

archiving the data collected for seven years. After seven years, the data collected will be destroyed using current privacy procedures. A password-protected program has been utilized for data storage. Data collected will be utilized for research and review purposes only. Data collected is accessible by the following individuals and/or entities: me, dissertation chair members, and the Institutional Review Board (IRB).

### **Summary**

Within this chapter, a detailed review of the research methodology used to examine attachment and its prediction of ESI of African American females during mid-to-late adolescence was provided. A quantitative and nonexperimental research design was used. In addition, a nonprobability or convenience sampling method was selected for this study due to my interest in examining a specific demographic population or cultural group. Via the nonexperimental design, surveys were used as the instrument or source for data collection for this population. To examine the predictive relationship between attachment and ESI, a multiple linear regression analysis was used. Furthermore, ethical considerations and procedures were explained to ensure overall psychological wellness of study participants. Within Chapter 3, a review and summary of results of this study are provided, in addition to implications of findings.

## Chapter 4: Results

The purpose of this study was to examine attachment and its prediction of ESI of African American females during mid-to-late adolescence. I sought to address if attachment predicts ESI of this group. It was hypothesized that attachment as assessed using the AAQ and the BarOn EQ-i:YV (S) predicts the ESI of this group. Within this chapter, a review of data collection procedures, results, and a summary is provided.

### **Data Collection**

The data collection process took place over a 2-month period between November 18, 2022 and January 21, 2023. The recruitment process for participants occurred through the social media platform Facebook. Parents accessed the study using a QR code or online link located in social media posts, which directed them to SurveyMonkey. All parents accessed the same link which included consent and assent procedures, the demographic survey, and online surveys. Consent and assent forms included information about the purpose and intent of the study, limitations, social benefits, and risks associated with participating in this study. I obtained data for this study using a demographic survey, the AAQ, and the BarOn EQ-i:YV (S) which participants completed in one setting.

During the first month, the recruitment rate was low. The response rate was also low, with eight responses during the first month. Due to a lower-than-expected response rate, I adjusted my research method. With IRB approval, the recruitment method was adjusted to add females who were 18 to my sample population. This assisted in increasing response rates and examining additional age groups during mid-to-late

adolescence. This adjustment occurred during the last month of the data collection process. Participants who were 18 accessed the same link which included consent procedures, the demographic survey, and online surveys.

During the second month of data collection, the recruitment rate increased due to increased participation and posts on Facebook. Also, the response rate increased during the last month of data collection, with 90% of data being received during this month. During the last month of data collection, the response rate increased, with 79 participants recruited in the last month. A total of 87 responses were collected.

Prior to conducting data analysis, I cleaned and checked the dataset for missing and incomplete responses and outliers. Of the 87 responses, 12 responses were not used for the following reasons. One participant did not meet age inclusion criteria and was automatically disqualified from the study, and no data were collected. Seven survey responses were incomplete. I used the Statistical Package for the Social Sciences (SPSS) and performed a box plot analysis to assist with identifying outliers in sample responses. There were no outliers identified involving anger distress or availability. According to the box plot analysis, there was one outlier identified involving goal-corrected partnership. In addition, three outliers were identified in total ESI score responses. All missing, incomplete, and outlier responses were removed. The final number of individuals who participated in this study was 75.

Baseline descriptive and demographic characteristics included in this study's final sample were gender, race/ethnicity, age, and grade level. Adolescent females constituted the whole sample population ( $n = 75$ , 100%). All participants were African American ( $n$

= 75, 100%). For age, 13.3% ( $n = 10$ ) of participants were 15, 25.3% ( $n = 19$ ) were 16, 32% ( $n = 24$ ) were 17, and 29.3% ( $n = 22$ ) were 18. The average age of participants was 16.77 years ( $SD = 1.021$ ).

In addition, 5.3% ( $n = 4$ ) of participants were in ninth grade, 18.7% ( $n = 14$ ) were in 10<sup>th</sup> grade, 26.7% ( $n = 20$ ) were in 11<sup>th</sup> grade, 34.7% ( $n = 26$ ) were in 12<sup>th</sup> grade, and 14.7% ( $n = 11$ ) had graduated from high school. This study's sample is proportionate to the larger population of interest in terms of age. The age mean indicates increased generalizability to the population of interest, which was African American females during mid-to-late adolescence.

## Results

The two instruments used to examine the research question were the AAQ and the BarOn EQ-i:YV (S). The AAQ scale is an instrument consisting of nine statements with responses on a 5-point Likert scale (0 = disagree, 1 = somewhat disagree, 2 = neither agree or disagree, 3 = somewhat agree, and 4 = agree). Responses to each subscales' three statements were summed to create a total score for each subscale, leading to higher scores involving availability and goal-corrected partnership indicating secure adolescent attachment with parents or caregivers. Lower scores involving angry distress indicated secure adolescent attachment with parents or caregivers. The BarOn EQ-i:YV (S) scale is an instrument consisting of 30 statements with responses on a 5-point Likert scale (1 = not true of me [never, seldom], 2 = just a little true of me [sometimes], 3 = pretty much true of me [often], and 4 = very much true of me [very often]). The 30 statements are divided into subscales: intrapersonal, interpersonal, stress management, adaptability, and

positive impression/general mood. Prior to calculating total ESI score, items 5, 8, 9, 12, 17, 26, 27, and 29 were reverse scored. According to the BarOn EQ-i: YV Technical Manual, positive impression/general mood items 3, 4, 7, 10, 11, and 15 were excluded (Bar-On & Parker, 2000). Only the 24 items from subscales (intrapersonal, interpersonal, stress management, and adaptability) were added to calculate a total ESI score with a higher score indicating higher intrapersonal and interpersonal abilities and higher ESI.

I conducted a skew, mean, kurtosis, and *SD* analysis to test for violations of underlying assumptions. Descriptive characteristics provided are for attachment (angry distress, availability, and goal-corrected partnership) and ESI scales. Attachment subscale means and standard deviations are as follows: angry distress ( $M = 3.906$ ,  $SD = 3.468$ ), availability ( $M = 7.840$ ,  $SD = 3.931$ ), and goal-corrected partnership ( $M = 9.786$ ,  $SD = 2.249$ ). The total ESI score mean was 63.28, with a standard deviation of 8.409.

To answer my research question, a multiple linear regression was performed using SPSS. The AAQ was used and measured three aspects of attachment: angry distress, availability, and goal-corrected partnership. In addition, the BarOn EQ-i:YV (S) was used to measure ESI of participants. Prior to conducting it, I tested for the following underlying assumptions associated with performing a multiple linear regression: linearity, homoscedasticity, normality, and independence of errors.

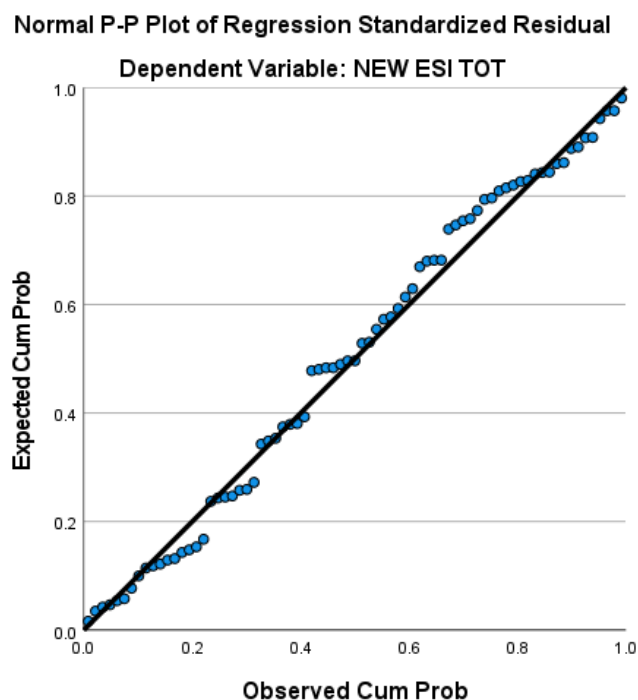
An underlying assumption that must be met prior to performing a multiple regression analysis is there must be linearity between the variables. I tested for a linear relationship between attachment (angry distress, availability, and goal-corrected partnership) and the total ESI scores. I used a P-P scatterplot to evaluate the linear



relationship (SPSS, 2021). I compared the score distributions to assess the distribution of the residuals with the normal distribution line. The P-P scatterplot represents a linearity between attachment (angry distress, availability, and goal-corrected partnership) and the total ESI scores (see Figure 1).

### Figure 1

*P-P Scatterplot for Attachment (Angry Distress, Availability, and Goal-Corrected Partnerships) and Total ESI*

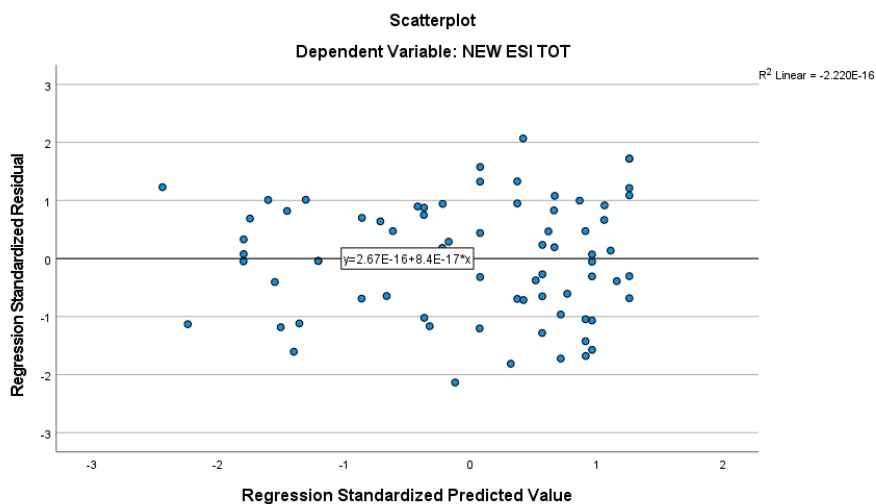


An additional underlying assumption that must be met prior to performing a multiple linear regression analysis is homoscedasticity. I tested for homoscedasticity by creating a scatterplot with the residuals against the dependent variable. The distance is relatively the same across the line and the data is randomly distributed. The data is

homoscedastic, and the underlying assumption was met. Figure 2 presents the scatterplot of predicted values and model residuals.

## Figure 2

*Residuals Scatterplot Testing Homoscedasticity Using Attachment (Angry Distress, Availability, and Goal-Corrected Partnership)*

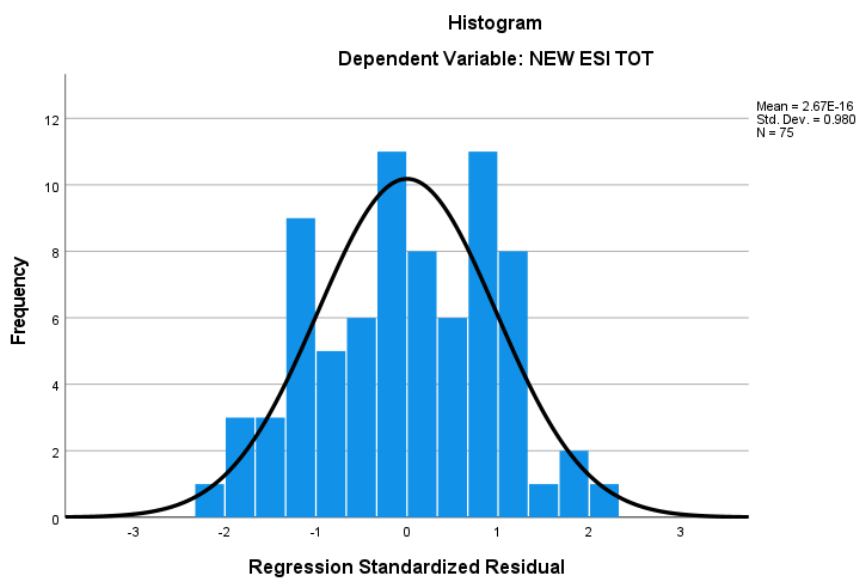


Next, I tested for the underlying assumption of normality prior to analyzing the data. A multiple linear regression requires the data to be normally distributed to all variables. I created a histogram to visually examine the distribution of the data. Normality is met if data is normally or evenly distributed and resembles a bell-shaped curve. Also, the assumption of normality can be examined by evaluating the skewness and kurtosis statistics. A dataset is normally distributed or meets the normality assumption, if the skewness and kurtosis are between -2 to 2, with a positive or negative indicating the tail direction of the data. As presented in Figure 3, the data in this study met the underlying assumption of normality. In addition, the skewness (kurtosis) was

.484 (-.774) for angry distress, -.565 (-1.053) for availability, -.736 (-.737) for goal-corrected partnership, and .035 (-.420) for total ESI, which indicate the data meets the underlying assumption for normality of the data. The skewness for angry distress was .484, which indicate this data is slightly more skewed on the right and is considered positively skewed with fewer data points as angry distress increase. The skewness for availability was -.565, which indicates this data is slightly more skewed on the left and is considered negatively skewed with fewer data points as availability decrease. The skewness for goal-corrected partnership was -.736, which indicates this data is slightly more skewed on the left and is considered negatively skewed with fewer data points as goal-corrected partnership decrease. Lastly, the skewness for total ESI was .035, which indicates this data is slightly more skewed on the right and is considered positively skewed with fewer data points as total ESI increase.

### Figure 3

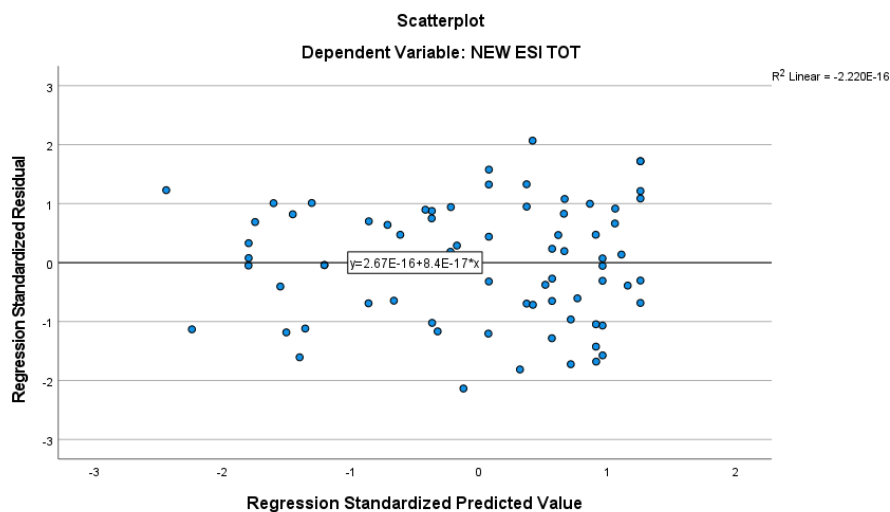
#### *Histogram of Normality*



The last underlying assumption tested prior to conducting the multiple linear regression analysis was the assumption of independence of errors or the absence of a relationship between the residuals and the variables. I reviewed the Durbin-Watson and the scatterplot to examine the data for the independence of errors. The Durbin-Watson was 1.89, which is close to the recommended Durbin-Watson value. Also, the scatterplot revealed there is no relationship between the residuals and the variables and met the multiple regression assumptions of independence of errors (Figure 4).

**Figure 4**

*Scatterplot of Independence of Errors*



The research question addressed in this study was does attachment (IV) as assessed by the AAQ predict ESI (DV) as assessed by the BarOn EQ-i:YV (S) of African American females during mid-to-late adolescence?  $H_0$ : Attachment (IV) as assessed by the AAQ does not predict ESI (DV) as assessed by the BarOn EQ-i:YV (S) of African American females during mid-to-late adolescence.  $H_a$ : Attachment (IV) as assessed by

the AAQ does predict the ESI (DV) as assessed by the BarOn EQ-i:YV (S) of African American females during mid-to-late adolescence.

A multiple linear regression was performed to analyze the prediction of ESI based on attachment (angry distress, availability, and goal-corrected partnership) in African American females during mid-to-late adolescence. Results indicated a significant regression model,  $F(3, 74) = 4.247, p = .008$  with attachment accounting for 15.2% of the variation in the ESI of African American females during mid-to-late adolescence (see Table 1 and Table 2).

**Table 1**

*Multiple Regression Statistics for Attachment (Angry Distress, Availability, and Goal-Corrected Partnership) and ESI*

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Change	F Change	df1	df2	Sig. F Change	
1	.390 <sup>a</sup>	.152	.116	7.90514	.152	4.247	3	71	.008	1.897

**Table 2**

*ANOVA Statistics for Attachment (Angry Distress, Availability, and Goal-Corrected Partnership) and ESI*

ANOVA <sup>a</sup>						
Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	796.246	3	265.415	4.247	.008 <sup>b</sup>
	Residual	4436.874	71	62.491		
	Total	5233.120	74			

As represented in Table 3, angry distress was not a significant predictor ( $\beta = -.067$ ,  $t = -.538$ ,  $p = .592$ ) of ESI. Availability was not a significant predictor ( $\beta = .151$ ,  $t = 1.087$ ,  $p = .281$ ) of ESI. Goal-corrected partnership was a significant predictor ( $\beta = .259$ ,  $t = 2.058$ ,  $p = .043$ ) of ESI. With an effect size of  $R^2 = .152$  and a Cohen's  $f^2$  value of .179, attachment is considered to have a small effect on the ESI of African American females during mid-to-late adolescence.

**Table 3**

*Coefficients Statistics for Attachment (Angry Distress, Availability, and Goal-Corrected Partnership) and ESI*

Model	Coefficients <sup>a</sup>					Correlations			Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients		Sig.	Zero-order	Partial	Part	Tolerance	VIF
	B	Std. Error	Beta	t						
1 (Constant)	51.913	4.717		11.004	<.001					
Angry Distress	-.163	.303	-.067	-.538	.592	-.209	-.064	-.059	.765	1.307
Availability	.322	.296	.151	1.087	.281	.312	.128	.119	.622	1.609
Goal-Corrected Partnership	.968	.471	.259	2.058	.043	.352	.237	.225	.753	1.327

a. Dependent Variable: NEW ESI TOT

### Summary

I intended to answer one research question by examining the predictive relationship between attachment (angry distress, availability, and goal-corrected partnership) and ESI of African American females during mid-to-late adolescence. A multiple linear regression was used to evaluate this predictive relationship. The

independent variable was attachment (angry distress, availability, and goal-corrected partnership) and the dependent variable was ESI.

IBM SPSS was used and yielded a sample size of 75. For the research question, there was a statistically significant predictive relationship ( $p = .008$ ) between attachment (angry distress, availability, and goal-corrected partnership) and ESI. Results indicated a significant regression model with attachment accounting for 15.2% of variations in ESI of African American females during mid-to-late adolescence. Angry distress was not a significant predictor of ESI, with  $p = .592$ . Goal-corrected partnership was a significant predictor of ESI with  $p = .043$ , which indicates ESI of African American female adolescents increases as goal-corrected partnership increases. Availability was not a significant predictor of ESI with  $p = .281$ . Based on these results, the null hypothesis was rejected.

Within this chapter, a review of data collection, descriptive statistics, statistical analysis, results, and a summary were provided. In Chapter 5, an additional overview and interpretation of findings, limitations of the study, recommendations, implications, and conclusion are provided.

## Chapter 5: Discussion, Conclusion, and Recommendations

The purpose of this study was to examine parent-adolescent attachment and its prediction of ESI of African American females during mid-to-late adolescence. This topic has not been examined. Walker et al. (2022) suggested examining attachment in conjunction with ESI throughout individuals' lifespan. Culture is a significant mediating factor in terms of differences involving attachment styles and expressions of attachment, as well as emotional-social normative thoughts and behaviors of a given cultural or ethnic group (Camille Hall, 2017; Emmerling & Boyatzis, 2012; Strand et al., 2019). Gender plays a significant role in the development and expression of ESI (Gilar-Corbi et al., 2021; Bindu & Thomas, 2006). Additional research would assist in further understanding this topic involving specific ethnic and cultural groups.

This study was conducted to explore developmental variables that influence ESI and wellness of African American females during mid-to-late adolescence, and to assist in filling gaps in the literature that remained concerning this topic. Key findings of this study suggest parental attachment predicts 15.2% of variance in ESI of African American females during mid-to-late adolescence. I found attachment during mid-to-late adolescence does influence ESI of African American females.

### **Interpretation of the Findings**

Attachment, emotional, and social intelligence play a fundamental role in psychosocial health and wellness (Sanchez et al., 2017). Szalai et al. (2016) found attachment greatly influences interpersonal and intrapersonal wellness within diverse



populations of adolescent females. To answer the research question, I examined data and determined a predictive relationship between attachment and ESI. I used a multiple regression analysis to answer this research question.

Attachment plays an influential role in terms of emotional-social abilities, experiences, and wellness. Results of this study included additional evidence concerning this topic. Results of the multiple regression analysis were significant, and the null hypothesis was rejected. I analyzed data and found that attachment accounted for 15.2% of variations in ESI of African American females during mid-to-late adolescence. In addition, I found that goal-corrected partnership was a significant predictor of ESI. Angry distress and availability were found not to be significant predictors of ESI.

Availability was found not to be a significant predictor of ESI for this focal population. Availability is defined as adolescents' internal perspectives of parents' or caregivers' ability to understand and meet their emotional needs. Findings suggest during adolescence, individuals depend less on their parental figures; availability was not a significant predictor of ESI of African American females during mid-to-late adolescence. During adolescence, they depend more on friends, and their needs are met apart from their parents or caregivers.

Within this study, African American females during mid-to-late adolescence exhibited and reported less angry distress. Angry distress was found not to be a significant predictor of ESI of African American females during mid-to-late adolescence. I rejected the hypothesis that angry distress would be a predictive factor in ESI. An explanation for these results is that adolescents are less dependent on their parents and

caregivers in terms of intrapersonal and interpersonal support. Adolescents often share and seek support from their peers, and they are more likely to express their feelings and concerns to their peers and friends. These changes in adolescents' supportive needs could explain the insignificance of angry distress in terms of predicting ESI of African American during mid-to-late adolescence. This study's findings regarding angry distress suggest that parent-adolescent conflict is less influential during mid-to-late adolescence than other parent-adolescent behaviors.

In contrast, goal-corrected partnership or adolescents' ability to be understanding and cooperative in terms of parent or caregiver needs in conjunction with their own needs and wants was found to increase ESI of African American females during mid-to-late adolescence. An explanation of these findings is during adolescents are seeking increased independence in order to make their own decision. Due to this, adolescents have different needs and wants but still depend on parental support for their various needs. It was hypothesized securely attached adolescents make or seek to make decisions that mutually support both parents' and adolescents' goals or needs. This was shown to be a significant predictor of ESI of African American females during mid-to-late adolescence.

These findings suggest that parent-adolescent mutual supportive behaviors and increased interest in adolescent needs and wants are more significant during adolescence than other parental behaviors, which can lead to improving emotional-social outcomes. Overall, this study provided evidence that attachment has a predictive influence and accounts for 15.2% of variations in ESI of African American females during mid-to-late adolescence. This current study supports previous findings but suggest there are

additional factors that account for development of ESI of African American females during mid-to-late adolescence. Additional factors that can account for the development of ESI during mid-to-late adolescence include adolescent hormonal changes and peer relationship dynamics. These results provide evidence to support the hypothesis that attachment predicts the ESI of African American females during mid-to-late adolescence.

Ainsworth and Bowlby's (1991) theory of attachment and Bar-On's (2006) theory of ESI support the idea that emotional-social abilities and wellness are influenced by parental attachment, in that secure attachments predicted higher ESI. Ainsworth and Bowlby's (1991) theory of attachment suggest attachment or relationship dynamics influence the psychosocial development of individuals during infancy and throughout the lifespan. This representation of attachment can be seen within infancy and throughout adolescence. This study provides evidence that the attachment theory can further assist with understanding and improving developmental outcomes during adolescence. The attachment theory suggest secure attachment is influenced by parents' or caregivers' care, support, and ability to meet adolescents' basic needs. The theory of attachment suggest insecure attachment is influenced by parents or caregivers being distant, insensitive, unsupportive, and the inability to meet the adolescent's basic needs. The AAQ constructs of angry distress, availability, and goal-corrected partnership assisted with examining and exploring attachment in African American females during mid-to-late adolescence. The findings of the study indicated angry distress and availability were not significant factors regarding attachment in African American female adolescents, which was in contrast to

previous research findings. These results could be accounted for due to cultural or gender differences present within this focal population.

Furthermore, Bar-On's ESI concept is comprised of intrapersonal, interpersonal, adaptability, and stress management. Higher ESI is associated with (a) the ability to recognize, understand, and express emotions and feelings; (b) the ability to understand how others feel and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive affect and be self-motivated (Bar-On, 2006). The BarOn EQ-i:YV (S) constructs of intrapersonal, interpersonal, adaptability, and stress management assisted with measuring and examining the ESI of African American females during mid-to-late adolescence. Interestingly, this study's findings suggest the attachment construct goal-corrected partnership can assist in predicting intrapersonal, interpersonal, adaptability, and stress management during mid-to-late adolescence. In contrast to the research predictions, angry distress and availability were found not to be influential factors in predicting the ESI of African American females during mid-to-late adolescence.

These findings suggest attachment or parent-adolescent relationships change and transition, but the attachment theory continues to offer support when seeking to examine emotional-social outcomes during adolescence. This study's findings have assisted in filling the gap in the literature that remained and provided theoretical implications concerning attachment and its prediction of the ESI of African American females during mid-to-late adolescence.

### **Limitations of the Study**

Within this section, I will discuss the limitations of this study and the barriers associated with the overall generalizability of this study's findings. An important limitation presented in this study was the presents of outliers for goal-corrected partnership and total ESI scores. This limitation impacted the sample size. An additional, limitation presented in this study was the low variance of angry distress scores, which could impact the overall regression analysis of the independent variable and impacts the internal validity. In addition, a limitation of this study is the possibility of participants responding to survey statements with inaccurate information, which would cause errors in analyzing and interpreting the results of this study. One possible instance of participants responding to the surveys with socially acceptable answers to appear more emotionally and socially well-adjusted. Also, participants may experience some level of discomfort with answering personal questions concerning their feeling toward their parents or caregivers.

In addition, participants completed self-reporting surveys, as opposed to a parent, caregiver, sibling, or teacher offering an objective perspective. There is a possibility that when participants complete a self-reporting instrument, the responses given are positively exaggerated from what others may observe behaviorally, which would impact the accuracy of the study's results. An additional limitation potentially present in this study is whether adolescents completed the survey privately. If the parents or caregivers is present while the participant completes the surveys, it may influence the responses to statements concerning parental relationships and morality. Another limitation is that the AAQ survey

does not differentiate between maternal and paternal attachment when referring to “parent” in the survey. Parental attachment dynamics and relationships may vary concerning either a maternal or paternal figures’ role in adolescents’ life.

### **Recommendations**

Within developmental psychology, additional literature and resources would be beneficial to further expanding the knowledge concerning African American adolescents in conjunction with attachment and ESI. This study was limited to 15-18 years old. It is important to examine attachment and the ESI of African American females during early childhood and leading into adolescence. Attachment and the development of ESI is a longitudinal experience, which begins during the early stages of development. As a result, future research is crucial concerning attachment and its prediction on the ESI of African American females during early childhood to early adolescence. Furthermore, a longitudinal study could provide knowledge concerning the influence of attachment during infancy and into late adolescence, in conjunction to ESI and development. In addition, this research was inclusive to females. It is important to consider males when examining attachment to parental figures and how these relationships predict ESI in this distinct population. Thus, future research is needed concerning gender differences in males. Also, in hopes of further understanding the differences found in angry distress and availability findings, an exploration of specific cultural differences which influence attachment needs of African American female adolescents would be beneficial. Furthermore, this study utilized self-reporting instruments, which request the perspective of the participant. The participants’ self-impression may vary from the perspectives of

parents and teachers. Thus, future research is recommended with a focus on parental figures' perspective of adolescents' attachment styles and observable emotional-social behaviors. Lastly, future research is recommended concerning peer attachment and its prediction on the ESI of African American females during mid-to-late adolescence.

During adolescence, individuals are transferring their need to belong from their parental figure to their peer groups and friends. With this transition of social influence from parent to peer, it is important that future research explore this predictive relationship.

### **Implications**

Developmental psychology seeks to examine and improve the psychosocial development of individuals throughout their lifespan. On an individual scale, this study offers positive social change implications including creating relationship-building, awareness, and preventive resources for parents and adolescents based on promoting healthy and secure attachment relationships and promoting healthy ESI. With parents and caregivers having early access to information on the influence of attachment on ESI during mid-to-late adolescence and resources to build and maintain parent-adolescent relationships, adolescents are more likely to have higher ESI and improved intrapersonal and interpersonal developmental outcomes. On a societal level, this study provides health providers and scholar-practitioners with information that can promote awareness and assist those who treat and develop resources for adolescents with improving ESI from a family-centered perspective. This social change implication could lead to future research and the development of resources for schools and organizations that seek to improve adolescent outcomes within various social areas such as peer relationships,

academic achievement, and vocational and career success. The above positive social change implications can assist pediatricians, counselors, parents, caregivers, and scholar-practitioners with improving the developmental and social outcomes of African American female adolescents.

This study offers further knowledge on the influence attachment has on predicting the ESI of African American females during mid-to-late adolescence. These findings may assist pediatricians, counselors, parents and caregivers, and scholar-practitioners with the mitigation of early attachment and emotional-social problems. For example, scholar-practitioners can utilize these findings to further understand the influence attachment has on the ESI of this focal population and develop future research and resources tailored to further understanding and improving the developmental outcomes of African American females throughout their lifespan. In addition, pediatricians are often the first and primary health providers for families. Pediatricians can emphasize the importance of secure and healthy attachments for adolescents and can assist with monitoring and guiding adolescents' and families' emotional-social wellness during adolescence and into early adulthood. In addition, counselors who assist adolescents and families can identify psychosocial problems associated with attachment or family issues and provide the appropriate resources to build and maintain parent and adolescent attachment bonds or relationship dynamics. Furthermore, this research can assist future and current parents and caregivers with methods of improving the emotional-social outcomes of their children during adolescence. Improving parent and adolescent relationship dynamics can



increase ESI and improve emotional and social outcomes for African American females during mid-to-late adolescence.

### **Conclusion**

This research sought to examine attachment and its prediction on the ESI of African American females during mid-to-late adolescence. One research question and its hypotheses were addressed in this study. After conducting a multiple linear regression analysis, the null hypothesis was rejected. Attachment (angry distress, availability, and goal-corrected partnership) statistically predicts ESI. Furthermore, angry distress was not a significant predictor of ESI. While goal-corrected partnership was a significant predictor of ESI, availability was not a significant predictor of ESI. This study achieved its aim of further understanding attachment and ESI, in that attachment predicts 15.2% of the variance observed in the ESI of African American females during mid-to-late adolescence. The findings of this study provide additional knowledge concerning the psychosocial development of African American females during the monumental transition into adulthood. These results provide families, health providers, and scholars with future direction concerning attachment and its prediction of the ESI of African American females during mid-to-late adolescence.

## References

- Aguilar-Luzón, M. C., Calvo-Salguero, A., & Salinas, J. M. (2014). Beliefs and environmental behavior: The moderating effect of emotional intelligence. *Scandinavian Journal of Psychology, 55*(6), 619–629.  
<https://doi.org/10.1111/sjop.12160>
- Ainsworth, M. D. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*(4), 333–341.  
<https://doi.org/10.1037/0003-066X.46.4.333>
- Albarello, F., Crocetti, E., & Rubini, M. (2021). Developing identification with humanity and social well-being through social identification with peer groups in adolescence. *Journal of Youth & Adolescence, 50*(6), 1157–1172.  
<https://doi.org/10.1007/s10964-020-01214-0>
- Al-Khateeb, A. A., Alshurman, W. M., & Al-Saree, I. I. A. (2020). Emotional intelligence levels among hearing-impaired and visually impaired students in Jordan. *Journal of Education and E-Learning Research, 7*(4), 395–406.  
<https://doi.org/10.20448/journal.509.2020.74.395.406>
- Altaras Dimitrijević, A., Jolić Marjanović, Z., & Dimitrijević, A. (2020). A further step towards unpacking the variance in trait and ability emotional intelligence: The specific contribution of attachment quality. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues, 39*(4), 1340–1353.  
<https://doi.org/10.1007/s12144-018-9837-3>

- Antonsich, M. (2008). European attachment and meanings of Europe. A qualitative study in the EU-15. *Political Geography*, 27(6), 691–710.  
<https://doi.org/10.1016/j.polgeo.2008.07.004>
- Anwer, M., Malik, N. I., Maqsood, A., & Rehman, G. (2017). The moderating role of social intelligence in explaining attachment style and emotional intelligence among young adults. *Pakistan Journal of Psychology*, 48(2), 3–20.  
<https://eds.p.ebscohost.com/eds/pdfviewer/pdfviewer?vid=1&sid=7ab952cd-3d4a-4c17-9148-732c21930f1d%40redis>
- Balan, R., Dobrea, A., & Balazsi, R. (2018). Indirect effects of parental and peer attachment on bullying and victimization among adolescents: The role of negative automatic thoughts. *Aggressive Behavior*, 44(6), 561.  
<https://doi.org/10.1002/ab.21775>
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Barbee, E. (1992). African American women and depression: A review and critique of the literature. *Archives of Psychiatric Nursing*, 6(5), 257-265.  
[https://doi.org/10.1016/0883-9417\(92\)90036-I](https://doi.org/10.1016/0883-9417(92)90036-I)
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18(Suplemento), 13–25.  
[https://www.researchgate.net/publication/6509274\\_The\\_Bar-On\\_Model\\_of\\_Emotional-Social\\_Intelligence](https://www.researchgate.net/publication/6509274_The_Bar-On_Model_of_Emotional-Social_Intelligence)
- Bar-On, R. & Parker, J. (2000). The BarOn Emotional Quotient Inventory: Youth Version Short Form [Measurement instrument].

- Bodfield, K. S., Putwain, D. W., Carey, P., & Rowley, A. (2020). A construct validation and extension of the Adolescent Attachment Questionnaire (AAQ). *Journal of Social & Personal Relationships*, 37(12), 3070–3082.  
<https://doi.org/10.1177/0265407520951267>
- Borelli, J. L., Ho, L., & Epps, L. (2018). School-aged children’s psychobiological divergence as a prospective predictor of health risk behaviors in adolescence. *Journal of Child & Family Studies*, 27(1), 47–58. <https://doi.org/10.1007/s10826-017-0870-x>
- Brabec, C. M., Gfeller, J. D., & Ross, M. J. (2012). An exploration of relationships among measures of social cognition, decision making, and emotional intelligence. *Journal of Clinical & Experimental Neuropsychology*, 34(8), 887-894.  
<https://doi.org/10.1080/13803395.2012.698599>
- Bratton, V. K., Dodd, N. G. and Brown, F. W. (2011). The impact of emotional intelligence on accuracy of self-awareness and leadership performance. *Leadership & Organization Development Journal*, 32(2), 127–149.  
<https://doi.org/10.1108/01437731111112971>
- Bretherton, I. (1994). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology*, 28(5), 759-775.  
<https://doi.org/10.1037/10155-029>
- Brown, G. L., Gustafsson, H. C., Mills-Koonce, W. R., & Cox, M. J. (2017). Associations between early caregiving and rural, low-SES, African American children’s representations of attachment relationships. *Attachment & Human*

*Development*, 19(4), 340–363. <https://doi-org.ezp.waldenulibrary.org/10.1080/14616734.2017.1318935>.

- Butler, B. S. T., Richardson, B. L., Chavous, T. M., & Zhu, J. (2019). The importance of racial socialization: school-based racial discrimination and racial identity among African American adolescent boys and girls. *Journal of Research on Adolescence (Wiley-Blackwell)*, 29(2), 432–448. <https://doi.org/10.1111/jora.12383>
- Cacioppo, M., Barni, D., Correale, C., Mangialavori, S., Danioni, F., & Gori, A. (2019). Do attachment styles and family functioning predict adolescents' problematic internet use? A relative weight analysis. *Journal of Child & Family Studies*, 28(5), 1263–1271. <https://doi.org/10.1007/s10826-019-01357-0>
- Camille Hall, J. C. (2017). No longer invisible: Understanding the psychosocial impact of skin color stratification in the lives of African American women. *Health & Social Work*, 42, (2). 71–78. <https://doi.org/10.1093/hsw/hlx001>
- Center for Disease Control and Prevention (CDC). (2020, November 15). *About teen pregnancy*. Center for Disease Control and Prevention (CDC). <https://www.cdc.gov/teenpregnancy/about/index.htm>
- Cheung, R. Y. M., Leung, M. C., Chung, K. K. H., & Cheung, H. Y. (2018). Family risks and adolescent adjustment in Chinese contexts: Testing the mediating role of emotional intelligence. *Journal of Child & Family Studies*, 27(12), 3887–3896. <https://doi.org/10.1007/s10826-018-1233-y>

Children's Defense Fund (2020). The state of American's children.

<https://www.childrensdefense.org/wp-content/uploads/2020/02/The-State-Of-Americas-Children-2020.pdf>

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Crowne, K. A. (2009). The relationships among social intelligence, emotional intelligence and cultural intelligence. *Organization Management Journal*, 6(3), 148–163. <https://doi.org/10.1057/omj.2009.20>

Dawda, D & Hart, S. (2002). Assessing emotional intelligence: reliability and validity of The BarOn Emotional Quotient Inventory (EQ-i) in university students. *Personality and individual Differences*. 28(4). 797-812.

[https://doi.org/10.1016/S0191-8869\(99\)00139-7](https://doi.org/10.1016/S0191-8869(99)00139-7)

Edmunds, C., & Alcaraz, M. (2021). Childhood material hardship and adolescent mental health. *Youth & Society*, 53(7), 1231–1254.

<https://doi.org/10.1177/0044118X211001896>

Esnaola, I., Revuelta, L., Ros, I., & Sarasa, M. (2017). The development of emotional intelligence in adolescence. *Anales De Psicología*, 33(2), 327–333. [https://doi-](https://doi.org.ezp.waldenulibrary.org/10.6018/analesps.33.2.251831)

[org.ezp.waldenulibrary.org/10.6018/analesps.33.2.251831](https://doi.org.ezp.waldenulibrary.org/10.6018/analesps.33.2.251831)

Farrelly, D. & Austin, E. (2007). Ability EI as an intelligence? Associations of the MSCEIT with performance on emotion processing and social tasks and with cognitive ability. *Cognition and Emotion*, 21 (5), 1043-1063.

<https://doi.org/10.1080/02699930601069404>

- Fearon, R. M. P., & Roisman, G. I. (2017). Attachment theory: progress and future directions. *Current Opinion in Psychology, 15*, 131–136. <https://doi-org.ezp.waldenulibrary.org/10.1016/j.copsyc.2017.03.002>
- Finer, L.B., & Zolna, M.R. (2016). Declines in Unintended Pregnancy in the United States, 2008-2011. *New England Journal of Medicine, 374*, 843-852. Retrieved from [www.nejm.org/doi/full/10.1056/NEJMsa1506575](http://www.nejm.org/doi/full/10.1056/NEJMsa1506575).
- Gignac, G. E., & Ekermans, G. (2010). Group differences in EI within a sample of Black and White South Africans. *Personality and Individual Differences, 49*, 639–644. <https://doi.org/10.1016/j.paid.2010.05.039>
- Gilar-Corbi, R., Valdés M. V., Navas, L., Holgado-Tello, F. P., & Castejón, J. (2021) Validation of the BarOn EQ-i:YV (S) inventory in its Spanish version: Gender-based invariance analysis. *International Journal of Environmental Research and Public Health, 18*, 1643. <https://doi.org/10.3390/ijerph18041643>
- Gloppen, K., Sieving, R. E., Borowsky, I. W., Pettingell, S. L., & Philippe, C. D. (2019). Relationships between mental health, skill sets, and violence perpetration among adolescent girls. *Journal of Interpersonal Violence, 34*(9), 1801–1819. <https://doi.org/10.1177/0886260516657909>
- Guijarro Gallego, A., Martínez Pérez, A., Fernández, V., Alcántara-López, M., & Castro Sáez, M. (2021). Life satisfaction in adolescents: relationship with parental style, peer attachment and emotional intelligence. *Electronic Journal of Research in Educational Psychology, 19*(53), 51–74. <https://doi.org/10.25115/ejrep.v19i53.3425>

- Hazel, N. A., Oppenheimer, C. W., Technow, J. R., Young, J. F., & Hankin, B. L. (2014). Parent relationship quality buffers against the effect of peer stressors on depressive symptoms from middle childhood to adolescence. *Developmental Psychology, 50*(8), 2115–2123. <http://dx.doi.org/10.1037/a0037192>
- Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction. *Journal of Vocational Behavior, 74*(2), 145–155. <https://doi.org/10.1016/j.jvb.2009.01.002>
- Imtiaz, S., & Naqvi, I. (2012). Parental Attachment and Identity Styles among Adolescents: Moderating Role of Gender. *Pakistan Journal of Psychological Research, 27*(2), 241–264. <https://doi.org/10.3390/ijerph17238933>
- Irfan, S., & Kausar, R. (2018). Emotional intelligence as predictor of moral judgment in adolescents. *Journal of Research & Reflections in Education (JRRE), 12*(2), 204–228. Retrieved from <https://eds.s.ebscohost.com/eds/pdfviewer/pdfviewer?vid=2&sid=cfed0c6e-2b3e-41f6-89a2-401f58b4f651%40redis>
- Irfan, S., & Kausar, R. (2020). Demographic characteristics and family environment as predictors of emotional intelligence in adolescents. *Journal of Behavioural Sciences, 30*(2), 61–80. Retrieved from <https://eds.s.ebscohost.com/eds/pdfviewer/pdfviewer?vid=1&sid=2043eae4-eb47-4abe-8e02-ddd218e639fb%40redis>
- Jewell, T., Gardner, T., Susi, K., Watchorn, K., Coopey, E., Simic, M., Fonagy, P., & Eisler, I. (2019). Attachment measures in middle childhood and adolescence: A



- systematic review of measurement properties. *Clinical Psychology Review*, 68, 71–82. <https://doi-org.ezp.waldenulibrary.org/10.1016/j.cpr.2018.12.00>.
- Jones, J. D., Ehrlich, K. B., Brett, B. E., Gross, J. T., Mohr, J. J., Hopper, E. A., Dinh, J. V., Malanchuk, O., Peck, S. C., Brodish, A. B., Adam, E. K., Eccles, J. S., Kemeny, M. E., & Cassidy, J. (2017). Perceptions of parental secure base support in African American adolescents and young adults: A preliminary study of predictive links to adult C-reactive protein. *Journal of Social and Personal Relationships*, 34(8), 1168–1185. <https://doi-org.ezp.waldenulibrary.org/10.1177/0265407516670532>
- Kanesan, P. & Fauzan, N. (2019). Models of emotional intelligence: A review. *Journal of Social Sciences and Humanities*.16(7). 1-19. Retrieved from <https://eds.p.ebscohost.com/eds/pdfviewer/pdfviewer?vid=2&sid=460512a0-df20-408f-9b44-e9223bcf2803%40redis>
- Karibeeran, S. (2019). Emotional Intelligence Among Adolescents. *Humanities and Social Sciences*, 7(3), 121. <https://doi.org/10.11648/j.hss.20190703.15>
- Keizer, R., Helmerhorst, K. O. W., & Van Rijn-van Gelderen, L. (2019). Perceived quality of the mother–adolescent and father–adolescent attachment relationship and adolescents’ self-esteem. *Journal of Youth & Adolescence*, 48(6), 1203–1217. <https://doi.org/10.1007/s10964-019-01007-0>
- Khaleque, A. (2003). Attachment and lifespan development: A review of the adult attachment literature. *Psychological Studies*, 48(1), 28–35. Retrieved from <https://psycnet.apa.org/record/2003-06201-006>

- Kost, K., Maddow-Zimet, I., & Arpaio, A. (2017). Pregnancies, Births and Abortions Among Adolescents and Young Women in the United States, 2013: National and State Trends by Age, Race and Ethnicity. *New York: Guttmacher Institute*. Retrieved from: <https://www.guttmacher.org/report/us-adolescent-pregnancy-trends-2013>.
- Lane, R. D. (2000). Levels of emotional awareness: neurological, psychological and social perspectives. In R. Bar-On & J.D.A. Parker (eds.), *Handbook of emotional intelligence*. San-Francisco: Jossey-Bass. Retrieved from <https://psycnet.apa.org/record/2001-00355-008>
- Lee, H., Esposito, M., Edwards, F., Chun, Y., & Grinstein-Weiss, M. (2020, July 27). *The demographics of racial inequality in the United States*. Brookings. <https://www.brookings.edu/blog/up-front/2020/07/27/the-demographics-of-racial-inequality-in-the-united-states/amp/>
- Li, J.-B., Lis, A., & Delvecchio, E. (2016). Familism and depressive symptoms among Italian adolescents: The mediating effect of parental attachment. *Children and Youth Services Review, 71*, 130–136. <https://doi.org/10.1016/j.chilyouth.2016.11.002>
- Liu, Q., & Wang, Z. (2021). Associations between parental emotional warmth, parental attachment, peer attachment, and adolescents' character strengths. *Children and Youth Services Review, 120*, 1–9. <https://doi.org/10.1016/j.chilyouth.2020.105765>

- Longley, R. (2020, July 13). What is demographics? Definition, usage, examples in advertising. ThoughtCo. <https://www.thoughtco.com/what-are-demographics-and-how-are-they-used-38513>
- Mathews, G., Emo, A., Funke, G., Zeidner, M., Roberts, R., Costa, P., & Schulze, R. (2006). Emotional intelligence, personality, and task-induced stress. *Journal of Experimental Psychology: Applied*, 12(2), 96-107. <https://doi.org/10.1037/1076-898x.12.2.96>
- McLeod, S. A. (2017, February 05). Attachment theory. Simply Psychology. <https://www.simplypsychology.org/attachment.html>
- Mental Health America. (2021). Black and African American communities and mental health. <https://www.mhanational.org/issues/black-and-african-american-communities-and-mental-health>
- Parker, J. D. A., Keefer, K. V., & Wood, L. M. (2011). Toward a brief multidimensional assessment of emotional intelligence: Psychometric properties of the Emotional Quotient Inventory—Short Form. *Psychological Assessment*, 23(3), 762–777. <https://doi.org/10.1037/a0023289>
- Petrosky, E., Blair, J. M., Betz, C. J., Fowler, K. A., Jack, S. P. D., & Lyons, B. H. (2017). Racial and Ethnic Differences in Homicides of Adult Women and the Role of Intimate Partner Violence - United States, 2003-2014. *MMWR. Morbidity and mortality weekly report*, 66(28), 741–746. <https://doi.org/10.15585/mmwr.mm6628a1>

- Rahmani, N., & Ulu, E. (2021). The relationship between attachment styles, emotional intelligence, and self-esteem in only-child families and two children families. *Propósitos y Representaciones*, 9, 1–11.  
<https://doi.org/10.20511/pyr2021.v9nspe3.1185>
- Riley, H., & Schutte, N. S. (2003). Low emotional intelligence as a predictor of substance-use problems. *Journal of Drug Education*, 33(4), 391-398.  
<https://doi.org/10.2190/6dh9-yt0m-ft99-2x05>
- Rovner, J. (2021). *Black disparities in youth incarceration*. The Sentencing Project.  
<https://www.sentencingproject.org/fact-sheet/black-disparities-in-youth-incarceration/>
- Sanchez-Alvarez, N., Extremera, N., & Fernandez-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *Journal of Positive Psychology*, 11(3), 276–285.  
<https://doi.org/10.1080/17439760.2015.1058968>
- Sanchez, D., Hamilton, E., Gilbert, D., & Vandewater E. (2018). Examining Afrocentric cultural values, ethnic identity, and substance use abstinence in low-income, early adolescent, African American girls. *Journal of Black Psychology*. 44(1) 74 –100.  
<https://doi.org/10.1177/0095798417746265>
- Schaffer, H. R., & Emerson, P. E. (1964). The development of social attachments in infancy. *Monographs of the Society for Research in Child Development*, 29, 1–77.  
<https://doi.org/10.2307/1165727>

- Schröder-Abé, M. and Schütz, A. (2011). Walking in each other's shoes: Perspective taking mediates effects of emotional intelligence on relationship quality. *European Journal of Personality*, 25(2), 155-169. <https://doi.org/10.1002/per.818>
- Sellnow, K., Esbensen, K., & Cisler, J. M. (2021). Social trust and reciprocity among adolescent girls exposed to interpersonal violence. *Journal of Interpersonal Violence*, 36(21/22), 9977–9995. <https://doi.org/10.1177/0886260519881522>
- Segrin, C. (1993). Social skills deficits and psychosocial problems: Antecedent, concomitant, or consequent? *Journal of Social and Clinical Psychology*, 12(3), 336–353. <https://doi.org/10.1521/jscp.1993.12.3.336>
- Segrin, C., & Flora, J. (2019). Fostering social and emotional intelligence: What are the best current strategies in parenting? *Social and Personality Psychology Compass*, 13(3), 1–14. <https://doi.org/10.1111/spc3.12439>
- Snow, N.E. (2009). Virtue as social intelligence: An empirically grounded theory (1st ed.). *Routledge*. <https://doi.org/10.4324/9780203880579>
- Strand, P. S., Vossen, J. J., & Savage, E. (2019). Culture and child attachment patterns: A Behavioral Systems Synthesis. *Perspectives on Behavior Science*, 42(4), 835–850. <https://doi.org/10.1007/s40614-019-00220-3>
- Summers, L., Lee, Y.-M., & Lee, H. (2017). Contributing factors of teenage pregnancy among African American females living in economically disadvantaged communities. *Applied Nursing Research*, 37, 44–49. <https://doi.org/10.1016/j.apnr.2017.07.006>

- Szalai, T. D., Czeglédi, E., Vargha, A., & Grezsa, F. (2016). Parental Attachment and Body Satisfaction in Adolescents. *Journal of Child and Family Studies*, 26(4), 1007–1017. <https://doi.org/10.1007/s10826-016-0626-z>
- Thomas, D. C., & Au, K. (2002). The Effect of Cultural Differences on Behavioral Responses to Low Job Satisfaction. *Journal of International Business Studies*, 33(2), 309–326. <https://doi.org/10.1057/palgrave.jibs.8491018>
- Van Rooy, D. L., Viswesvaran, C., & Alonso, A. (2004). Group Differences in Emotional Intelligence Scores: Theoretical and Practical Implications. *PsycEXTRA Dataset*. <https://doi.org/10.1037/e518632013-467>
- Walker, S. A., Double, K. S., Kunst, H., Zhang, M., & MacCann, C. (2022). Emotional intelligence and attachment in adulthood: A meta-analysis. *Personality and Individual Differences*, 184. <https://doi.org/10.1016/j.paid.2021.111174>
- Wenzel, A., Graff-Dolezal, J., Macho, M., & Brendle, J. R. (2005). Communication and social skills in socially anxious and nonanxious individuals in the context of romantic relationships. *Behaviour Research and Therapy*, 43(4), 505–519. <https://doi.org/10.1016/j.brat.2004.03.010>
- West, M., Rose, M. S., Spreng, S., Sheldon-Keller, A., & Adam, K. (1998). Adolescent attachment questionnaire: A brief assessment of attachment in adolescence. *Journal of Youth & Adolescence*, 27(5), 661–673. <https://doi.org/10.1023/a:1022891225542>

## Appendix A: Demographic Survey

1. Please indicate your sex:
  - Male
  - Female
  
2. Please indicate your ethnicity/race:
  - Asian
  - Black or African American
  - Hispanic or Latino
  - Middle Eastern or North African
  - Native American or other Pacific Islander
  - White
  - Multiracial
  
3. What is your age?
  - 14 and under
  - 15
  - 16
  - 17
  - 18
  - 19 and over
  
4. Please indicate your grade level:
  - 9<sup>th</sup>
  - 10<sup>th</sup>
  - 11<sup>th</sup>
  - 12<sup>th</sup>
  - Graduated from High School