

A THEORETICAL FRAMEWORK OF INTERRACIAL COUPLE RELATIONSHIP
SUCCESS: EMPIRICAL FINDINGS FROM A SAMPLE OF BLACK-WHITE COUPLES IN
THE UNITED STATES

by

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B.A., Miami University of Ohio, 2010
M.S., Kansas State University, 2013

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2016

Abstract

The current study proposes a theoretical model of Interracial Couple Relationship Success and empirically tests a portion of the model in which ethnic identity is linked to relationship satisfaction for Black-White interracial couples. Data were collected from 185 heterosexual Black-White marital couples in the United States. An actor-partner interdependence model (APIM) was used to test the direct and indirect effects of ethnic identity to relationship satisfaction via self-esteem and problem-solving skills. The results indicated ethnic identity of both Black and White partners was related to Black but not White partners' self-esteem. Findings also revealed significant indirect pathways from Black partners' self-esteem to their own relationship satisfaction via effective problem-solving skills. The indirect pathway from Black partners' self-esteem to partner relationship satisfaction was also mediated by partner perceptions of problem-solving in the relationship. The results of this study informs the continued development of the of Interracial Couple Relationship Success model and offers data regarding the role of identity and individual well-being in the context of interracial relationships.

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Dedication

To my husband, Nick, for always being supportive, providing a sense of comfort, and continuing to be the constant in my life and believing in me when I doubted myself. To my siblings, Derrick, Sylvia, and Seraphina, without their love and unwavering encouragement, I would not have the confidence and inspiration to pursue my dreams. And to my parents, Connie, Raymond, and Wei, for all their hard work and endurance in the face of so many struggles to provide me the opportunity for better and greater things.

Chapter 1 - Introduction

Approximately 5.4 million married couples in the United States are in interracial relationships (Johnson & Kreider, 2013) with 15% of new marriages being interracial relationships compared to just over 6% in the 1980s (Wang, 2012). Romantic partnering between individuals from different races was made illegal in the Racial Integrity Act of 1924 until its eventual overturn in 1967 in the *Loving v. Virginia* ruling (388 U.S. 1, 1967). Since then, and particularly in recent decades, interracial relationships have grown exponentially (Wang, 2012). Conducting research to better understand how to successfully navigate interracial relationships will “promote future reductions in social distance by signaling to others which racial barriers are permeable; thereby encouraging others to consider friendships and romantic relationships across racial lines” (Harris & Ono, 2005, p. 237).

Research focused on interracial relationships has largely focused on experiences of discrimination (e.g., Lewandowski & Jackson, 2001; Scott, 1987; Steinbugler, 2005; Watts & Henricksen, 1999) or therapeutic considerations in working with interracial couples (e.g., Killian, 2001; Kim, Prouty, & Roberson, 2012; Leslie & Young, 2015) and less on the impact of racial and ethnic awareness on interracial romantic relationships. Furthermore, with some exceptions (e.g., Dainton, 2015), there has been little research aimed at understanding interracial couples’ relationship processes that support successful outcomes. Interracial couples experience unique challenges in building their relationship, potentially driven by their differing heritage, such as differences in sex role expectations, work and leisure attitudes, emotional expression, family rituals and traditions, language barriers, conflicting child raising perspectives, conflict style differences, racial prejudices and social stigmatization, differences in religious practices, and level of involvement of the extended family (Biever, Bobele, & North, 1998; Sullivan & Cottone, 2006; Seshadri & Knudson-Martin, 2013; Troy, Lewis-Smith, & Laurenceau, 2006).

The literature largely focuses on the unique experiences of interracial couples and therapeutic considerations in working with interracial couples or families, but still lacks an explicit framework for understanding the development of successful interracial relationships. According to their review of the literature, Bratter and Escbach (2006) noted that interracial married couples are more likely to experience stressful relationship events that result in psychological distress compared to those in mono-racial relationships. Furthermore, some

research has suggested that interracial relationships are at a greater risk for dissolution than mono-racial relationships (Wang, Kao, & Joyner, 2006), thus, it is a curiosity that the developmental factors contributing to distress, stability and dissolution in interracial relationships have largely gone unexplored. Relationship distress and dissolution are associated with a myriad of health and economic concerns including higher rates of mortality, alcohol and substance use, and poverty (Evans, 2004; Robles et al, 2013; Whisman, 2007). Given that many of these issues are exacerbated in racial and ethnic minority groups, it is increasingly important that the wellbeing of these relationship unions receive attention and action. These findings also suggest it may be necessary to make the shift from using general theoretical frameworks (e.g., interdependence theory; Clark, Harris, Hasan, Votaw, & Fernandez, 2015; Gaines, Clark, & Afful, 2015) to study interracial relationships and begin to develop a focused framework that considers the unique experiences of interracial couples.

In studying the influence of race and ethnicity in interracial relationships, one must consider the differing experiences of individuals that identify as part of the racial majority or minority and the unique experiences of ethnic groups. Ethnic identity is a concept traditionally explored in individual development research, with a primary focus on how ethnic minority individuals come to understand their ethnic or racial heritage (e.g., Reynolds, Gonzales-Backen, Allen, Hurley, Donovan, Schwartz, Hudson, Agocha, & Williams, 2016; Roberts, Phinney, Mase, Chen, Roberts, & Romero, 1999; Syed, 2010). Although important in understanding individual development, ethnic identity also plays an important role in ethnic minority romantic relationships, often perceived as a strength or buffer against stressors. In a conceptual model of Black couples' marital outcomes, researchers posited that a mature ethnic identity is a protective factor against stressors in the marital relationship (Bryant, Wickrama, Bolland, Bryant, Cutrona, Stanik, 2010). Experiences of discrimination based on race or ethnicity may be one of the primary stressors for ethnic minority individuals in interracial couples. In contrast, positive feelings regarding one's ethnic identity and belonging is associated with greater overall happiness (Kiang, Yip, Gonzales, Witkow, & Fuligni, 2006; Phinney, 2007). Trail, Goff, Bradbury, and Karney (2012) suggest, "...for minority couples, the experience of racial or ethnic discrimination is a salient and severe stressor, one that has been linked to numerous racial and ethnic disparities in important outcomes," (p. 461). For ethnic minorities in mono-racial

relationships, their racial similarity and shared understanding may serve as a means for understanding their partner's experiences (e.g., Gaines Jr., 2001).

For racial minorities, racial identity and knowing one's "racial membership (is) one of the defining characteristics of their self-concept," (Sellers et al., 1998, p. 19). For White individuals, on the other hand, a strong "racial identity" can be professed as pride of one's racial background, signifying, perhaps supremacist values. In their writing on white racial identity, McDermott and Samson noted that "because white pride has historically been predicated upon a denigration of nonwhites, the articulation of the duties and requirements of whiteness reflects a desire to correlate a conscious white identity with positive attributes," (2005, p. 249) suggesting that for White individuals, a consciousness of their own location in the larger social context of race is a better depiction of racial awareness, rather than identity. Thus, for those who identify as White, having a critical and conscious perspective regarding Whiteness demonstrates awareness of the social implications of race both of the self and other as well as acknowledgement of privilege. In the development of this study, I have considered the nuances of meaningful racial identity for White individuals and have concluded that the measure of such a construct need be less focused on racial development or pride. Rather, racial "identity" for White individuals should put emphasis on consciousness of how race is experienced by others and the role of the White race in discrimination and privilege compared to racial minority groups. In the following discussions of White racial identity, the term racial identity is to connote racial consciousness for White individuals but is used to reflect its equivalence to racial identity for other racial groups.

Given that interracial couples differ in their racial and ethnic identity; it is important to understand how these differences are associated with success of their romantic relationship. The literature on this link, however, largely neglects the unique experiences of interracial couples and their racial and ethnic identity and its influence on their relationship. In addition, the current literature on relationship development and maintenance has neglected to address the impact of differing racial and ethnic identities, values, and practices on the success of romantic relationships. Given the increasing numbers of interracial couples, the greater risk of dissolution in these relationships and the lack of scholarship on the individual and relational processes contributing to relationship distress, there is a great need for building theoretical and empirical understanding of interracial and interethnic couple relationship development. Furthermore, such models must consider the unique experiences of ethnic minorities; addressing ethnic identity

development may be one way to do this. A theoretical model addressing these aspects of interracial relationships can inform interventions designed to improve relationship quality among interracial couples.

Chapter 2 - Literature Review

Theoretical Frameworks

The present study intends to fill a gap in the literature by proposing and testing a theoretical model of interracial couple relationship success. Given this aim, existing theoretical frameworks that address the development of ethnic identity, interracial couple relationships, and romantic relationship processes are used to inform the present theoretical framework. Additionally, other researchers have addressed interracial couple relationship outcomes (e.g., Killian, Seshadri & Knudson-Martin, 2013) but a formal theoretical framework has yet to be developed and empirically tested. Two models served as the theoretical foundation for the present study; the Interracial Relationship Development Model (Foeman & Nance, 1999) and the Development of Early Adult Romantic Relationships Model (DEARR; Bryant & Conger, 2002). Taken together, these two theoretical models address the importance of understanding interracial couple relationships over time and the developmental processes that result in successful relationship outcomes.

Interracial Relationship Development Model

The Interracial Relationship Development Model was developed in 1999 by Foeman and Nance in order to understand the formation and development of interracial couple relationships. The model specifically focuses on the development of Black/White interracial relationships taking into consideration the historical experiences of anti-miscegenation between the two racial groups in the United States. The model consists of four stages that begin at the formation of the interracial couple relationship: 1) racial awareness, 2) coping, 3) identity emergence, and 4) maintenance. The authors posit that interracial couples work through each of these four stages in addition to the normal developmental experiences that all couples go through when forming a committed relationship (Foeman & Nance, 1999).

In stage 1, the couple behaves like any couple in beginning to acquaint themselves with each other's similarities and differences and become aware of one another's habits. If the couple decides to pursue a relationship, they continue to learn about their own racial identity and beliefs as well as their partners and how they are similar or different. Furthermore, each partner is also making sense of how their collective racial group and the racial group of their partner

experiences societal challenges or role expectations (Foeman & Nance, 1999). For instance, partners may communicate their differing experiences in how they typically deal with new situations including strangers or the expectations of being a man or woman in their ethnic culture (Foeman & Nance, 1999). A couple is effectively able to work through the first stage when they are able to communicate understanding and sensitivity to each other's differing racial experiences (e.g., privilege versus discrimination), and indicate mutual attraction (Foeman & Nance, 1999). The successful navigation through this stage is indicative of the forming of trust and dialogue (Foeman & Nance, 1999).

In stage 2, the couple is coping with social definitions of race by developing proactive and/or reactive strategies to combat potential discrimination or disapproval of the relationship (Foeman & Nance, 1999). The authors note that, many times, a couple may be thrust into this stage of coping given reactions from others (Foeman & Nance, 1999). For instance, if the couple learns that a friend or family member feels negatively about their relationship, the couple must decide how to navigate situations such as social gatherings or family reunions (Foeman & Nance, 1999). Through navigating experiences of discrimination against their relationship, the couple copes by seeking support from diverse or accepting individuals or social groups and avoiding uncomfortable settings (Foeman, & Nance, 1999). During this stage, the couple must be able to communicate about and enact potential approaches to addressing discrimination. Through this stage, the couple is able to understand how to protect their relationship from outside harm (Foeman & Nance, 1999).

At stage 3, identity emergence, the couple solidifies their stance as a team. Specifically, the couple may be making sense of what brings them together and how to integrate their differences as they consider their future as a couple and family (Foeman & Nance, 1999). In a sense, they have developed a "we-ness" (Seshadri & Knudson-Martin, 2013). At this point, the couple is able to join together against outside threats to the relationship using effective communication skills. The couple may now engage in conversations regarding their identity as a couple and how it affects raising biracial children or living in a multicultural society (Foeman & Nance, 1999).

In the final stage, stage 4, the couple is maintaining their relationship. They have equipped themselves with strategies to navigate differences in their relationship and continue to engage in behaviors inside and outside the relationship to maintain a strong couple identity

(Foeman & Nance, 1999). This stage is similar to experiences of couples in mono-racial relationships with the added consideration of establishing routines and rituals unique to their interracial experiences. For instance, the couple may have developed a common response to initial reactions from new people when they introduce each other as partners or spouses or they may have determined new family traditions that incorporate their cultural differences (Foeman & Nance, 1999). At different points in the relationship, each partner may find him or herself revisiting stages of the model as it is suggested that these processes are continuously occurring (Foeman & Nance, 1999). “Identity formation in interracial families is a fluid and adaptive process that unfolds over time in reaction to contextual constraints and with varying levels of agency,” (Csizmadia, Leslie, & Nazarian, 2015, p. 89).

Together, the stages posed by the Interracial Relationship Development Model provide a conceptual understanding of the unique relationship experiences encountered by individuals in interracial unions. Specifically, the theoretical model highlights the influences of outside race-related experiences on the couple relationship. For the purpose of the present study, the Interracial Relationship Development Model serves as a broad theoretical foundation in understanding the complexities faced by interracial couples as they form relationships. The current research attempts to address the unique experiences of ethnic identity development for both partners and how it is associated with relationship processes. The Interracial Relationship Development Model does not take into consideration the ethnic identity of each partner and how this is associated with relationship outcomes or how their level of ethnic identity is associated with their ability to navigate through the relationship stages effectively. For this study, therefore, another theoretical model is offered to supplement our understanding of relationship development. The Development of Early Adult Romantic Relationships (DEARR) Model is presented as an additional framework through which we can begin to understand how early familial and individual experiences contribute to interracial relationship success.

Development of Early Adult Romantic Relationships Model

The Development of Early Adult Romantic Relationships (DEARR) Model is a theoretical model of young adult relationship development (Bryant & Conger, 2002). Although this model was originally developed for young adult couples, it provides a broad framework that delineates developmental processes present in all romantic relationships. The DEARR model

proposes a longitudinal framework in which experiences in one's family of origin impact young adult romantic relationship outcomes via individual and socioeconomic characteristics and relationship interactions (Bryant & Conger, 2002). Specifically, the authors posit that young adults enter romantic relationships with attitudes, dispositions, and behaviors that were molded in their family of origin—for instance, appropriate ways to express emotions, how to manage disagreements, and beliefs about divorce (Bryant & Conger, 2002). One's family history subjects the individual to biological predispositions as well, such as greater likelihood of experiencing a mental illness diagnosis. For instance, an individual may develop traits of neuroticism, anxiety, or other dispositions based on familial history of the diagnoses in their larger family system (Bryant & Conger, 2002). Furthermore, the DEARR Model includes consideration of an individual's context. A person's experience of wealth, poverty, or access to resources will shape their experiences of the world, and correspondingly their experiences in romantic relationships. For instance, research has demonstrated that individuals from higher socioeconomic standings are more likely to wait longer to marry and preface marriage with higher education (Bryant & Conger, 2002). These individual traits and characteristics are shaped by early relational experiences, which then influences subsequent romantic relationship interactions. In essence, the biological predispositions and experiences in one's family shapes the development of the individual and their worldview regarding what is appropriate and inappropriate in romantic relationships.

Attributes of the young adult couple relationship refer to the interpersonal experiences that nourish or inhibit the growth of the relationship (Bryant & Conger, 2002). A couple's ability to manage conflict or discuss issues with each other and each individual's hopes or concerns about the relationship (e.g., ability to trust partner; confidence that the relationship will endure and succeed) are examples of attributes of the relationship. The DEARR Model suggests that these relationship attributes are related to the success of the relationship (Bryant & Conger, 2002). In its entirety, the DEARR Model proposes a longitudinal mediational model in which early family-of-origin experiences impact later romantic relationship success via individual characteristics and relationship attributes (Bryant & Conger, 2002). The DEARR Model has been supported by a growing body of research (e.g., Cui & Fincham, 2010; Parade, Supple, & Helm, 2012; Whitton et al., 2008).

Together, these two theoretical models offer greater contextual understanding of the processes that could lead to successful interracial couple relationships. The present study posits a distinct perspective that integrates the developmental approach of the DEARR model and the focus on identity development of the Interracial Relationship Development Model. In their longitudinal testing of ethnic identity development in adolescence, French, Seidman, Allen, and Aber (2006) offered advice to other researchers on testing identity development, “Although the most widely cited models of ethnic identity development are stage models, researchers need to move beyond merely assigning individuals to stages and instead try to grasp the processes underlying the development of ethnic identity” (p. 8). Although their focus was on an individual’s development of ethnic identity, the present study argues a need for the same perspective on interracial couple relationship development and expands upon the stage model proposed by Foeman and Nance (1999) by borrowing from the framework of the DEARR model (Bryant & Conger, 2002). Specifically, the present model is unique in that it centers on both the importance of individual identity development and how one’s identity is related to relationship processes and, ultimately, successful interracial relationship outcomes.

A Theoretical Framework of Interracial Couple Relationship Success

In this dissertation, I propose the Interracial Couple Relationship Success Model (ICRS) as a theoretical framework for understanding interracial couple relationship development and success (see Figure 1). Using deductive methods to expand upon the current literature on couple relationship development and racial-ethnic identity, this theory aims to provide a unique framework that can be applied to better understand the factors associated with interracial couple relationship success. The overarching developmental framework of the Interracial Couple Relationship Success (ICRS) Model is structured after the DEARR model by Bryant and Conger (2002). The DEARR model depicted the linear relationships leading to relationship success in young adult romantic relationships (Bryant & Conger, 2002). Young adults enter romantic relationships with explicitly and implicitly learned attitudes and behaviors from their family of origin (Bryant & Conger, 2002). Similarly, the ICRS Model highlights the integral nature of each individual’s racial and ethnic identity and culture, informed primarily by experiences in one’s family of origin and larger social context. These learned notions regarding one’s ethnic background are associated with one’s ethnic identity development and attitudes, paralleling the

individual experiences of social and economic (dis)advantages in the DEARR model (Bryant & Conger, 2002). The individual's experiences of ethnic identity are furthermore related to the individual's perceptions of self in relation to others (e.g., self-esteem; relationship confidence), which then affects how one behaves in romantic relationship interactions in adulthood. In addition to ethnic identity, racial identity for persons of color (POC) may be uniquely associated with indicators of individual well-being. For White individuals, greater racial consciousness may be differently related to positive individual characteristics as scholars have noted that greater awareness of one's White race is complexly related to experiences of shame and pride (McDermott & Samson, 2005) which could indicate either a positive or negative relationship between racial identity and self-esteem. Finally, the attributes of the relationship (e.g., how the couple solves problems in their relationship) then result in the success of the romantic relationship, as is also described by the DEARR model (Bryant & Conger, 2002). The ICRS Model, in its infancy, provides a broad framework to understand interracial couple relationship success from initial identity development experiences to intrapersonal growth and understanding to subsequent relationship processes and finally relationship outcomes. These larger concepts are intended to be measured by more specific constructs capturing the unique processes associated with successful interracial relationships. Empirical testing of the model propositions would provide validity for the purported associations. The best way to test the proposed ICRS model would be through use of longitudinal data with a large sample of different interracial dyads followed throughout early socialization experiences through the successful maintenance of an interracial relationship. Given the cross-sectional nature and limited sub-sample of the current study, I focused on garnering empirical support for the latter portion of the ICRS Model by testing a specific pathway linking ethnic and racial identity to relationship success (i.e., relationship stability and satisfaction) through self-esteem and interpersonal problem-solving (see Figure 2 for a detailed theoretical depiction of these linkages). In the following review of the extant literature, these particular links of the proposed model are further explored.

Ethnic and Racial Identity and Self-Esteem

Ethnic identity (Phinney, 1992) is a concept born out of the larger construct of social identity in which researchers pose that a greater sense of group belonging and positive perceptions of group identity is associated with greater self-esteem (Tajfel, 1982). There is a

robust association between healthy ethnic identity and self-esteem (Phinney, 1992). For Black individuals, higher levels of ethnic identity are associated with greater self-esteem (Phelps, Taylor, & Gerard, 2001). Specifically, the researchers found that 37% of the variance in Black student's self-esteem was explained by cultural mistrust, ethnic and racial identity (Phelps et al., 2001). Positive associations between ethnic identity affirmation and self-esteem also persist for biracial Latino/White and Asian/White individuals (Brittain et al., 2013). In a study of ethnic identity as a protective factor for White and Black teenagers, researchers found that a stronger sense of ethnic identity was related to higher levels of social adaptation and emotional adjustment for both racial groups (Yasui, Dorham, & Dishion, 2004). In another study, researchers concluded that it is not whether one has positive or negative perceptions of their own ethnic identity but rather, the extent to which one's ethnicity has been explored and understood that is associated with greater self-esteem (Umaña-Taylor, Yazedjian, & Bámaca-Gómez, 2004). The Multigroup Ethnic Identity Measure (MEIM) is a measure of ethnic identity developed in response to a need for a broad measure of ethnic identity exploration and formation that applied to multiple ethnic groups (Phinney, 1992). The importance of considering the unique but related experiences of ethnic exploration and understanding is supported by the revision to the original MEIM, the Multigroup Ethnic Identity Measure -Revised (MEIM-R Phinney & Ong, 2007) in which ethnic identity is comprised of two core constructs; exploration and commitment. The MEIM-R is widely considered as one of the primary measures of ethnic identity (Ponterotto & Park-Taylor, 2007), and is thus used in the present research. The present literature suggests that self-esteem is a positive outcome of a positive ethnic identity and that the association is a necessary link to consider in the study of ethnic minority individuals and relationships.

In their meta-analytic research on measures of racial and ethnic identity, Ponterotto & Park-Taylor (2007) suggest that researchers consider measurement of both constructs when investigating identity processes and development related to race or ethnicity. Researchers suggest that a salient group identity, such as racial identity, is associated with positive in-group identity and racial centrality, which is associated with greater levels of self-esteem (Twenge & Crocker, 2002). Studies that explicitly tested this link found that a positive sense of racial identity is related to greater self-esteem in ethnic and racial minority groups (Smith, Walker, Fields, Brookins, & Seay, 1999). In their review on the relationship between race and self-esteem, Twenge and Crocker (2002) also note that "having a central and positive racial identity may have

both direct and indirect effects on self-esteem,” (p. 373) such that positive racial identity may serve as a buffer against discrimination for members of racially stigmatized groups. Although differing ethnic groups have experienced varying levels of discrimination at individual and societal levels, there is evidence for a positive link between a positive racial identity and self-esteem across differing racial groups (Phinney, Ferguson, & Tate, 1997). Overall, research suggests that a positive sense of one’s racial identity is associated with greater self-esteem (Twenge & Crocker, 2002). This association, however, may require continued examination in samples with more than one racial group as some research has found that racial and ethnic identity accounted for a significant proportion of the variance in self-esteem for Black but not White individuals (Goodstein & Ponterotto, 1997).

Self-Esteem and Relationship Processes

In a widely cited work, Baumeister and colleagues (2003) pointed out the benefits and pitfalls to self-esteem and suggested that in general, self-esteem is beneficial when it enhances (positive) efforts (i.e., task performance; making a good impression) and experiences of happiness. In the present work, I argue that an individual who has developed a positive sense of self-esteem is more likely to engage in positive problem-solving skills in their romantic relationship. Cast and Burke (2002) presented a theory of self-esteem in which positive self-esteem is both a cause and an outcome in forming and maintaining the self within relationships. Specifically, the authors suggest that self-esteem encourages an individual to maintain relationships that have positively influenced the self (Cast & Burke, 2002), advocating for the need to engage in positive conflict management processes such as problem solving. Research has shown that when an individual had high self-esteem, one is more likely to be reassuring to their partner when faced with perceived conflict, compared with individuals with low self-esteem, who were more likely to react anxiously (Murray, Rose, Bellavia, Holmes, & Kusche, 2002). Furthermore, individuals with higher self-esteem are more likely to face conflict in romantic relationships more optimistically (e.g., Murray, Holmes, MacDonald, & Ellsworth, 1998). The current literature reflects an important link between higher levels of self-esteem and positive relationship maintenance strategies such as better problem solving, suggesting that both experiences are necessary in understanding the development of successful interracial relationships.

Relationship Processes and Relationship Success

The literature indicates a robust, although widely defined, link between relationship-promoting behaviors and successful relationship outcomes (e.g., Gottman & Krokoff, 1989). A couples' ability to problem solve effectively is likely to positively influence the outcome of the relationship. In a study on the trajectory of marital satisfaction amongst newlyweds, one study found that positive affect and positive relationship skills (e.g., problem-solving) predicted both the initial level and change over time in marital satisfaction (Johnson, Cohan, Davila, Lawrence, Rogge, Karney, Sullivan, & Bradbury, 2005). Furthermore, Rusbult and colleagues (1986) tested the impact of problem solving on experiences of distress in couple relationships and concluded that "it is the way in which partners react in response to destructive behaviors from their partners that is [the] best [predictor] of relationship health" (p. 744). In another study, effective problem-solving skills predicted greater levels of relationship satisfaction (Gill, Christensen, & Fincham, 1999).

Research has established that relationship maintenance strategies are positively linked to relationship satisfaction, yet factors predicating relationship maintenance within interracial relationships has largely been absent. Consideration of identity development and how it differs for both romantic partners in relationships may be useful, particularly for interracial couples with dissimilar racial and ethnic experiences. Although not between romantic partners, research with interracial roommates suggest that racial attitudes predicted the stability and duration of the roommate relationships (Towles-Schwen & Fazio, 2006). Similar links should be explored in interracial romantic relationships to determine the process via which this effect may occur. Towles-Schwen and Fazio (2006) suggested that a critical contribution to having positive attitudes regarding the relationship stems from the development of friendship. If applied to interracial romantic relationships, a similar indicator of friendship may be adaptive communication skills, such as problem solving. Through the examination of problem-solving from both partner's perspectives, researchers may be able to determine the unique associations between individual perceptions of relationship maintenance strategies in the relationship and its influence on relationship satisfaction. Additionally, research has established that greater levels of relationship satisfaction is positively linked to the stability of the relationship (Amato et al., 2007), suggesting that fostering happiness and satisfaction in interracial relationships will encourage longer lasting unions and marriages. In its aggregate, this body of literature paves the

way for the study of the potentially unique influence of racial and ethnic identity formation and its association with successful relationship outcomes for interracial couples.

Present Study

In the present study, I aimed to provide empirical support for a portion of the Interracial Couple Relationship Success (ICRS) model by addressing the intrapersonal and interpersonal concepts that predict relationship stability and satisfaction among interracial couples. The model posits that one's ethnic and racial identity/consciousness formation is positively associated with greater relationship success in interracial relationships, via several mediating variables. Specifically, I hypothesized that a higher level of self-esteem is related to greater problem-solving skills in the current romantic relationship, which is then ultimately related to higher levels of relationship success as indicated by greater relationship satisfaction and stability. In this dissertation, I sought empirical support of the theory through testing its applicability in a sample of interracial couples—Black/White couples. To boost the viability of the model, I controlled for the effects of participants' sex, religiosity, relationship length, parental race, and perceived experiences of racial discrimination. Research suggests that more frequent religious attendance is linked to greater marital stability (Call & Heaton, 1997). Furthermore, religious involvement is often a large component of Black individuals' identity and belonging (McGoldrick, Giordano, & Garcia-Preto, 2005). Considering that the present sample is comprised of Black/White couples, religious importance and attendance are included as potential control variables. Relationship length is also included as a covariate in the model as it has been found to be associated with decreased problem solving skills and relationship satisfaction over time (Shapiro, Gottman, & Carrere, 2000). Additionally, racial identity of parents has been found to result in differences in socialization goals around race and their children's racial heritage (Richman & Mandara, 2013) and is also included as a potential covariate. Finally, perceived experiences of racial discrimination were considered as a control variable as it has been found to negatively impact relationship quality through self-image (Doyle & Molix, 2014) and related to lower marital quality for men with lower ethnic identity (Trail et al., 2012). Consideration of contextual variables provide vital information about potential unique variance in the data, and are thus important to consider. Furthermore, established literature on interracial couple relationships notes that the distress faced by interracial couples often has more to do with the intersection of

multiple contextual factors than the solitary difference in race (Killian, 2001). The findings of the present study may offer increased understanding of the associations between ethnic and racial identity development, individual self-esteem, and interracial relationship processes and outcomes.

Chapter 3 - Method

Sampling Procedure

Participants were recruited through the use of a Qualtrics Panel with restricted sampling based on several criteria. All eligible participants had to be in a Black/White heterosexual married relationship, with both partners between the ages of 18-40, and both partners had to be willing to participate in the study. The sample was purposefully restricted to individuals ages 18-40 to decrease the likelihood of variability due to the impact of institutionalized discrimination for previous compared to more recent generations of interracial couples. Participants completed an online survey including psychometrically validated scales measuring racial and ethnic identity development processes, individual values and beliefs, relationship processes, and relationship outcomes. Based on funding via a scholarship for data collection for this dissertation, a total sample of 200 heterosexual interracial Black/White couples were recruited to participate in this study. Black/White couples are one of the most prevalent groups of interracial couples in the United States (Pew Research Center, 2012) and face the most stigma compared to other interracial couplings (Wang, 2012). Qualtrics Paneling is a unique method of data collection that provides researchers with large national samples at a relatively affordable price. Prices are determined based on length of survey, numbers of participants requested, and restrictions of the sample. Based on consultations with a Qualtrics representative, the study sample cost approximately \$17 per couple. Qualtrics received payment for providing the panel data and for administration of the survey. Participants received monetary remuneration for completing the survey from Qualtrics. After data collection was completed, Qualtrics provided the finalized de-identified dataset which I cleaned and prepared for analysis.

Participants

Qualtrics Paneling offered a novel method of sampling that guaranteed completion of data collection with the requested sample size. Given that the sample of interest are Black-White couples, I anticipated that there would be an unbalanced sex/race composition with the majority of couples in the sample consisting of Black men and White women, as is reflected in population-based data (Wang, 2012). Furthermore, other research has shown that Black men are considerably more likely than Black women to marry outside of their own race. In fact, one study

indicated that Black men are 2.7 times more likely to have a White spouse and 4.3 times more likely to have an Asian spouse compared to their female counterparts (Harris & Ono, 2005). Based on these estimates, I expected that two-thirds to three-quarters of my sample would have consisted of Black male-White female dyads. In anticipation for this imbalance, I requested from Qualtrics that my sample be composed of at least 50 Black female/White male couples in order to analyze potential group differences. Qualtrics noted the request but indicated that such a subsample was not guaranteed, otherwise, the desired sample size may be compromised.

Following the completion of data collection, the data were cleaned and participants were removed from the sample if they did not meet the following criteria: currently in a Black-White heterosexual marital relationship, between the ages of 18-40, and both partners were available to complete the survey. After removing couples who did not meet the above criteria, the final sample came to 185 couples. Detailed descriptive statistics of the sample and model variables are provided in Table 1. The sex-race composition of the sample was relatively balanced with 103 couples in Black male-White female relationships and 80 couples in White male-Black female relationships, two couples included at least one participant who did not answer on the variable of sex. All couples in the sample reported being in a long-term relationship with their current partner ($M = 8.99$ years, $SD = 4.57$ years, $Range = 1.42$ years to 25.33 years). Subsequent descriptive data are discussed in terms of each partner based on their racial identification. The mean age was 31.91 ($SD = 4.38$) for Black participants and 31.98 ($SD = 4.20$) for White participants. The majority of Black participants attended college with 36.2% of the sample receiving a Bachelor's degree (12.4% received an Associate's degree). Education level was similar for White participants (38.9% receiving a Bachelor's degree, 18.9% an Associate's degree). About a third (34%) of the couples reported an annual household income between \$50,000 and \$69,999, and roughly a quarter (25.9-26.5%) of the participants, varying due to which partner was reporting, indicated an income of less than \$49,999. Both Black and White participants primarily reported being Catholic (23.9% for Black participants, 25.4% for White participants) or Protestant (34.2% for Black participants, 31.4% for White participants) more so than other religious denominations.

Measures

Identity Measures

As previously discussed, the concepts of ethnic and racial identity have been commonly measured with the same scales although the classification of race and ethnicity are by definition distinct from each other. In the present study, I measured ethnic identity, racial identity, and racial consciousness as separate constructs with inventories that capture the nuances of each concept.

Ethnic Identity

To assess participants' ethnic identities, I used the 6-item Revised Multigroup Ethnic Identity Measure (MEIM-R; Phinney & Ong, 2007). The revised MEIM measures two related constructs of ethnic identity, exploration and commitment. Participants were first asked how they identify themselves with an open-ended question, "In terms of ethnic group, I consider myself to be (blank)." Next, they were asked the extent to which they agree to a series of statements regarding their ethnic identity. Responses ranged from 1 = *strongly disagree* to 5 = *strongly agree*. Statements measuring exploration include "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs" and commitment statements include "I have a strong sense of belonging to my own ethnic group." The original development of the measure indicated good reliability of both subscales (Cronbach's alphas of .76 for exploration and .78 for commitment; Phinney, 2007). In the present sample, the total scale score had high reliability for both Black ($\alpha = .91$) and White participants ($\alpha = .86$).

Black Racial Identity

Black racial identity was measured using two distinct scales, the humanist and nationalist subscales in the Multidimensional Inventory of Black Identity (Sellers, Smith, Shelton, Rowley, & Chavous, 2008). Each subscale is comprised of nine items for a total of 18 items. Sample items from the humanist subscale include "Blacks and Whites have more commonalities than differences" and "We are all children of a higher being, therefore, we should love people of all races." The nationalist subscale items include "Blacks and Whites can never live in true harmony because of racial differences" and "A thorough knowledge of Black history is very important for Blacks today." Black participants responded on a Likert scale from 1 = *strongly disagree* to 7 =

strongly agree to each of the 18 items, White participants were not presented with this measure. Scores for the humanist and nationalist subscales were computed individually with a mean average of nine items per subscale. Neither scale indicates greater or superior or more salient Black identity, but rather, provides two different perceptions of strong racial identity through differing understandings of what it means to embody one's racial background. Cronbach's alpha was .82 for the humanist subscale and .83 for the nationalist subscale.

White Racial Consciousness

As suggested by literature on racial identity of White individuals (e.g., McDermott & Samson, 2005), awareness or consciousness of one's racial identity in a larger social context is a more accurate reflection of positive racial identity. Thus, a measure of racial consciousness was used. White racial consciousness was measured using the pseudo-independence and autonomy subscales of the revised White Racial Consciousness Development Scale (WRCDS-R; Lee, Puig, Pasquarella-Daley, Denny, Rai, Dallape, & Parker, 2007). The revised scale is based on an earlier version of the measure by Clancy and Parker (1989). Each subscale is comprised of nine items with all responses ranging on a 1 = *strongly disagree* to 5 = *strongly agree* Likert scale. The subscale totals were independent from one another. Only White participants were presented with this measure. Items on the pseudo-independence scale are intended to measure one's awareness and acknowledgement of White dominance or privilege and its potential in perpetuating racist behaviors (Lee et al., 2007). Higher scores on the pseudo-independence scale reflects greater awareness of privilege. The autonomy subscale captures the extent to which a non-racist White identity is embraced as demonstrated by advocacy and appreciation of similarities and differences between racial groups (Lee et al., 2007). Sample items include "I think White people should work hard to give up their advantages," from the pseudo-independence subscale and "When I hear someone make racist comments, I say something to them to show my disapproval," from the autonomy subscale. Higher scores indicate greater acceptance. Mean totals for both subscales were created to develop two manifest variables. Reliability in the present sample was $\alpha = .83$ for pseudo-independence and $\alpha = .63$ for autonomy.

Self-Esteem

Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1979). Since 1979, the Rosenberg Self-Esteem Scale has continued to remain one of the most

used measures of self-esteem in the United States and internationally. This scale has been used with varying ethnic groups with high reliability (e.g., Umaña-Taylor et al., 2004). In 2005, Schmitt and Allik administered the scale to over 15,000 individuals across 53 nations and using principal-components analysis and found that the measure produced a unidimensional structure in the vast majority of nations, suggesting that it is valid across cultures. Items were coded such that higher scores indicated higher levels of self-esteem. Participants were asked to evaluate each item on a 4-point scale from 0 = *strongly agree* to 3 = *strongly disagree*. Sample items included “I feel that I have a number of good qualities,” and “I take a positive attitude toward myself.” A mean score was computed by reverse coding items opposite in valence and averaging the ten items. In the present sample, the measure was reliable for both Black ($\alpha = .86$) and White ($\alpha = .86$) participants.

Relationship Processes

Problem Solving

Problem solving in the couple relationship was measured using the 17-item Interactional Problem-Solving Inventory (IPSI; Lange, 1983). This scale is intended to measure one’s perceived ability to handle relationship problems. This measure was originally developed in the Netherlands and has been adapted for use in international samples (e.g., Cheung, 2002). Responses to items can range from 1 = *totally disagree* to 6 = *totally agree*. Sample items included “Before deciding upon a solution for a particular problem, we first view the matter from different angles,” and “After we have discussed a particular problem, I often feel that my point of view has not been properly acknowledged.” Rather than computing a total scale score, an item-parceling technique was used to disperse the 17 items into three balanced parcels as manifest indicators of the latent construct, problem solving. Items were coded so that higher scores were indicative of better problem-solving skills. The measure was found to be reliable for Black ($\alpha = .81$) and White ($\alpha = .80$) participants. Cronbach’s alphas were in line with previous studies using this measure (among Chinese young adults, $\alpha = .78$; Anderson, Johnson, Liu, Zheng, Hardy, Lindstrom, 2013; among first-time parents in the Netherlands, $\alpha = .82 - .87$; Meijer, & van den Wittenboer, 2007).

Relationship Outcomes

In this model, I intended to model the outcome variable, relationship success, as a latent variable using two indicators: relationship stability and relationship satisfaction. In a reflection of the relationship science literature, Fincham and Beach (2010) noted that our foci tend to be largely negative in valence. They suggest a need for relationship researchers to focus on aspects of relationship flourishing, a concept that aims to capture an amalgamation of stability, satisfaction, resilience, commitment, support, and other positive constructs in the literature (Fincham & Beach, 2010).

Relationship Stability

Relationship stability was measured using the 6-item Marital Instability Index (Amato & Booth, 2007) that assessed whether the participant has considered or participated in activities related to ending the relationship over the last six months. Participants indicated either a 0 = *No* or 1 = *Yes* for each item. Sample items included “In the last six months, has the thought of getting a divorce or separation crossed your mind?” and “In the last six months, have you discussed a divorce or separation with family members or a close friend?” Items were summed in order to compute a total scale score with a higher overall value indicating greater instability. In order to use the marital instability scale as a manifest indicator of relationship success, the total scale score was reverse-coded such that higher scores would reflect greater stability as to reflect that same valence as success and satisfaction. Versions of the Marital Instability Index have been used in varying samples with relatively high reliability ($\alpha = .77 - .78$; Hardy, Soloski, Ratcliffe, Anderson, & Willoughby, 2014; $\alpha = .85$, Whitton, Stanley, Markman, & Johnson, 2013). Cronbach’s alphas in the present sample was $\alpha = .76$ for Black participants and $\alpha = .72$ for White participants.

Relationship Satisfaction

The second indicator of relationship success, relationship satisfaction, was measured using the 4-item Couple Satisfaction Index (CSI-4; Funk & Rogge, 2007). The CSI-4 was developed using item response theory (IRT) methods in an effort to develop a rigorous measurement of the concept of relationship satisfaction. Using IRT, Funk and Rogge (2007) were able to compare the CSI with existing measures of relationship satisfaction and demonstrate the convergent and construct validity of the scale. Participants were asked to respond regarding

how much four statements are true of their relationship. Possible responses varied due to use of slightly differing Likert scales, however, each item is measured on a general range of 0 = *Not at all* to 5 = *Completely*. Items included statements such as “In general, how satisfied are you with your relationship?” and “I have a warm and comfortable relationship with my partner.” Higher scores indicate greater satisfaction with one’s relationship. In a study with a similar sample size, this measure demonstrated high reliability with Cronbach’s alpha ranging from $\alpha = .86 - .88$ (Johnson, Nguyen, Anderson, Liu, & Vennum, 2015). It is also important to consider studies that have samples experiencing similar external stressors as interracial couples. For instance, a study with same-sex couples found that the CSI-4 demonstrated excellent internal reliability ($\alpha = .94$; Whitton, Kuryluk, & Khaddouma, 2015). In the present sample, Cronbach’s alpha was $\alpha = .92$ for Black participants and $\alpha = .92$ for White participants, reflecting high reliability.

Covariates

Several contextual variables were considered due to their association with the primary model variables. Due to the sample size, the number of estimable parameters in the structural model is limited and model variables were chosen with care. Contextual factors, however, are typically controlled in theoretical models to determine the unique effects of exogenous variables on endogenous and outcome variables. Potential control variables in the final model included participant sex, religiosity, relationship length, parental race, and experiences of discrimination.

Religiosity was measured using the 5-item version of the Centrality of Religiosity Scale (CRS; Huber & Huber, 2012); participants were asked about religious attendance and beliefs (e.g., “How often do you think about religious issues” and “To what extent do you believe that God or something divine exists?”). Items were recoded to develop a total scale score such that greater values indicated greater religiosity. Next, relationship length was determined by how long they have been in their current relationship indicated by the total number of years and months with the current partner. Participants were asked to indicate the racial identity of their mother and father. Possible responses included American Indian/Alaskan Native, Asian/Pacific Islander, African-American/Black but not Hispanic, Latino or Hispanic, White non-Hispanic, Multi-racial, or Other. Lastly, participant’s perceived experience of day-to-day discrimination was measured using six items adapted by Trail et al (2012) from the Midlife Development in the United States (MIDUS) survey (Kessler, Mickelson, & Williams, 1999). These items are

intended to capture potential everyday experiences of discrimination. Although the items are broad to encompass possible discrimination based on race, ethnicity, gender, or particular abilities, the literature generally concedes the measure primarily to elicit experiences of discrimination based on race or ethnicity (e.g., Doyle & Molix, 2014; Kessler et al., 1999; Levin, Sinclair, Veniegas, & Taylor, 2002; Trail et al., 2012). Thus, participants were asked to indicate on a scale of 0 = *never* to 3 = *often*, “how often have you experienced the following examples of discrimination based on your race and/or ethnicity”: being treated as inferior, people acting fearful of you, being treated with less respect than others, people treating you as if you have been dishonest, being insulted or received name-calling, and being threatened or harassed (Trail et al., 2012). In the original study, the measure was found to be reliable for both men and women ($\alpha = .75$ for husbands and $\alpha = .69$ for wives; Trail et al., 2012). For the present sample, the scale demonstrated high reliability ($\alpha = .90$ for Black participants, $\alpha = .89$ for White participants).

Data Analysis Plan

The present study presents a cross-sectional structural equation model to empirically test the proposed theory of interracial couple relationship success. Both partners in the relationship provided unique data allowing for dyadic data analysis. For individual level data (i.e., identity measures, individual well-being, and demographic covariates), both partner’s responses were reflected as separate variables in the model.

Due to the limited number of couples and large amount of model variables in the study, the present model employed use of manifest variables to indicate individual-level constructs (i.e., ethnic identity, racial identity, and self-esteem) and latent variables for relationship-level constructs (e.g., problem-solving, and relationship success). Problem-solving is a 17-item measure, which posed concerns regarding convergence, thus, I posed two potential approaches to developing the latent construct for each partner: 1) using a common-fate approach, 2) parceling the items into three manifest indicators of the latent construct. Modeling problem-solving as a joint measure in the couple relationship through a common-fate method captures the interdependence within the relationship. The common-fate approach allows for measurement of the shared variance (Ledermann & Kenny, 2012) of problem-solving by measuring what is shared within each couple’s perspectives regarding their problem-solving abilities. The shared views of both partners are reflected within the latent construct with factor loadings indicating

how much of the shared variance was contributed by each partner. Common-fate approaches are typically more difficult to estimate given assumptions of strong intradyadic correlations and fixed to be equal factor loadings (Ledermann & Kenny, 2012).

Based on standards of good model fit to the data, I proceeded with use of parceling to measure problem-solving. Parceling (Little, Rhemtulla, Gibson, & Schoemann, 2013) the items into three parcels to be manifest indicators of a latent construct may benefit model fit and measurement of the construct. Due to the large number of items in the IPSI (17 items), individual manifest items would have presented potential issues including likelihood of not converging, high variability in factor loadings, requiring more parameter estimates, and greater likelihood of dual factor loadings. Parceling the items results in lower error variance, greater reliability, and smaller, more equal intervals. A balancing approach was used in which three parcels were created based on strength of correlations between items and the scale total (Little, 2012).

Descriptive analyses of the model variables and sample demographics were conducted in SPSS Version 23.0. Full information maximum likelihood estimation (FIML) was used to address missingness in the data. FIML has been found to be the preferred approach compared to listwise deletion, pairwise deletion, or mean substitution (Acock, 2005). Following descriptive analyses, Mplus 6.12 (Muthén & Muthén, 1998-2012) was used to test the measurement and structural model as well as test indirect effects using bootstrap analyses with 2,000 bootstraps (Preacher & Hayes, 2008). For structural equation modeling, model fit was evaluated on several indices. In the present study, I used the following guidelines: a Chi-square statistic with a non-significant p-value, Comparative Fit Index (CFI) and Tucker-Lewis Index values greater than .95, a Root Mean Square Error of Approximation (RMSEA) value below .08, and a Standardized Root Mean Square Residual (SRMR) value below .08 to constitute evidence of acceptable fit between the model and the observed data (Hu & Bentler, 1999; Kline, 2011).

To determine whether the path coefficients were larger for Black versus White partners, pairs of pathways were constrained one at a time and model fit was evaluated iteratively. Chi-square difference tests were conducted for each constrained parameter against the original model—if the model fit did not significantly worsen, it suggests that the parameter estimate is approximately equal between the two groups. If model fit is worse, it indicates that the parameter significantly differs for the groups and should therefore be freely estimated.

Finally, three alternative models were tested. When using cross-sectional data, alternative models provide additional empirical support for the theoretically proposed pathways. If model fit indices suggest that the proposed model fits better than an alternative model, it suggests that the temporal ordering and modeled pathways between variables in the original model are empirically justified. Specifically, I tested an alternative model in which all intrapersonal variables (i.e., ethnic identity, racial identity/consciousness, and self-esteem) are tested at the same level, covarying, rather than having ethnic identity and racial identity/consciousness predicting self-esteem. Developmentally, it may be that these experiences of racial and ethnic awareness and understanding and self-esteem development may coincide rather than occur sequentially.

The second model tested mediating effects from ethnic identity to relationship satisfaction with the mediating variables reversed (i.e., ethnic identity → problem-solving → self-esteem → satisfaction). This was based on previous theory suggesting that self-esteem, in addition to being a viable antecedent to positive relationship interactions, may also be an outcome of successful interactions (Cast & Burke, 2002). A final alternative model was tested in which direct actor pathways from self-esteem to relationship satisfaction for both partners are modeled. This would suggest partial mediation rather than full mediation as posited in the original model.

When comparing alternative models to the proposed model, I conducted a chi-square difference test when the alternative model was nested or hierarchical (i.e., the associations between the pathways are in the originally proposed order, but with a trimmed or added parameter), and I used the Akaike information criterion (AIC) and the Bayesian information criterion (BIC) indices for non-nested models in which the ordering of the constructs are changed but the number of estimated parameters may be equivalent. When conducting a chi-square difference test, a difference value of less than 3.84 for one degree of freedom is non-significant, suggesting that the more parsimonious model should be retained. When conducting a non-nested comparison, smaller AIC/BIC values indicate better fit of the model to the data (Little, Bovard, Widaman, 2006).

Chapter 4 - Results

Descriptive Statistics and Initial Analyses

Descriptive analyses were conducted in SPSS to provide an overall understanding of the present sample and variables of interest (see Table 1). In this dyadic sample of Black-White interracial couples, 56% of the couples were Black male/White female relationships, with an average relationship length of 8.86 years ($SD = 4.78$). A series of independent-samples t-tests were conducted to compare mean differences on the model variables between couples in Black male/White female and White male/Black female relationships. Results of the t-tests are shown in Table 2. Bivariate relationships between the final model variables are depicted in Table 3.

In my initial proposal of this dissertation, relationship success was proposed as a larger construct comprised of validated measures of relationship satisfaction and stability. In my preliminary analyses, however, relationship stability was found to have lower reliability than anticipated in the present sample and when modeled as a latent factor with two indicators resulted in an unstable measurement model with poor fit, thus the final model used relationship satisfaction as the sole outcome variable. Furthermore, the proposed theoretical model posits unique associations between ethnic identity and self-esteem and racial identity and self-esteem. The racial identity and racial consciousness measures, however, had extensive missing data due to a fault in the skip logic in the survey. Specifically, a large number of Black participants ($n = 146$) did not answer the nationalist and humanistic Black racial identity measures and were prompted to answer the White racial consciousness items. Due to this high degree of missing data, the racial consciousness scales could not be included in the final model.

Confirmatory Factor Analysis

Prior to testing the structural model, a confirmatory factor analysis was conducted to determine whether the measurement model fit the data well. Guidelines provided by Kline (2011) were used to evaluate goodness-of-fit. An initial measurement model in which problem-solving was modeled as a common-fate variable resulted in poor fit to the data, therefore, I proceeded to a subsequent measurement model in which problem-solving was measured separately for each partner but the scale items were parceled into three indicators of the latent construct. The results of this confirmatory factor analysis indicated adequate fit to the data (χ^2

(34) = 55.170, $p = .012$; root mean square error of approximation (RMSEA) = .058, 90% CI [.027, .085], comparative fit index (CFI) = .981, Tucker–Lewis index (TLI) = .960, standardized root mean square residual (SRMR) = .028).

Structural Equation Model

Model fit indices for the final actor-partner interdependence structural model indicated good fit to the data ($\chi^2(113) = 172.45$, $p < .001$; root mean square error of approximation (RMSEA) = .053, 90% CI [.037, .069], comparative fit index (CFI) = .953, Tucker–Lewis index (TLI) = .930, standardized root mean square residual (SRMR) = .060). Factor loadings for parcel indicators of problem-solving for both partners were positive, ranging from .76 (Parcel 1, White partner) to .90 (Parcel 3, Black partner). All factor loadings were significant at the .001 level. Individual loadings are displayed in the final model figure (i.e., see Figure 3) for model with standardized estimates). The direct pathway from ethnic identity to self-esteem was significant for Black individuals ($\beta = .196$, $b = .118$, $p = .016$) but not for White individuals ($\beta = -.039$, $b = -.026$, $p < .001$). Pathways from self-esteem to problem-solving skills were significant and positive for both partners at the actor level ($\beta = .390$, $b = .409$, $p < .001$ for Black partners; $\beta = .206$, $b = .192$, $p = .025$ for White partners) as well as at the partner level (Black partners' self-esteem to White partners' problem solving, $\beta = .430$, $b = .412$, $p < .001$; White partners' self-esteem to Black partners' problem solving, $\beta = .221$, $b = .225$, $p = .011$). Results also revealed that direct actor paths from problem-solving to relationship satisfaction were significant for both Black and White partners ($\beta = .620$, $b = 4.686$, $p = .025$ for Black partners; $\beta = .411$, $b = 3.629$, $p = .050$ for White partners) but partner paths were not significant ($\beta = .150$, $b = 1.088$, $p = .475$ for Black partner's problem-solving to White partners' satisfaction, $\beta = -.084$, $b = -.700$, $p = .755$ for White partner's problem-solving to Black partners' satisfaction). These findings suggest that the actor and partner effects were present for both partners between self-esteem and problem-solving but only actor paths were significant for problem-solving skills to relationship satisfaction.

In addition to the direct pathways between model variables, covariates were included in the model at the level of ethnic identity. Insignificant path coefficients between covariates and model variables were pruned iteratively until only significant pathways remained (Little, 2013). Two significant effects remained in the final model. Specifically, Black participants' reported

level of religiosity was positively associated with their White partner's relationship satisfaction ($\beta = .226, b = .765, p < .001$) and White participants' sex was significantly associated with their Black partner's self-esteem ($\beta = .444, b = .465, p = .012$). Residual variances of the model variables were correlated between partners; results of these correlations ranged from moderate to high (ethnic identity: $r = .425$, self-esteem: $r = .587$, problem-solving skills: $r = .757$, and relationship satisfaction: $r = .553$). In total, the model accounted for 34.3% of the variance in relationship satisfaction for White partners and 30.4% of the variance in relationship satisfaction for Black partners.

Indirect Effects

In addition to the direct pathways, tests of indirect effects revealed several significant mediated paths (see Table 4). For Black partners, one's own self-esteem was related to their own relationship satisfaction via their reported problem-solving skills in the relationship ($\beta = .242$, 95% CI = .017, .466, $p = .035$). Black partners' self-esteem was also found to be related to their White partners' relationship satisfaction via the White partners' problem-solving skills ($\beta = .177$, 95% CI = .007, .347, $p = .041$). The latter pathway indicates that, within Black-White interracial relationships, a one-unit increase in a Black partner's self-esteem is associated with a .177 unit increase in the White partner's relationship satisfaction, via its effect on the White partner's problem-solving skills.

Constrained Pathways

In order to determine whether pathways in the structural equation model significantly differed from another, pairs of pathways were constrained to be equal, and chi-square difference tests were conducted. Abbreviations "BP" for Black partner and "WP" for White partner are used in this description of the pathways for ease of readability. The following pathways were constrained to be equal in this series of analyses: 1. BP's self-esteem \rightarrow BP's problem-solving and WP's self-esteem \rightarrow WP's problem-solving; 2. WP's self-esteem \rightarrow WP's problem-solving and WP's self-esteem \rightarrow BP's problem-solving; 3. BP's self-esteem \rightarrow BP's problem-solving and BP's self-esteem \rightarrow WP's problem-solving; 4. BP's self-esteem \rightarrow WP's problem-solving and WP's self-esteem \rightarrow BP's problem-solving; 5. BP's problem solving \rightarrow BP's relationship satisfaction and WP's problem-solving \rightarrow WP's relationship satisfaction; 6. BP's ethnic identity \rightarrow BP's self-esteem and WP's ethnic identity \rightarrow WP's self-esteem. When pathways are

constrained to be equal, a parameter in the model is free to vary, making the model less complex. If results of the chi-square difference test indicate that the model fit of the simpler model is not significantly different from the original, more complex model, then the simpler constrained model is retained for parsimony. The findings of these analyses revealed that these series of pathways held equal to one another did not yield a significantly worse fitting model, suggesting that associations between self-esteem and problem-solving and the relationship between problem-solving and relationship satisfaction for each partner in the relationship were relatively equal to one another. Detailed results of the constrained analyses are discussed here.

The first constrained pathway between the Black partner's self-esteem and their own problem-solving was constrained to be equal to the White partner's self-esteem and their own problem-solving skills. A chi-square difference test was used to compare the constrained model to the structural model described above. The results of the chi-square difference test indicated that the constrained pathways did not significantly worsen the model ($\chi^2_{diff}(1) = 2.54, p = .11$) and was thus retained for parsimony. These findings suggest that, in this sample, the association between self-esteem and problem-solving does not significantly differ between Black partners and White partners. Second, the pathway between White partners' self-esteem and their own problem-solving did not significantly differ from the association between White partners' self-esteem and their Black partners' problem-solving skills ($\chi^2_{diff}(1) = 0.22, p = .63$). The third constraint in which pathways between Black partners' self-esteem to their own and the path between their own self-esteem and their White partner's problem-solving skills was forced to be equal, resulted in a non-significant chi-square difference, with the chi-square value being essentially identical to the initial model ($\chi^2_{diff}(1) = 0.001, p < .97$). Next, the partner pathways from the Black partners' self-esteem to White partners' problem solving and White partners' self-esteem to Black partners' problem solving were constrained to be equal. Results revealed that the constraint did not significantly worsen the model ($\chi^2_{diff}(1) = 1.87, p = .17$). When the actor paths between each partner's problem-solving skills and their own relationship satisfaction were constrained to be equal, model fit did not significantly worsen ($\chi^2_{diff}(1) = 0.46, p = .49$). Finally, when pathways between each partner's ethnic identity and their own self-esteem were constrained to be equal, results revealed that model fit was not worsened, although the chi-square statistic approached the significant cut-off value (i.e., 3.84; $\chi^2_{diff}(1) = 3.22, p = .07$).

An attempt to capture potential differences in Black male-White female versus White male-Black female dyads was considered via moderation analyses using sex as a mixed moderator (Garcia, Kenny, & Ledermann, 2015). This model, however, did not converge due to the high number of parameters against the present sample size, thus comparisons between Black male/White female and Black female/White male relationships in this actor-partner interdependence model were unable to be tested.

Alternative Models

Prior to accepting the final structural model, three alternative models were tested. First, individual level variables (i.e., ethnic identity, and self-esteem) were measured at the same level rather than as direct pathways from identity variables to self-esteem. Since the proposed alternative model is not nested in the original model, AIC and BIC values were used to evaluate the fit. Although there are no official cut-off values for AIC and BIC in model comparison, lower values indicate better fit of the model to the data. Results revealed that the original model (AIC: 9922.160, BIC: 10231.314) fit better than the alternative model (AIC: 9937.348, BIC: 10304.468), thus, the original model with direct pathways from ethnic identity to self-esteem were retained. The second alternative model was based on literature positing higher levels of self-esteem as an outcome in successful relationship interactions (Cast & Burke, 2002). In this study, I specifically tested the alternative model in which ethnic identity is linked to self-esteem via problem-solving skills as the mediator (i.e., ethnic identity → problem-solving → self-esteem → satisfaction). Results revealed that the alternative model had higher AIC (9976.656) and BIC values (10343.777) compared to the original model (AIC: 9922.160, BIC: 10231.314), thus the original model fit better to the data and was kept as the final model. The final alternative model was a nested model in which two parameters (i.e., both actor pathways from self-esteem to relationship satisfaction) were added. A chi-square difference test was conducted to determine whether the alternative model fit significantly better than the original proposed model. Results of the chi-square difference test indicated that the difference was not significant ($\chi^2_{diff}(2) = 0.365, p < n.s.$), therefore, the original model was retained.

Chapter 5 - Discussion

The purpose of this study was to present and empirically test a portion of the Interracial Couple Relationship Success model as potential framework for understanding factors associated with successful outcomes for couples in interracial relationships. Data for this research were gathered from Black-White couples across the United States. Given the focus of this research on interracial relationships, I felt I would be remiss not to acknowledge the current acts of violence against Black Americans in our nation. Manifestations of racism via acts of hate and prejudice continue to permeate our lives and our families, inevitably impacting our relationships with individuals across racial backgrounds (e.g., Hall, Hall, & Perry, 2016). The current ongoing crimes in our nation shed light on the continued discrimination based on race and the necessary focus on how to improve interracial relationships and interactions in and outside of intimate relationships (e.g., García & Sharif, 2015). Deviating from these acts of hatred, there is a growing number of individuals entering interracial relationships today, and within the field of family science, it is important to learn ways to successfully navigate these relationships and promote healthy relationship outcomes. Furthermore, research dedicated to understanding processes and factors that benefit interracial relationships may serve to bolster these unions in the midst of discriminatory acts. The Interracial Couple Relationship Success model is based on the assumption that it is necessary to understand one's context and cultural experiences when attempting to understand a relationship process. This consideration, however, requires that individuals acknowledge that each individual is uniquely shaped by their individual experiences and identity development, which in turn will impact their intimate relationships.

The present research presented an initial empirical testing of a portion of the Interracial Couple Relationship Success model in which Black and White partners' ethnic identity, self-esteem, couple problem-solving skills, and relationship satisfaction were considered. In addition to these model variables, several significant control variables were considered including religiosity of both partners, experiences of discrimination as individuals and as a couple, parental race, and relationship length. Black partners' degree of religiosity and sex of the White partner was the only control variable significantly related to variables measured in the model. Specifically, there was a positive association between Black partners' religiosity and White

partner's relationship satisfaction and sex of White partner with their Black partner's self-esteem.

Primary findings from the study suggests that ethnic identity, typically confined to a singular experience occurring in individual development, is an important aspect of couple relationships when considering interracial couples. Although the results of the present study did not indicate a fully mediated model between ethnic identity and relationship satisfaction, the direct pathways are worth noting. Specifically, ethnic identity was found to be positively related to self-esteem for Black participants. These findings are in line with previous research (Phinney, 1995; Umaña-Taylor et al., 2002). Literature on ethnic identity development suggests that ethnic identity is more salient for ethnic minority individuals compared to Whites and that a greater salience of one's ethnic identity is associated with positive well-being (Phinney & Ong, 2007; Yip & Fuligni, 2002). If ethnic identity is not a salient indicator of identity development for White individuals, it would make sense that it is not related to one's self-esteem, as it would be for ethnic minority individuals. The significant positive relationship between ethnic identity and self-esteem for Black participants fueled exploration for differences in self-esteem for Black versus White individuals. Given a long standing history of legalized discrimination and recent acts of injustice, previous theorists and researchers hypothesized that Black Americans' experiences of racism would likely be associated with lower levels of self-esteem compared to other racial groups in the United States (Jones, 1999). In their meta-analysis on the consideration of race in self-esteem, however, Twenge and Crocker (2002) found that Black Americans actually had higher levels of self-esteem than White Americans. The findings of this study support the latter research; descriptive statistics, at a cursory glance, suggested that both partners had similar levels of self-esteem, but an ad-hoc paired sample t-test revealed that Black participants actually had higher levels of self-esteem compared to their White partners. Specifically, I found a significant difference in the scores for Black partners' self-esteem ($M = 3.25$, $SD = .54$) and White partner's self-esteem ($M = 2.23$, $SD = .53$; $t(184) = 3.04$, $p = .003$). The finding posed an interesting query about perceptions of strong group identity for Black individuals and potentially other ethnic and racial minorities. These findings are consistent with notions posed by social identity theory (Tajfel & Turner, 1986) which suggests that, minority groups that are potential targets for discrimination and negative stereotyping will often strive to develop and redefine a positive group identity and encourage greater in-group cohesion which

has been positively linked to higher levels of self-esteem (Twenge & Crocker, 2002). Findings from the constraint analyses, however, suggest that the association between ethnic identity and self-esteem actually may not significantly differ between White and Black partners, which merits further testing for additional support.

The partner pathway between White participants' ethnic identity development and their Black partners' self-esteem was significantly negatively related. This suggests that White individuals' exploration and commitment to their own ethnic heritage is related to lower self-esteem in their Black partner. This finding, although moderate in effect size, posits an interesting conclusion about identity formation for White individuals—ethnic identity commitment may be related to rigid beliefs, denial of racial privilege and discrimination, or perhaps even supremacist values, rather than positive racial or ethnic identity formation (e.g., McDermott & Samson, 2005; Olzak, 1992). Thus, such rigidity could then result in greater potential for conflict and damaging interactions fueled by engrained prejudice and devaluation of the other in romantic relationships with someone of a different race. As such, greater commitment to one's White identity may be associated with lower self-esteem in their Black partner. Alternatively, there may be a missing mediating variable driving the relationship between White individuals' ethnic identity to their Black partners' self-esteem. It is possible that higher levels of ethnic identity for White individuals suggests greater commitment to his or own traditions and customs, resulting in less compromise or adaptability to the traditions of their Black partner, ultimately resulting in lowered self-esteem of the Black partner. Given that the findings of this study are preliminary, it would be useful to continue to explore the link between one's ethnic identity and their romantic partner's self-esteem. Furthermore, it may be interesting to explore these associations and how it differs when both partners belong to the same racial group, either as part of the majority or minority.

Pathways from self-esteem to problem-solving revealed that one's own level of self-esteem is directly related to how well he/she is able to problem-solve with a romantic partner, regardless of one's race. These findings lend support to the presented hypothesis that individuals with a positive sense of self-esteem are more likely to engage in positive problem-solving skills in their romantic relationship. On one hand, this finding is not surprising; those who have higher self-esteem fare better in relationship interactions (e.g., Murray et al., 1998). The unique aspect of these findings, however, is that the relationship between self-esteem and problem-solving are

the same for both the White and Black partners in the relationship. This is interesting given that although the findings indicated differences in mean levels of self-esteem for the partners, it appears that self-esteem of both partners is equally important to consider as it is positively and equally related to effective problem-solving skills. In essence, it highlights the importance of considering one's partner's self-esteem as much as one's own in how it is associated with ability to work through conflict together.

Results of this study also revealed that problem solving skills were directly related to relationship satisfaction. This finding was significant as an actor effect but not partner effect for both Black and White partners. Results suggest that one's perceived problem-solving skills are associated with greater relationship satisfaction in one's current relationship. This finding is aligned with previous research demonstrating similar results in research studies (e.g., Johnson et al., 2005) and as a primary link in theoretical literature on romantic relationship processes (i.e., DEARR Model; Bryant & Conger, 2002). Based on these finding that problem-solving skills are positively related to relationship satisfaction, researchers, theorists, and clinicians may benefit from understanding ways to enhance problem-solving skills unique to interracial couples. The lack of significant partner pathways could suggest that each partner in the relationship may have differing indicators of what constitutes successful problem-solving skills and conversations about navigating differences in the relationship. It may be that interracial couples face additional unique experiences that require negotiation between partners, and exploration of these issues could result in greater satisfaction for both individuals in the relationship.

The test of indirect effects provided support for problem-solving mediating the relationship between self-esteem and relationship satisfaction for Black partners. This finding suggests that for Black individuals in interracial relationships, their own level of self-esteem is related to how satisfied she is in her relationship with a White romantic partner, through how well she perceives them to be able to problem-solve as a couple. This result indicates the importance of being able to effectively navigate disagreements in the relationship. The existing literature supports this finding and suggests that when self-esteem is low, individuals are likely to experience greater sensitivity to actions that they may perceive as rejection and are more likely to withdraw after a disagreement, which ultimately has a negative impact on their relationship satisfaction (Murray et al., 2002). For White partners, however, this indirect effect was not significant. It may be that there are other potential mediating links or factors contributing

to White individuals' relationship satisfaction in interracial relationship. Perhaps, the relationship between White individuals' self-esteem and his relationship satisfaction in an interracial relationship may be strengthened or weakened by another relationship factor. For instance, research has suggested that the relationship between self-esteem and overall happiness is moderated by attachment styles (Simsek, 2013).

The second significant indirect pathway suggested that in Black-White interracial relationships, the self-esteem of the Black partner is related to his White partner's satisfaction in the relationship via the White partner's problem-solving skills. Turning to literature on Black self-esteem as it relates to racial identity, it may be that a strong sense of self-value and worth is perceived positively by one's partner and acts as a catalyst for effective problem-solving in the relationship, ultimately resulting in greater satisfaction in the relationship when such problem-solving endeavors are successful. There is no clear explanation, however, as to why the reverse indirect pathway (i.e., White partner's self-esteem → Black partner's problem-solving skills → Black partner's relationship satisfaction) was not significant. It may be that individuals' self-esteem is indirectly related to their own relationship satisfaction through an alternative indirect path, perhaps via another mediating variable not tested in this model. For instance, it could be that self-esteem is related to greater levels of mindfulness practice for individuals across racial groups which is ultimately related to relationship satisfaction via better communication (e.g., Barnes, Brown, Krusemark, Campbell, & Rogge, 2007). Alternatively, self-esteem may be related to greater empathy, leading to more positive interactions, and ultimately, relationship satisfaction. This claim is partially supported by research on Asian-White interracial relationships suggesting that empathy, understanding, and acceptance played a vital role in successful couple interactions (Canlas, Miller, Busby, & Carroll, 2015; Chow, 2007). Although there is not a precise explanation for this finding, potential mediating variables are worth exploring in understanding the link between self-esteem and relationship satisfaction in interracial relationships.

Finally, the current student revealed that the indirect path from ethnic identity to relationship satisfaction was not significant, but the direct association between ethnic identity and self-esteem and self-esteem's indirect association with relationship satisfaction via problem-solving was significant. In light of research that has established a robust link between ethnic identity and self-esteem particularly for minority individuals (for a meta-analytic review of

ethnic identity and well-being, see Smith & Silva 2011), a finding replicated in this study, it is perplexing as to why the fully mediated path from Black ethnic identity to their own relationship satisfaction was not significant. It could be that particular aspects of the model, when measured as direct pathways were strong, but the aggregate indirect effect given the long sequence of variables, was small, and ultimately, not significant. A potential empirical explanation for the insignificant indirect effects is the amount of variance accounted for by the direct paths in the model. Researchers have suggested that potential indirect effects may be weakened in models in instances where the mediators are strongly related with the exogenous or endogenous variables the model (Preacher & Hayes, 2008). Specifically, high correlations may suggest potential multicollinearity of such variables reducing the likelihood that a significant indirect effect would emerge. Nonetheless, the indirect pathway from self-esteem to relationship satisfaction offers a fruitful first step in pondering how interracial partners well-being uniquely relates to their experience of satisfaction and success in their relationships through problem-solving.

Together, these findings provide initial insight as to important relationship processes to attend to in interracial relationships, but continued investigation would lend support for these tenuous interpretations. Furthermore, this study offers several unique contributions to the extant literature on interracial couple relationship development. First, this study's initial testing of a proposed theoretical framework aimed at understanding the experiences of interracial relationships advances the field's attention to unique experiences of diverse couples. Secondly, the present study measures ethnic identity in the context of adult romantic relationships. Smith and Silva (2011) note that the vast majority of research on ethnic identity focuses on adolescent development, with few attending to the relevance of ethnic identity at other stages in the life span or within the context of interpersonal relationships. Finally, this research contributes to the extant literature by addressing Twenge and Crocker's (2002) call to researchers to examine the construction or associations with self-esteem as they vary between different racial backgrounds. Specifically, this study addresses the unique association between ethnic identity and self-esteem for Black and White partners in interracial relationships and further tests how each individual's identity is related to their partner's self-esteem.

Theoretical Implications

The present research proposed a middle-range theory (Jaccard & Jacoby, 2010), titled the Interracial Couple Relationship Success (ICRS) model. The findings of this study were the initial results of the empirical testing of a portion the ICRS model with a specific sub-population of interracial couples (i.e., Black-White couples). The testing and refining of this theory need be continued. Specifically, this study only addressed the latter part of the model, starting with ethnic identity. It would be important for theorists and to further develop the links between socialization and family-of-origin experiences and identity development. As a middle-range theory, the ICRS model offers a balance between breadth and depth by centering on a specific phenomenon or experience of a particular population with potential to apply to diverse groups experiencing the phenomenon (e.g., differing interracial dyads; Jaccard & Jacoby, 2010). This model was developed using a deductive theory building techniques (Jaccard & Jacoby, 2010; Tallman, 1993) that adapted an existing theoretical framework (i.e., the DEARR model; Bryant & Conger, 2002) to capture the unique experiences of couples in interracial relationships with a focused scope on the pathways to successful romantic outcomes. The breadth of this theory is limited to interracial couples, yet spans across different potential inter-racial and -ethnic dyads. This model offered partial explanation of the possible variables associated with relationship success in interracial relationships.

It would be important to empirically test the viability of the Interracial Couple Relationship Success model in its entirety. Jaccard and Jacoby (2010) recommended expanding theoretical knowledge by analyzing propositional relationships through a thought experiment approach for quantitative variables. Specifically, to expand the current breath of this study, proposed propositions between the model variables could be tested among different interracial dyads to determine if the strength and direction of effects found here span across different interracial relationships. Furthermore, the theory may also be expanded to look at more nuanced differences in couples of the same race but from differing ethnicities. Due to the novelty of this theory, research may also refine, test, and redefine the claims made in the theoretical model. For instance, the association between ethnic identity and self-esteem for Black individuals was consistent with the positive relationship proposition posed in the theory, but the same was not found for White individuals. These partner pathways warrant further investigation to develop an empirically backed proposition. As with any theory development process, the process is iterative

and will require more data, and reevaluation of theoretical propositions as they are supported or refuted through empirical testing.

Clinical Implications

The findings of this study offer several clinical implications. First, these findings contribute to the initial develop of a theory of interracial couple relationships that may aid in helping couples and clinicians understand the factors to consider in developing a stable romantic relationship between partners of different races. The inclusion of ethnic identity in understanding individual well-being and relationship processes in a couple relationship offers clinicians a specific area of focus in understanding each individuals' ethnic awareness. Clinicians may find it fruitful to explore how each partner racially and ethnically identifies and encourage discussion of how their differing identities affect their relationship. The Multiple Heritage Couple Questionnaire (Henriksen, Watts, & Bustamante, 2007) is a semi-structured interview guide that may be useful in guiding interracial couples through understanding each other's culture and identity and provide potential areas for discussion and application of problem-solving skills. In addition to implications for couples' therapy, there are implications of the Interracial Couple Relationship Success model for family life. Primarily, the initial testing of this theory offers potential areas to focus on as individuals mature throughout their own development and the development of their relationships. Specifically, families may explore ethnic identity through discussion of cultural customs and exploration of ethnic traditions and furthermore, how it may impact their self-esteem in adulthood. Clinicians are encouraged to incorporate the findings of this study into their practice with interracial couples and further explore how these linkages may be unique for each couple.

Limitations and Future Directions

This study had several limitations. First, the data is cross-sectional, restricting interpretations of the findings to be strictly correlational. Future research would benefit from testing similar associations or alternative aspects of the model with longitudinal data. This would be especially helpful in determining the ordering of effects and would provide greater understanding of how experiences as an individual prior to entering an interracial relationship may impact the processes or success of the relationship.

An unfortunate and major limitation of these findings is the lack of clarity regarding the role of racial identity and racial consciousness in interracial couple relationships. In future research on interracial relationships, researchers would benefit from including similar measures of racial identity development for racial minorities and racial consciousness or awareness for White individuals. By including and comparing the effects of racial identity and ethnic identity, future research may be able to parse out unique effects and provide preliminary understanding as to how such identity exploration may benefit or hinder relationship processes for interracial couples.

Furthermore, the present study utilized manifest variables for many of the concepts measured. In structural equation modeling, the assumption regarding measurement of manifest variables is that it is measured without error (Kline, 2011). Since there is always measurement error, latent variables are more accurate when using SEM because of the assumption that there is some unaccounted variance in the measurement model (Kline, 2011). Due to the relatively large size of the model, the number of participants in the sample was not sufficient to estimate all the parameters that would be included in a fully latent model. Future studies may benefit from using a robust-sized sample in order to minimize measurement error when studying similar associations.

Finally, investigation of the antecedents and developmental trajectory of racial and ethnic identity formation and how it relates to later relationship outcomes could be a potential future direction for research. Such an aim is beyond the scope of the present research given limited sample size and cross-sectional data. In my initial development of the Interracial Couple Relationship Success model, exploration of influences regarding race and ethnic heritage from one's family-of-origin and larger societal contexts were considered as antecedents to racial and ethnic identity. In the present study, however, these associations were not tested due to lack of longitudinal data and selected focus on the couple relationship. In future research, it may be interesting to note what earlier experiences may encourage positive or negative identity development or racial consciousness and how such primary experiences may impact subsequent relationship endeavors with a partner of a different race. Some researchers have explored antecedents of ethnic and racial identity development (e.g., Umaña-Taylor, Bhanot, & Shin, 2006) and its association with self-esteem (e.g., Corenblum, 2014) and other aspects of intrapersonal outcomes (e.g., well-being; Smith & Silva, 2011), however, there is no known

research delineating the link between these aspects of identity development and couple relationship outcomes. This study has just begun to scratch the surface of the linkages between identity formation and acceptance and relationship success. Future research should continue to expand the understanding of these linkages via the development of more generalizable measures of identity development, greater understanding of the nuances in measuring race versus ethnicity, and increased testing of the impact of these experiences in the context of a romantic relationship. In studies of interracial relationships, it would also be beneficial to study different interracial relationship compositions while taking into consideration the unique experiences of each racial and ethnic group.

Conclusion

Divorce and separation rates among interracial couples are, on average, higher than rates in same-race or other types of intermarriages and relationships (e.g., religious intermarriages; Bramlett & Mosher, 2002; Solsberry, 1994). The empirical testing of a portion of the proposed Interracial Couple Relationship Success model extends the current theoretical literature on relationship development by incorporating the unique consideration of ethnic identity for interracial relationships. This study provided an initial glimpse at the association between ethnic identity and relationship satisfaction in interracial relationships using original data collected from a sample of Black-White couples. Findings of the study suggest that ethnic identity is an important factor in Black-White interracial relationships for both partners. Specifically, ethnic identity of both Black and White partners is related to the self-esteem of the Black partners but White partners' ethnic identity was not related to their own levels of self-esteem. Furthermore, the findings indicated that higher self-esteem for Black partners was related to both partner's levels of relationship satisfaction via each of their reports of problem-solving in the couple relationship. Such findings suggest that better problem solving skills in the midst of conflict is a significant factor in understanding how one's individual mental well-being affects the overall health of the romantic relationship. This study adds to the current understanding of ethnic identity development by expanding the context from individual growth to relationship processes by highlighting the importance of its unique relationship to self-esteem for Black-White interracial partners.

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Appendix A - Figures

Figure 1 Proposed Theoretical Framework of the Interracial Couple Relationship Success (ICRS) Model

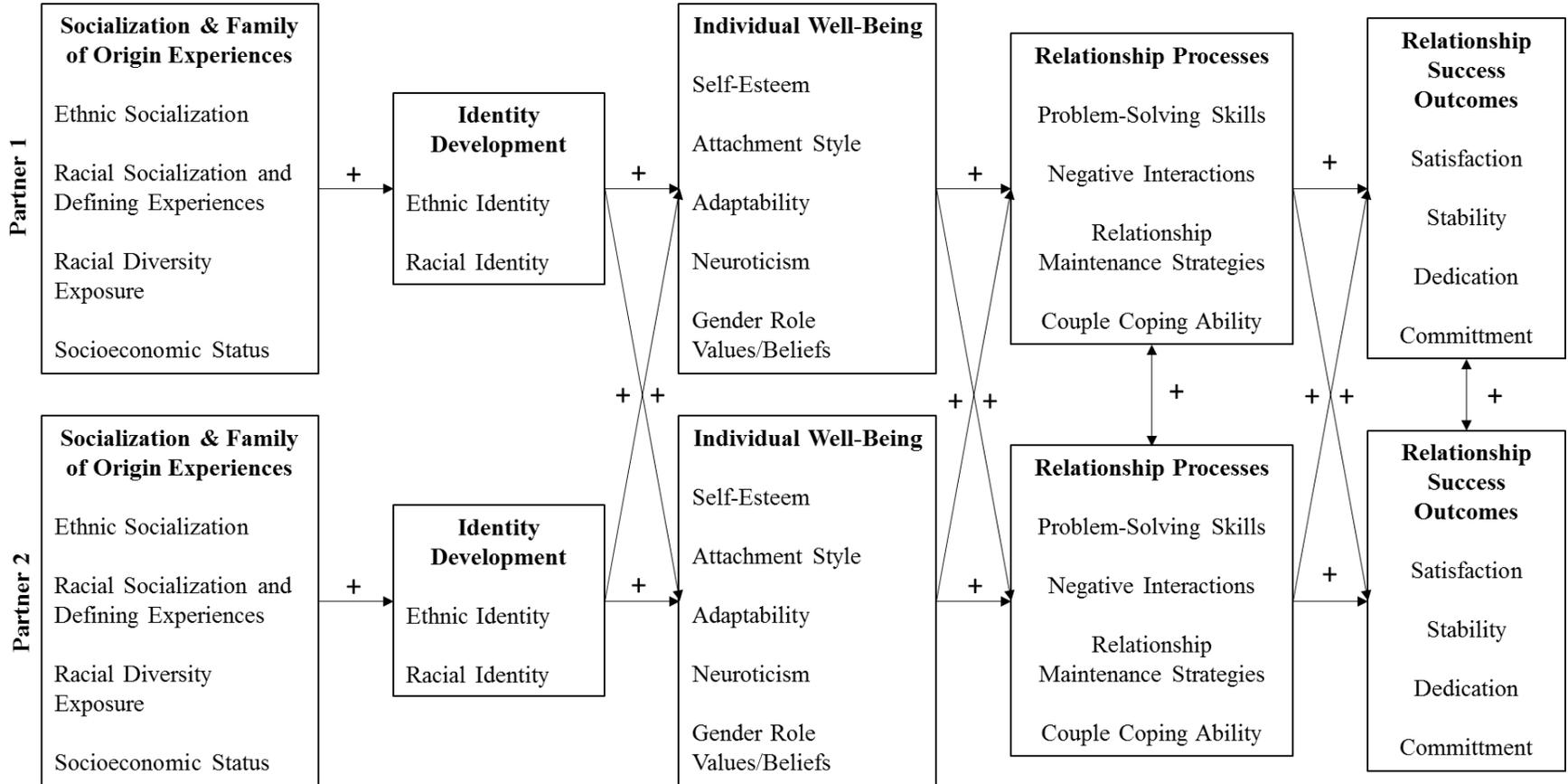


Figure 2 Proposed Portion of the Interracial Couple Relationship Success (ICRS) Model for Empirical Testing

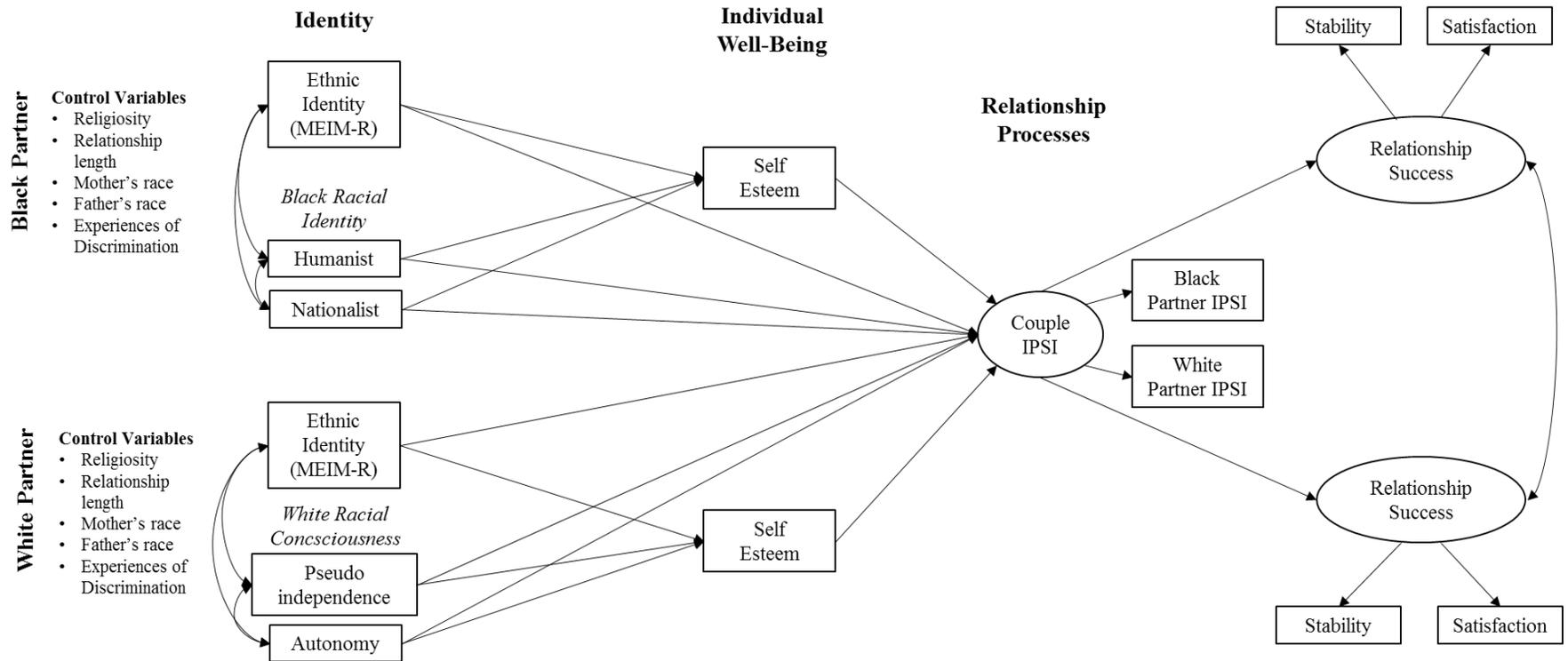
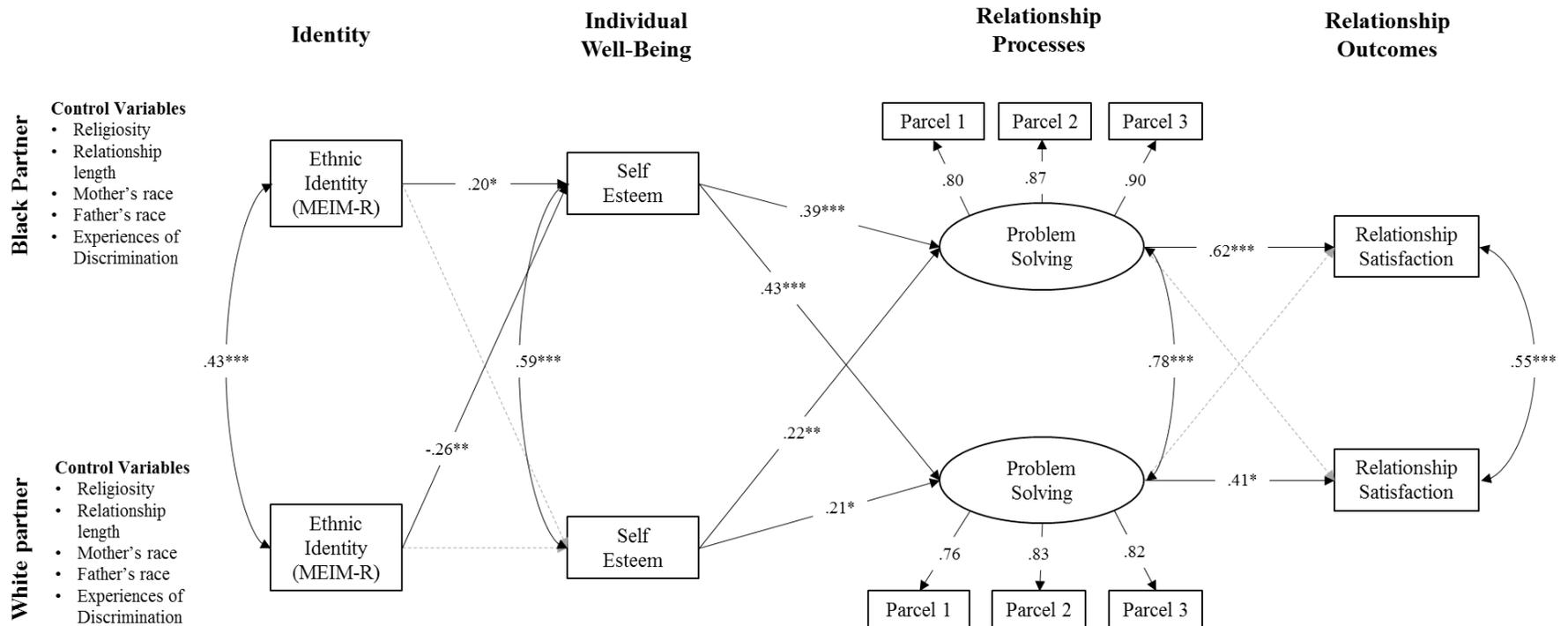


Figure 3 Structural Model of the Impact of Ethnic Identity on Relationship Satisfaction in Black-White Interracial Relationships ($n = 185$ couples)



Note: Standardized estimates shown. Model fit indices: $\chi^2(113)=172.45, p<.001$; root mean square error of approximation=.053, CI [.037, .069], comparative fit index=.953, Tucker–Lewis index=.930, standardized root mean square residual=.060.

* $p<.05$. ** $p<.01$, *** $p<.001$ (two-tailed). Model was estimated with 2,000 bootstraps. Control variables were regressed on each model variable and pruned until significant effects remained, path coefficients for control variables are not depicted for ease of interpretation.

Appendix B - Tables

Table 1 Descriptive Statistics for Variables of Interest

Variable	Black Partner				White Partner			
	M or %	SD	Range	α (# items)	M or %	SD	Range	α (# items)
Relationship Satisfaction	20.45	4.17	0-27	.92 (4)	20.25	4.13	0-27	.92 (4)
Problem Solving	4.03	.77	1-6	.81 (17)	4.07	.71	1-6	.80 (17)
Self-Esteem	3.25	.53	0-3	.86 (10)	2.23	.54	0-3	.86 (10)
Ethnic Identity	3.70	.87	1-5	.91 (6)	3.36	.82	1-5	.86 (6)
Age	31.91	4.38	22-40	-	31.98	4.20	19-40	-
Income								
Less than \$19,999	1.1%	-	-	-	1.1%	-	-	-
\$20-\$39,999	15.7%	-	-	-	15.1%	-	-	-
\$40-\$59,999	28.1%	-	-	-	29.2%	-	-	-
\$60-\$79,999	23.2%	-	-	-	22.7%	-	-	-
\$80-\$99,999	14.1%	-	-	-	13.5%	-	-	-
\$100,000 or Above	17.8%	-	-	-	18.4%	-	-	-
Sex								
Male	51.4%	-	-	-	48.6%	-	-	-
Female	48.6%	-	-	-	51.4%	-	-	-
Education (Highest Achieved)								
7 th Grade, 8 th Grade, or Some high school	3.7%	-	-	-	2.2%	-	-	-
High school graduate/GED	13.0%	-	-	-	13.5%	-	-	-
Some College	21.1%	-	-	-	14.1%	-	-	-
Associate's Degree	12.4%	-	-	-	18.9%	-	-	-
College Graduate (Bachelor's Level)	36.2%	-	-	-	38.9%	-	-	-
Master's degree or equivalent	11.4%	-	-	-	10.8%	-	-	-
Doctorate Degree (or equivalent level)	2.2%	-	-	-	1.6%	-	-	-
Employment Status								
Full time	75.7%	-	-	-	71.9%	-	-	-
Part time	9.2%	-	-	-	7.0%	-	-	-
Homemaker	10.8%	-	-	-	15.1%	-	-	-
Unemployed/Disabled	4.3%	-	-	-	4.3%	-	-	-
Student	0.0%	-	-	-	1.6%	-	-	-
Relationship Length (Yrs)	9.42	4.98	1-26	-	8.30	4.57	1-26	-
Experiences of Discrimination	1.43	.80	0-3	-	.68	.70	0-3	-

Religiosity	3.49	1.18	1-5	-	3.61	1.09	1-5	-
Religious Denomination								
Catholic	23.9%	-	-	-	25.4%	-	-	-
Eastern Orthodox	.5%	-	-	-	1.6%	-	-	-
Catholic								
Hindu	0%	-	-	-	.5%	-	-	-
Islamic	9.2%	-	-	-	10.3%	-	-	-
Jehovah's Witnesses	1.6%	-	-	-	1.1%	-	-	-
Jewish	.5%	-	-	-	.5%	-	-	-
Latter-day Saint (Mormon)	1.6%	-	-	-	1.6%	-	-	-
Protestant (Methodist, Lutheran, Episcopalian, Baptist, etc.)	34.2%	-	-	-	31.4%	-	-	-
Unitarian Universalist	1.1%	-	-	-	.5%	-	-	-
Agnostic	8.2%	-	-	-	9.7%	-	-	-
Atheist	6.0%	-	-	-	3.8%	-	-	-
Other	13.0%	-	-	-	13.5%	-	-	-

Table 2 Independent Samples T-test for Differences between Black Male/White Female and White Male/Black Female Couples

Variable	Black Male/ White Female		White Male/ Black Female		<i>t</i> (<i>df</i>)	<i>p</i> -value
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Relationship Satisfaction						
Black Partner	20.21	4.30	20.69	4.02	-.76 (181)	.45
White Partner	19.77	4.31	20.84	3.87	-1.74 (181)	.08
Problem Solving						
Black Partner	4.06	.78	3.99	.77	.52 (181)	.60
White Partner	4.12	.71	4.02	.70	.94 (181)	.35
Self-Esteem						
Black Partner	2.40	.50	2.28	.55	1.54 (181)	.13
White Partner	2.21	.50	2.27	.59	-.74 (153) ^a	.45
Ethnic Identity						
Black Partner	3.69	.81	3.77	.89	-.65 (181)	.517
White Partner	3.23	.76	3.56	.85	-2.77 (181)	.01**

Notes. * $p < .05$. ^aEqual variances not assumed. *df* = degrees of freedom.

Table 3 Bivariate Correlations among Model Variables

<i>Model Variable</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. B Satisfaction	—											
2. B Problem-Solving P1	.37**	—										
3. B Problem-Solving P2	.49**	.72**	—									
4. B Problem-Solving P3	.52**	.71**	.77**	—								
5. B Self-Esteem	.21**	.40**	.47**	.47**	—							
6. B Ethnic Identity	-.04	-.07	-.07	.04	.08	—						
7. W Satisfaction	.66**	.34**	.46**	.44**	.21**	.12	—					
8. W Problem-Solving P1	.29**	.45**	.50**	.53**	.48**	-.02	.30**	—				
9. W Problem-Solving P2	.37**	.53**	.59**	.62**	.44**	-.07	.50**	.67**	—			
10. W Problem-Solving P3	.39**	.57**	.59**	.68**	.44**	-.01	.47**	.62**	.65**	—		
11. W Self-Esteem	.16*	.37**	.38**	.42**	.58**	.09	.24**	.36**	.38**	.36**	—	
12. W Ethnic Identity	-.02	-.21**	-.18*	-.16*	-.18*	.43**	.05	-.20**	-.15*	-.15*	.00	—

Notes. * $p < .05$. ** $p < .01$, (two-tailed). B = Black participant, W = White participant, P1 = parcel 1, P2 = parcel 2, P3 = parcel 3.

Table 4 Bootstrap Analyses for Indirect Effects (Significant Indirect Pathways Show; Standardized Solution)

Predictor	Mediator	Outcome	β	CI	<i>t</i> -value
Black Partner's Self-Esteem→	White Partner's Problem Solving→	White Partner's Relationship Satisfaction	.18	.007, .347	2.04*
Black Partner's Self-Esteem→	Black Partner's Problem Solving→	Black Partner's Relationship Satisfaction	.24	.017, .466	2.11*

Notes. * $p < .05$. (two-tailed). Indirect paths tested with 2,000 bootstraps. CI = 95% confidence interval.

Appendix C - Measures

Ethnic Identity - Revised Multigroup Ethnic Identity Measure (MEIM-R; Phinney & Ong, 2007)

These questions are about your ethnicity or your ethnic group and how you feel about it or react to it. Please fill in:

In terms of ethnic group, I consider myself to be: _____

Indicate how much you agree or disagree with each statement.

1 = *Strongly disagree*

2 = *Disagree*

3 = *Neither agree nor disagree*

4 = *Agree*

5 = *Strongly agree*

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.	1	2	3	4	5
2. I have a strong sense of belonging to my own ethnic group.	1	2	3	4	5
3. I understand pretty well what my ethnic group membership means to me.	1	2	3	4	5
4. I have often done things that will help me understand my ethnic background better.	1	2	3	4	5
5. I have often talked to other people in order to learn more about my ethnic group.	1	2	3	4	5
6. I feel a strong attachment towards my own ethnic group.	1	2	3	4	5

Rosenberg Self-Esteem Scale (Rosenberg, 1979)

Please indicate the extent to which you agree to the following statements on a scale on 0 = *strongly agree* to 3 = *strongly disagree*.

	Strongly agree	Agree	Disagree	Strongly Disagree
1. I feel that I am a person of worth, at least on an equal plane with others.	0	1	2	3
2. I feel that I have a number of good qualities.	0	1	2	3
3. All in all, I am inclined to feel that I am a failure.	0	1	2	3
4. I am able to do things as well as most other people.	0	1	2	3
5. I feel I do not have much to be proud of.	0	1	2	3
6. I take a positive attitude toward myself.	0	1	2	3
7. On the whole, I am satisfied with myself.	0	1	2	3
8. I wish I could have more respect for myself.	0	1	2	3
9. I certainly feel useless at times.	0	1	2	3
10. At times I think I am no good at all.	0	1	2	3

Problem-Solving - Interactional Problem-Solving Inventory (IPSI; Lange et al., 1991)

The following questions ask about conflict with your partner. Please rate your level of agreement with the following statements on a scale from 1 = *strongly disagree* to 6 = *strongly agree*.

	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Somewhat Agree 4	Agree 5	Strongly Agree 6		
1. We have little trouble in choosing a solution for a given problem.			1	2	3	4	5	6
2. When I tell my partner which points I wish that he/she would change, my partner takes notice.			1	2	3	4	5	6
3. After we have discussed a particular problem, I often feel that my point of view has not been properly acknowledged.			1	2	3	4	5	6
4. When I mention something that bothers me, I often get the feeling that my partner does not take me seriously.			1	2	3	4	5	6
5. In our relationship there are many problems which we are unable to solve.			1	2	3	4	5	6
6. Before deciding upon a solution for a particular problem, we first view the matter from different angles.			1	2	3	4	5	6
7. When I propose a solution to a problem, my partner often dismisses it out of hand.			1	2	3	4	5	6
8. Our quarrels often end up in discussions about who is right and who is wrong.			1	2	3	4	5	6
9. When we disagree, my partner tries to meet my wishes as best as he/she can.			1	2	3	4	5	6

- | | | | | | | |
|--|---|---|---|---|---|---|
| 10. When we are having an argument about a particular matter, we often end up including totally irrelevant issues. | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. If my partner in one or other way has disappointed me, I talk to him/her about it. | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. When we quarrel, I often get the idea that we do not understand each other. | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. After a quarrel I often have the impression that we missed each other's points. | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. I almost never express small irritations because I am afraid that this will damage our relationship. | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. If I do not expect my partner to accommodate my wishes, I do not bother to express them. | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. Often we cannot agree about what, at a certain moment, is the main point of the problem. | 1 | 2 | 3 | 4 | 5 | 6 |
| 17. Quite often we are at odds because we interpret each other's irritations incorrectly. | 1 | 2 | 3 | 4 | 5 | 6 |

Relationship Satisfaction – Couple Satisfaction Index (CSI-4; Funk & Rogge, 2007)

The following series of questions are about your relationship with your partner.

1. Please indicate the degree of happiness, all things considered, of your relationship.

Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect
0	1	2	3	4	5	6

Most people have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

2. I have a warm and comfortable relationship with my partner.

Not at all true	A little true	Somewhat true	Mostly true	Almost Completely true	Completely true
0	1	2	3	4	5

3. How rewarding is your relationship with your partner?

Not at all	A little	Somewhat	Mostly	Almost Completely	Completely
0	1	2	3	4	5

4. In general, how satisfied are you with your relationship?

Not at all	A little	Somewhat	Mostly	Almost Completely	Completely
0	1	2	3	4	5