Understanding change in violence-related attitudes for adolescents in relationship education

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ABSTRACT

Relationship education (RE) targets common correlates of adolescent dating violence (ADV), such as gender role beliefs (GRB) and DV acceptance (DVA), yet few studies have evaluated the influence of RE on GRB and DVA and none have considered participants' sociodemographic characteristics. Using a sample of adolescents from the United States (Mage = 15.66 years; 58% female), this study examined pre- and post-test GRB and DVA scores of RE participants (n = 1645) compared to nonparticipants (n = 522) and explored the differential and combined effects of participants' sociodemographic characteristics on change. Black males held the most traditional GRB at pre-test, but became more egalitarian after programming. RE participation also appeared to act as a buffer against an increase in DVA for females, but not males. Study findings provide a more complex picture of the role of RE in shifting beliefs and attitudes associated with ADV and provide implications for programming.

1. Introduction

Romantic relationship violence has been of great concern to researchers and practitioners for many years, but historically, the focus has been on adult and college-aged samples. More recently, however, adolescent dating violence has garnered considerable attention as a significant public health concern (Center for Disease Control and Prevention, 2014). Adolescence is a particularly pertinent developmental period, as involvement in romantic relationships becomes quite common (Collins & Steinberg, 2006), and early romantic experiences serve as the foundation for future relationship expectations and practices (Kerpelman et al., 2010). Yet, due to inexperience in romantic relationships and an absence of formal education on healthy relationships, adolescents may be especially vulnerable to experiencing dating violence (Callahan, Tolman, & Saunders, 2003; Powers & Kerman, 2006). A number of risk factors for experiencing dating violence have been identified, including two key attitudes – traditional gender role beliefs and dating violence acceptance (Center for Disease Control, 2014; O'Keefe, 2005).

As Ajzen and Fishbein (1973) suggested that beliefs and attitudes serve to inform individuals' intentions and behaviors, understanding the roles of gender role beliefs and dating violence acceptance may be crucial for dating violence intervention and prevention. Studies of relationship education (RE) participants have demonstrated the malleability of such beliefs for adults (e.g., Lucier-Greer, Ketring, Adler-Baeder, & Smith, 2012) and youth (e.g., Amie, Sullivan, Dryden, Karam, & Barbee, 2011; Whittaker, Adler-Baeder, & Garneau, 2014). Yet, to date, only one youth intervention study has examined both change in gender role beliefs and dating violence acceptance in a sample of RE participants (Whittaker et al., 2014); however, this study did not include a comparison sample nor did they examine potential demographic moderators beyond gender. Race (Foshee et al., 2008) and SES (Kulik, 2002; Marks, 2004).
Lam, & McHale, 2009) are also associated with gender role beliefs and dating violence acceptance, and thus, should be considered as possible moderators of change following RE participation. Addressing several limitations of current literature, this study examines the impact of RE participation on adolescents’ gender role beliefs and dating violence acceptance and explores the differential and combined effects of gender, race, and SES.

1.1. Beliefs and attitudes associated with dating violence

Traditional gender roles operate as scripts for what broader society deems appropriate and acceptable behaviors and roles for men and women in families and romantic relationships (Hill, 2002). According to feminist theory, traditional gender roles stem from the ideology that men are entitled to power, authority, and control over women in public (e.g., work) and private (e.g., family) spheres of life; thus, women are expected to be submissive to men (Hill, 2002). The divergent expectations for men and women as well as the gendered distribution of power can be explained by Wingood and DiClemente's (2002, pp. 313–345) theory of gender and power. The assumption is that imbalances of power in relationships between men and women stem from differing expectations of men and women's roles and place in society. Sexual division of power is reinforced at different societal levels, determining for whom it is acceptable to use forceful or aggressive behaviors, emphasizing the abuse of male authority and control in relationships (Smith, White, & Moracco, 2009; Wingood & DiClemente, 2002, pp. 313–345). These power differentials are reinforced throughout the lifespan and, according to the gender-intensification hypothesis, the societal pressure to adhere to gender-related norms is heightened during adolescence (Hill & Lynch, 1983), cultivating relational power imbalances that place females at risk of experiencing dating violence. Studies suggest that those endorsing traditional gender role beliefs increases the risk of both dating violence perpetration and victimization (Center for Disease Control, 2014; Flood & Pease, 2009; Reyes, Foshee, Niolon, Reidy, & Hall, 2016).

Relatively, acceptance of the use of aggression or violence in romantic relationships also is a robust predictor of dating violence perpetration and victimization (Ali, Swahn, & Hamburger, 2011; Malik, Sorenson, & Aneshensel, 1997; Nabors & Jasinski, 2009; O’Keefe, 1997; O’Keefe, 2005). Individuals who believe that violent and aggressive behaviors are acceptable, particularly under certain circumstances (e.g., when insulted, disrespected, or when pushed or hit first) are at increased risk of perpetrating and being a victim of violence in their romantic relationships (Foshee, Linder, MacDougall, & Bangdiwala, 2001). Further, a meta-analysis of adult intimate partner violence risk and protective factors reported a moderate effect size (point biserial $r = 0.30$) between acceptance of violence and violence perpetration (Stith, Smith, Penn, Ward, & Tritt, 2004) and is found among adolescents as well (Foshee et al., 2001; O’Keefe, 1997; 2005).

1.2. The roles of gender, race, & socioeconomic status on beliefs and attitudes

Salient sociodemographic characteristics, such as gender, race, and SES, are also associated with traditional gender role beliefs and dating violence acceptance. Gender has been identified as a stable predictor of traditional gender role beliefs and dating violence acceptance attitudes (Flood & Pease, 2009; Kane, Staiger, & Ricciardelli, 2000), with males reporting more traditional gender role beliefs (e.g., Berkel, Vandiver, & Bahner, 2004; Bryant & Spencer, 2003; Whitaker et al., 2014) and greater acceptance of the use of aggression against a romantic partner than females (Cauffman, Feldman, Jensen, & Arnett, 2000).

When considering race and gender role beliefs and dating violence attitudes, studies find that adolescents from racial minority communities, particularly Black youth, are more likely to endorse traditional gender role beliefs (Foshee et al., 2008; Kane et al., 2000) and condone the use of violence towards partners compared to their White peers (Fitzpatrick, Salgado, Suvak, King, & King, 2004; Foshee et al., 2008; Nabors & Jasinski, 2009). Hill (2001, 2002) asserted that the intersection of race and gender should be considered since there are distinctions in the socialization of individuals by both race and gender, such that Black females and White females do not subscribe to the same gendered norms. The diverging socialization process is believed to date back to the period of slavery where Black women, due to their required and enforced roles, were made to adopt a more independent and assertive version of womanhood and femininity within and outside of the home (Carter, Corra, & Carter, 2009; Hill, 2001).

Current research suggests that these differences are contemporarily relevant, too. Research finds that Black males endorse more egalitarian beliefs than their White male counterparts (Blee & Tickamyer, 1995; Hill, 2002; Kane et al., 2000), but this varies depending on context. Specifically, Kane et al. (2000) suggests that Black men tend to be more egalitarian than White men regarding women’s workforce participation, but they are more traditional in regards to gendered roles within romantic relationships. It is possible that, due to experiences of racial discrimination and oppression in areas of life outside of the home, Black males may be more likely to assert their power and dominance in their romantic relationships and, in turn, hold more traditional gender role beliefs about couple relationships and family life (Hill, 2001, 2002). Additionally, though females are often less tolerant of relationship violence than males, Black females report higher tolerance of relationship aggression than White females (Nabors & Jasinski, 2009; Nagel, Matsuo, McIntyre, & Morrison, 2005).

Although evidence of within-group differences when examining race and gender exists, SES introduces a different, yet relevant identity that has been overlooked in the relevant literature. Despite the theory of intersectionality’s call for attention to the combined effects of these social constructs that constitute individuals’ diverse realities (Crenshaw, 1989; Davis, 2008), few researchers have examined the role of SES in individuals’ gender role beliefs and only one has examined SES and dating violence acceptance. Research suggests that children whose parents are highly educated (i.e., a proxy for SES) are less likely to hold traditional gender role beliefs than children from less educated parents (Antill, Cunningham, & Cotton, 2003; Kulik, 2002; Marks et al., 2009). One study has examined the direct effect of SES on dating violence acceptance and found that adolescents with lower SES (measured by parents’ education) are more accepting of dating violence than adolescents with higher SES (Foshee et al., 2008). However, it does not appear
that SES has been used in conjunction with gender and race to examine their association with gender role beliefs and dating violence acceptance. Understanding this relationship is important for the development of successful intervention and prevention efforts seeking to address the growing issue of adolescent dating violence.

1.3. Relationship education

From a developmental perspective, adolescence is the time in which romantic relationships are beginning to form and therefore an ideal time to implement early intervention or prevention, such as RE, aimed at improving interpersonal competence. RE programs focus on the importance of healthy relationships, present information on unhealthy dating relationship patterns, and provide necessary tools and skills-training for engaging in healthy relationship behaviors (e.g., communication and conflict resolution skills; Gardner, Giese, & Parrott, 2004; Kerpelman, Pittman, Adler-Baeder, Eryigit, & Paulk, 2009). These programs are typically offered to the general population and have demonstrated improvements on key target outcomes related to healthy relationships (Adler-Baeder, Kerpelman, Schramm, Higginbotham, & Paulk, 2007; Gardner et al., 2004; Kerpelman et al., 2010).

Research also has demonstrated that participation in RE influences adolescents’ attitudes and behaviors that are vital to healthy relationship formation (Kerpelman et al., 2009, 2010). Although not an explicit target outcome of RE, two exploratory studies with adult (Lucier-Greer et al., 2012) and adolescent (Whittaker et al., 2014) samples have investigated the influence of RE on traditional gender role beliefs and found support for their malleability. The study of youth found gender differences in gender role beliefs, with males demonstrating greater change than females. Though altering gender role beliefs is not a focus of RE, some areas of the curriculum (e.g., principles of a healthy relationship and common values) may create a shift in adolescents’ perspectives regarding roles and expectations in romantic relationships. The emphasis on mutual respect throughout RE lessons also may influence role expectations and the expected and actual treatment of romantic partners in relationships.

In addition, a handful of adolescent RE studies (e.g., Antle et al., 2011; Sparks, Lee, & Spjeldnes, 2012) have documented significant change in dating violence acceptance after RE participation. Because unhealthy relationship patterns and dating violence are specifically addressed in RE, positive changes in dating violence acceptance after program participation are expected. As such, these previous studies provide the initial evidence that RE has the potential to reduce dating violence acceptance and shift traditional gender role beliefs among youth, which may reduce involvement in dating violence during adolescence. In this study, we build upon prior research through the use of a comparison sample to examine potential differences in changes in gender role beliefs and dating violence acceptance for RE and non-RE participants. Further, we explore among the participant group the individual and combined influence of gender, race, and SES on change in gender role beliefs and dating violence acceptance after RE participation.

1.4. Current study

The current study advances research on the influence that RE participation has on adolescents’ gender role beliefs and dating violence acceptance in at least three ways. First, by including a comparison sample of adolescents who were not exposed to RE we are able to understand patterns of change in violence-related attitudes for youth who participated in RE relative to those who did not. Second, this study is explicitly guided by the theory of gender and power (Wingood & DiClemente, 2002, pp. 313–345) and intersectionality (Crenshaw, 1989; Davis, 2008) to better understand the interactions of gender, race, and SES as they relate to change in violence-related attitudes following participation in RE. Third by examining the influence of several demographic moderators of change (i.e., gender, race, and SES) and their interaction we are better able to understand for whom RE appears to be most beneficial.

Although traditional gender role beliefs are not specifically targeted in RE, findings from the one study of youth RE (Whittaker et al., 2014) using the same curriculum suggest that indirect messages of mutual respect and value in relationships may elicit a shift towards more egalitarian gender role beliefs. Therefore, we hypothesized (H1) that adolescents who participated in RE will become more egalitarian (i.e., endorse less traditional gender role beliefs) and will report less dating violence acceptance than adolescents who did not receive RE. In addition, using the sample of RE participants, the present study examined three research questions: (1) Does the amount of change in traditional gender role beliefs and in dating violence acceptance following RE participation differ by gender, race, and SES, independently? (2) Does the amount of change in traditional gender role beliefs and in dating violence acceptance differ by the two-way interaction of these identities (i.e., gender x race, gender x SES, and race x SES) for adolescents who receive RE? and (3) Does the amount of change in traditional gender role beliefs and dating violence acceptance differ by the intersection of all three identities (i.e., gender x race x SES) for adolescents who receive RE?

2. Methods

2.1. Participants and procedures

This sample was obtained from an intervention project in the Southeastern United States focused on providing individuals with RE in order to promote healthy relationships. Adolescents participants were exposed to the Relationship Smarts Plus (RS+; Pearson, 2007) curriculum, which consists of six core lessons lasting from 50–90 min, at their respective high schools delivered by community educators from local family resource centers. These lessons contain information and activities focusing on identifying values, building a healthy relationship, healthy ways of breaking up, warning signs of dating abuse, effective communication skills, and smart relationship decision making. In the curriculum there is one lesson specific to dating violence and identifying warning signs and abuse
in romantic relationships (i.e., Lesson 7: “Dating Violence and Breaking Up”). Other areas and activities throughout the curriculum also address unhealthy and abusive behaviors (e.g., Lesson 4: “Principles of Smart Relationships”). Although the curriculum does not directly cover gender role beliefs, common, underlying themes of the lessons emphasize mutual support and respect and power-sharing (e.g., Lesson 3: “Attractions and Infatuation” and Lesson 4: “Principles of Smart Relationships”) in romantic relationships, which may challenge more traditional beliefs about power differentials in romantic relationships.

Each of the youth included in this study received parental approval, via university IRB approved consent forms, and completed surveys before and after program participation. Data were also collected from adolescents who did not participate in RE. The use of a comparison sample is beneficial in furthering our understanding of comparative trajectories of change. However, it is important to note that this project was not designed to be an efficacy study, but rather a demonstration project focused on the feasibility of offering RE through community partner agencies in diverse communities. Therefore, adolescents were not randomly assigned to the participant or comparison group and there was no specific eligibility criteria for inclusion.

The sample consists of 2167 adolescents (1645 in the participant group and 522 in the comparison group; see Table 1). There was a high retention rate from pre-to post-assessment. Of the 1645 adolescents in the participant group who completed pre-surveys, 1611 (98%) completed post-surveys and of the 522 adolescents in the comparison group who completed pre-surveys, 504 (97%) completed the post-surveys. The sample is fairly balanced on gender and race (58% girls, 42% boys; 58% White, 42% Black). The average age was 15.66 years (SD = 1.13). Mother’s education level served as a proxy for adolescents’ SES (Hoff, Laursen, & Bridges, 2012; Hoffman, 2003). Thirty-eight percent completed high school or less; 32% completed some college or 2-year degree; and 30% completed a 4-year degree or higher. There were no significant differences between the two groups on race ($\chi^2 (5) = 10.90, p = .06$). However, the comparison sample differed from the participant group on gender ($\chi^2 (1) = 3.20, p = .07$) or maternal education ($\chi^2 (5) = 10.90, p = .06$). Internal consistency was demonstrated (Participant: Pre $\alpha = 0.81$, Post $\alpha = 0.84$; Comparison: Pre $\alpha = 0.82$, Post $\alpha = 0.83$).

### Table 1

Descriptive Statistics for Gender Role Beliefs and Dating Violence Acceptance for Participant (n = 1571) and Comparison Groups (n = 497).

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<td>Post</td>
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<td>Post</td>
<td>1.59 (.96)</td>
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<td>1.00</td>
<td>5.00</td>
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Note. M = Mean; SD = Standard deviation.

2.2. Measures

2.2.1. Gender role beliefs

Three items were used to assess gender role beliefs at pre- and post-test (Larsen & Long, 1988). Items focused on beliefs concerning the roles of males and females with respect to decision-making and authority (e.g., “Ultimately a woman should always submit to a husband’s decision” and “As head of the household, the father should have final authority over children.”, “Men make better leaders than women”). Individuals responded on a 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree). Internal consistency was demonstrated (Participant: Pre $\alpha = 0.81$, Post $\alpha = 0.84$; Comparison: Pre $\alpha = 0.82$, Post $\alpha = 0.83$).

2.2.2. Dating violence acceptance

Dating violence acceptance (Jones & Gardner, 2002) was assessed using two items: “In today’s society, slapping a spouse or dating partner is understandable under some circumstances” and “In today’s society, pushing a spouse or dating partner is understandable under some circumstances.” Individuals responded using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Internal consistency was demonstrated (Participant: Pre $\alpha = 0.93$, Post $\alpha = 0.92$; Comparison: Pre $\alpha = 0.90$, Post $\alpha = 0.90$).

2.2.3. Participant characteristics

Gender, participation group and race were dichotomized (1 = Female, 0 = Male; 1 = Participant in RE, 0 = Comparison/No RE exposure; 0 = White, 1 = Black). In addition, mother’s education was dichotomized as a marker of adolescents’ SES (1 = high school degree or less/Lower SES, 0 = Some college or higher/Higher SES).

2.3. Data analysis

First, an unconditional means model was fit and the intraclass correlation coefficient was calculated to determine whether or not the use of multilevel modeling was warranted. The result of the calculation was less than the recommended 0.10 threshold (ICCDVA:
suggesting that there is not enough shared variance at the class level to indicate that nesting was required. Therefore, in order to best answer our research questions, Hypothesis 1 (i.e., RE participants versus comparison) we proceeded using mixed between within repeated measures analysis of variance (RMANOVAs). Research Questions 1 through 3, were answered using a series of structural equation models. Latent variables were created using the individual observed items for both gender role beliefs and dating violence acceptance attitudes at pre and post-assessment. Full information maximum likelihood (FIML) was used to account for missing data. Additionally, the chi-square test of model fit, comparative fit index (CFI), and the root mean square error approximation (RMSEA) were used as goodness-of-fit indices.

3. Results

3.1. Establishing program effectiveness

Descriptive statistics of the outcome variables at both pre- and post-assessment can be found in Table 1. We believed RE participants would show greater change in gender role beliefs and dating violence acceptance than adolescents in the comparison group (H1). There was no statistically significant difference in change patterns in gender role beliefs between RE participants and comparison adolescents (Wilks' Lambda = 1.00, \( F(1, 2048) = 0.69, p = .41, \eta^2 = 0.000 \)). Additionally, there were no significant differences between groups in reported gender role beliefs at pre-\( F(1, 2123) = 0.35, p = .55 \) or post-assessment \( F(1, 2086) = 0.10, p = .75 \). Although the mean score for dating violence acceptance was relatively low at both time points and there was limited variability in responses, there was a statistically significant difference in change patterns in dating violence acceptance between RE participants and comparison adolescents (Wilks' Lambda = 0.994, \( F(1, 2063) = 13.37, p < .001, \eta^2 = 0.006 \)). More specifically, RE participants reported no significant change in dating violence acceptance \( t(1580) = 1.43, p = .15 \), whereas, adolescents in the comparison group reported a significant increase in acceptance of dating violence \( t(496) = 2.86, p < .01 \). Although there were no significant differences between the participant and comparison groups in dating violence acceptance at pre-test \( F(1, 2137) = 1.14, p = .29 \), there were significant differences between the two groups at post-test \( F(1, 2099) = 18.72, p < .001 \), such that adolescents in the RE participant group reported less dating violence acceptance \( (M_{comp} = 1.81 (1.09) \) and \( M_{part} = 1.59 (0.96) \) than adolescents in the comparison group.

3.2. The moderating effects of gender, race, and SES

3.2.1. Direct effects

A series of structural equation models were fit to determine the impact that gender, race, and SES have on change in gender role beliefs and dating violence acceptance for adolescents who were exposed to RE. After controlling for baseline gender role beliefs, adolescent gender (\( \beta = -0.11, p = .09 \)), race (\( \beta = -0.04, p = .48 \)), and SES (\( \beta = -0.01, p = .86 \)) were not significantly related to adolescents' residual change in gender role beliefs following RE participation. Taken together, the direct effects model including all predictor variables provided adequate model fit \( \chi^2 (20) = 293.91, p < .001; CFI = 0.95; RMSEA = 0.09, p < .001 \).

When accounting for dating violence acceptance at pre-test, adolescent gender (\( \beta = -0.17, p < .001 \)), race (\( \beta = 0.23, p < .001 \)), and SES (\( \beta = 0.11, p < .05 \)) were significantly related to residual change in dating violence acceptance for adolescents.
who participated in RE (see Fig. 1). The direct effects model including all three predictors had exceptional model fit ($\chi^2 (10) = 39.17$, $p < .001$; CFI = 0.99; RMSEA = 0.04, $p = .81$). Post-hoc analyses revealed that there was a statistically significant difference in change patterns between males and females (Wilks' Lambda = 0.989, $F (1, 1572) = 18.29, p < .001, \eta^2 = 0.01$; see Fig. 2). Results indicated that there was a significant decrease in dating violence acceptance for females ($t (894) = 4.05, p < .001$), whereas for males there was a significant increase in dating violence acceptance ($t (678) = -2.16, p < .05$). Further analyses revealed that pre-test reports of dating violence acceptance did not differ by gender ($F (1, 1615) = 2.61, p = .11$), yet at post-test females were less accepting of violence than males ($F (1, 1590) = 6.79, p < .01$). Post-hoc analyses also revealed that there was no significant difference in change patterns between Whites and Blacks (Wilks' Lambda = 0.999, $F (1, 1579) = 1.90, p = .17, \eta^2 = 0.001$). Further analyses revealed that there were significant differences in pre- ($F (1,1623) = 109.03, p < .001$) and post-test ($F (1,1597) = 77.38, p < .001$) reports of dating violence acceptance by race, such that Blacks (Mpre = 1.92 (1.11), Mpost = 1.84 (1.04)) reported more acceptance of dating violence at both time points than Whites (Mpre = 1.43 (0.83), Mpost = 1.42 (0.85)). Lastly, post-hoc analyses revealed no significant difference in change patterns between low and high SES adolescents (Wilks' Lambda = 1.00, $F (1, 1511) = 0.007, p = .93, \eta^2 = 0.000$). Further analyses revealed that there were significant differences in pre- ($F (1,1553) = 11.08, p < .001$) and post-test ($F (1,1526) = 13.16, p < .001$) reports of dating violence acceptance by SES such that low SES adolescents (Mpre = 1.71 (1.05), Mpost = 1.68 (1.03)) reported more acceptance of dating violence at both time points than high SES adolescents (Mpre = 1.55 (0.91), Mpost = 1.51 (0.88)).

3.2.2. Two-way and three-way interactions

A series of structural equation models were fit to determine the influence of various combinations of adolescent gender, race, and SES have on change in gender role beliefs and dating violence acceptance for adolescents who were exposed to RE. On average, accounting for baseline gender role beliefs and controlling for all demographic variables in the model, the interaction of gender and race was significantly related to residual change in gender role beliefs for RE participants ($\beta = 0.46, p < .001$; see Fig. 2). The model fit the data well ($\chi^2 (25) = 299.53, p < .001$; CFI = 0.96; RMSEA = 0.08, $p < .001$). Post-hoc analyses revealed that there were significant differences in change patterns by adolescent gender and race (Wilks' Lambda = 0.989, $F (1, 1554) = 17.03, p < .001, \eta^2 = 0.01$; see Fig. 4). Compared to White males, White females, and Black females, Black males showed a significant decrease in their endorsement of traditional gender role beliefs ($t (260) = 4.19, p < .001$); however, Black females showed a significant increase in traditional gender role beliefs ($t (389) = -3.30, p < .001$). Alternatively, White males ($t (399) = -1.02, p = .31$) and White females ($t (506) = -1.65, p = .10$), showed no significant differences in scores between pre- and post-assessment.

On average, accounting for baseline levels of gender role beliefs and controlling for all demographic variables in the model, the interaction of gender and SES ($\beta = 0.04, p = .73$) as well as race and SES ($\beta = -0.02, p = .83$) were not significantly related to residual change in gender role beliefs following RE exposure. The three-way interaction of gender, race, and SES on residual change in gender role beliefs of RE participants was not significant ($\beta = -0.11, p = .64$).

Accounting for dating violence acceptance at pre-test and demographic variables, the interaction of gender and race ($\beta = -0.09, p = .30$), gender and SES ($\beta = -0.01, p = .90$), as well as race and SES ($\beta = 0.05, p = .58$) were not significantly related to residual change in participants' dating violence acceptance. There were also no three-way interactions for gender, race, and SES on residual change in dating violence acceptance ($\beta = 0.04, p = .84$).

4. Discussion

Dating violence in adolescent romantic relationships is a growing social issue (CDC, 2014) that has led to the use of dating
violence prevention and RE programs as a means of addressing key factors associated with dating violence perpetration and victimization (Cornelius & Resseguie, 2006; Kerpelman et al., 2009). Although both dating violence prevention and RE programs have been found to positively influence adolescents across a variety of targeted outcomes (e.g., Adler-Baeder et al., 2007; Gardner et al., 2004; Kerpelman et al., 2009; Eaton, Davis, Barrios, Brener, & Noonan, 2007; Foshee et al., 2012), few studies have examined the influence of RE on notable predictors of dating violence, specifically traditional gender role beliefs and dating violence acceptance, in adolescent samples. Additionally, although several RE studies have considered the influence of demographic variables on program outcomes (e.g., Adler-Baeder et al., 2007; Kerpelman et al., 2009; 2010), few have examined the intersection of sociodemographic characteristics (i.e., gender, race, and SES) and their influence on program outcomes.

One study of youth RE (Whittaker et al., 2014), examined change in gender role beliefs and dating violence acceptance as well as the moderating effect of gender and provided the basis for the current study in which we utilized a comparison sample to explore whether program participation was related to change in gender role beliefs and dating violence acceptance for adolescents. In addition to the unique influence of gender, we also examined the independent and combined moderating effect of RE participants’ gender, race, and SES. We found that Black males, who were the most traditional of the four gender by race subgroups, became more egalitarian following program participation. Additionally, initial findings comparing individuals in the participant group to those in the comparison group suggested that RE participation was not related to change between pre- and post-assessment of dating violence acceptance. However, upon further examination we discovered that adolescent females reported less acceptance of dating violence following RE participation whereas males were reportedly more accepting of dating violence. These findings underscore the value of examining sociodemographic moderators when attempting to understand the impact of programs such as RE.
4.1. Gender role beliefs and intersecting identities

Previous studies of RE demonstrated the malleability of gender role beliefs within adult (Lucier-Greer et al., 2012) and adolescent (Whittaker et al., 2014) samples. These findings suggest that, although gender role beliefs are not a specific target outcome of RE, other areas in the program content emphasize the importance of a respectful as well as equal and supportive relationship, possibly fostering a shift in participants’ perspectives regarding roles and expectations in romantic relationships. In this study, it initially appeared that there was no change in gender role beliefs for either group. Even though one previous study found a small but significant shift in gender role beliefs among youth RE participants, it may be more challenging to replicate this, given that adherence to and the salience of gender-related norms is often exacerbated during adolescence. Additionally, our sample was slightly more egalitarian prior to programming than the previous study (i.e., Whittaker et al., 2014), providing less room for change. Importantly, we sought to emphasize less the experience of “the average” participant and instead to explore differences that may exist between subgroups of the RE participant sample.

The theory of intersectionality suggests that in order to better understand variation in individuals’ experiences we should recognize rather than control for differences that may exist due to the combination of participants’ sociodemographic characteristics. As such, the current study sought to capture the predictive and moderating effects of individuals’ gender, race, and SES both separately and through their interaction. At the start of the program, Black males were more traditional than any other gender by race subgroup. Because the measure of gender role beliefs in this study emphasized male dominance and authority, this finding aligns with Hill's (2001; 2002) suggestion that Black males are more likely to define masculinity in terms of male power and dominance in romantic relationships as well as family life and, as such, may hold more traditional beliefs than others. As highlighted earlier, traditional gender role beliefs are often associated with dating violence perpetration and victimization (Flood & Pease, 2009; Foshee, Benefield, Ennett, Bauman, & Suchindran, 2004; Stith et al., 2004). Therefore, one might assume that holding more traditional beliefs, particularly supporting male superiority and authority, would place Black males at greater risk for engaging in dating violence. Yet, following RE participation, this subgroup showed the greatest decrease in traditional gender role beliefs, suggesting that they may benefit the most from RE participation. This shift towards more egalitarian beliefs likely has important implications. More specifically, it is possible that by altering traditional gender role beliefs, we may ultimately lessen the risk of adolescent dating violence, particularly with this group of adolescents. In contrast to Black males, Black females, although still low, reported more traditional beliefs over time. Hill (2002) suggests that although children in Black families may be taught gender equality, this may not extend to romantic relationships and household expectations. As such, although Black males become more egalitarian after RE participation, there may not be enough discussion surrounding gender role beliefs to prevent the shift towards more traditional norms reported by Black females.

4.2. Dating violence acceptance and intersecting identities

Although reducing the use and acceptance of aggression in relationships is often an explicitly targeted outcome of RE programs, very few studies have examined change in this outcome. Those that do find less dating violence acceptance following RE program participation (e.g., Antle et al., 2011; Sparks et al., 2012). We expected a similar result; however, the participant group did not show a reduction in acceptance of dating violence. Rather, the pattern in our sample indicated that a small, but significant shift towards more acceptance of dating violence occurred for the non-participants, while the participant group, on average, remained lower in their acceptance. While we emphasize that levels of acceptance for both groups is in the lower portion of the response range at both pre and post, this finding suggests that RE may protect adolescents against a normative increase in dating violence acceptance. This slight increase in acceptance of dating violence among the non-participants is challenging to explain and we can only speculate as to the reason for this. As previous research suggests, adolescents may sometimes mistake physical aggression as a form of conflict resolution, or assertiveness as an expression of caring, which may explain why we might see a pattern of increasing acceptance of aggression during adolescence among non-participants (Callahan et al., 2003; Foshee et al., 2001; O’Keefe, 2005). The environment of RE, however, provides a context within which adolescents may clarify their beliefs about the acceptability of dating violence and aggression and thus, the experience may act as a protective factor against an increase in dating violence acceptance and, possibly later dating violence perpetration and victimization.

Importantly, our examination of moderators of change in the participant group reveals a more complex story than is first evident from the group comparisons. Both theory and evidence from previous research suggested differences in dating violence acceptance by individuals’ gender and race (e.g., Beyers, Leonard, Mays, & Rosén, 2000; Nabors & Jasinski, 2009; Nagel et al., 2005) as well as their SES (e.g., Foshee et al., 2008). Similarly, in this study differences between subgroups emerged. The “average” participant seemed to maintain a low level of acceptance of dating violence over time, however, examinations of subgroups showed that female participants became less accepting of dating violence, whereas male participants became more accepting and demonstrated a pattern more similar to the average non-participant.

This is the first study to evaluate the moderating effect of gender on change in dating violence acceptance following RE and our findings offer some initial indication that females may be more receptive to messages in RE regarding the acceptability of dating violence. To further validate that the program experience might explain female participants’ patterns of change, we conducted post-hoc analyses on the influence of gender on change in dating violence acceptance for the comparison group and found that both males and females in the comparison group became more accepting of dating violence over time. Therefore, it is possible that, as suggested by the theory of gender and power (Wingood & DiClemente, 2002, pp. 313–345), the identification with the social norms surrounding the expectations of male power and authority in relationships may be heightened during adolescence, particularly for males (Hill &
Lynch, 1983). Further inquiry is needed to investigate whether males are more resistant to these messages and may benefit from enhanced discussions and program content on healthy and unhealthy dating patterns.

Also noteworthy is the evidence that Black and low SES participants in youth RE were more accepting of violence at both time points compared to White and higher SES adolescents. These findings align with previous research that suggests that minority and lower SES adolescents tend to be more accepting of violence than their non-minority and higher SES peers (Foshee et al., 2008; Markowitz, 2001) Though the dating violence acceptance scores were relatively low within the given range of responses, the elevated scores of some youth (i.e., Black and lower SES adolescents) across both time-points offers implications for future program developers and educators to better address adolescent populations who are comparatively most accepting of dating violence (i.e., males, Blacks, and lower SES adolescents), and in turn, potentially at greater risk for experiencing dating violence as a perpetrator or a victim.

### 4.3. Limitations

Although this study broaches an area of new terrain in the RE literature, there are several limitations that should be addressed. First, even though this study incorporated the use of a comparison sample, it is important to note that because this was a demonstration project, the individuals in this sample were not randomly assigned to the participant or comparison group. The use of randomization would strengthen the assurance that changes in gender role beliefs and dating violence acceptance are due to program participation. Similarly, because this was a demonstration project, rather than random control assignment, there was an imbalance in sample sizes between the participant and comparison group. Although we tested and controlled for differences between the two samples, an important next step is the random assignment and balancing of comparison groups. Furthermore, although the current study used a pre- and immediate post-assessment approach, using an additional longer-term longitudinal design (i.e., three or more time points) would help to better understand the potential long-lasting or delayed effects resulting from RE participation.

Additionally, it is important to note the highly influential nature of peers during adolescence (Arriaga & Foshee, 2004; Steinberg & Morris, 2001). As such, self-report measures, may be influenced by respondents’ perceptions of what their peer group considers to be socially acceptable and appropriate and, in turn, may affect how honestly the students respond to the items. Also, because physical violence often has a stigma attached to it, individuals may be less likely to disclose their true feelings. The relatively low average of dating violence acceptance at both time points suggests that adolescents were indicating relatively low acceptance of violence across time. It is possible that more variation in acceptance would be captured if measures of acceptance of other forms of aggression beyond physical violence (e.g., emotional, verbal) were also considered. One strength of this study includes the examination of the potential moderating effect of mother education level on change following program participation. The lack of study findings specific to education level may be attributed to the limited measurement of indicators of socioeconomic status. More specifically, while studies consider mother’s education as an acceptable proxy for SES (e.g., Hoff et al., 2012; Hoffman, 2003), future studies may benefit from a more comprehensive measure of SES (e.g., mother’s education, employment status and prestige, and whether the child qualified for free or reduced lunch). Yet, despite these limitations this study has several strengths, including the large, diverse sample and offers unique information on the influence of RE on change in gender role beliefs and dating violence acceptance following RE participation and, in doing so, offers practical implications for future program developers and educators.

### 4.4. Practical implications

Although gender role beliefs are not a specific target outcome of RE programs, given the linkage between traditional gender role beliefs and dating violence experiences, program developers and educators may consider modifying current programs to incorporate a unit on gender role beliefs, particularly those related to male privilege and authority, and provide greater discussion surrounding the topic. This may be especially important for classes that include Black males. Although this subgroup started with more traditional gender role beliefs related to male superiority, they demonstrated the most malleability and positive change compared to other subgroups. Because adolescence is a time in which these divergent expectations of roles are heavily reinforced (Hill & Lynch, 1983), the incorporation of a unit on gender role beliefs may elicit a shift towards more egalitarian beliefs in all subgroups of RE participants.

The theory of gender and power (Wingood & DiClemente, 2002, pp. 313–345) suggests that in many instances society may knowingly or unknowingly reinforce differing roles for males and females, often allowing males more power than females in a variety of domains. As such, prior to implementing programs in which gender role beliefs are discussed, educators may benefit from critical self-reflection regarding their own stance on gender roles, a process often used in qualitative research (Charmaz, 2006; Morrow, 2005). Engagement in critical self-reflection serves to improve objectivity within qualitative research and decrease the likelihood that researchers’ personal biases influence their results (Morrow, 2005). Therefore, the use of critical self-reflection in RE curriculum trainings through the use of journaling may increase educators’ awareness of the subtle ways in which they may unintentionally deliver gendered-messages.

Additionally, reductions in dating violence acceptance were documented only for female participants. This is an important outcome goal and it is concerning that reductions were not evidenced for male participants. We note that facilitators of the programs were predominantly female (62%). It may be helpful to involve more diversity amongst facilitators, both gender and race, particularly when delivering lessons on dating violence acceptance.

Educators may also consider incorporating messages regarding the use of unhealthy relationship behaviors, particularly dating violence, throughout multiple lessons. Although in the RS+ curriculum there is one lesson which focuses primarily on dating violence, there are other areas of the curriculum in which educators may add an emphasis on the unacceptability of the use of violence in romantic relationships. Incorporating these messages throughout the entire curriculum in addition to the existing unit on dating violence, throughout multiple lessons. Although in the RS+ curriculum there is one lesson which focuses primarily on dating violence,
violence may help to evoke similar shifts towards less acceptance of dating violence for both male and female participants.

4.5. Conclusions and future directions

The three-way interaction of gender, race, and SES was not related to the amount of change in gender role beliefs or dating violence acceptance. To date the majority of the literature on the theory of intersectionality has been situated within adult samples and is focused on distinguishing differing experiences and norms within broader socio-demographic groups by recognizing the intersection of multiple identities. As such, more research examining intersectionality and its meaning for adolescents’ development and experiences are still warranted. We continue to expect that an adolescent's social address matters and can influence the effectiveness of a program.

Additionally, because responses to both gender role beliefs and dating violence acceptance might be influenced by perceptions of socially desirable and acceptable responses and due to the highly influential nature of peers in adolescence and evidence from school-based intervention studies that find class climate matters (Domitrovich et al., 2008; Ma, Pittman, Kerbelman, & Adler-Baeder, 2014; Ozer, 2006), accounting for class-level factors (i.e., class average of dating violence acceptance and gender role beliefs prior to RE) may help to enhance understanding of how to more adequately address certain beliefs and uniquely tailor interventions based off of the groups’ needs. Furthermore, research accounting for the demographic characteristics of facilitators (e.g., gender, race, age) may offer valuable information on improving facilitator-participant match and, in turn, possibly enhance the effectiveness of RE programs. Future research that uses a randomized control design will provide a more definitive test of RE program impact on gender role beliefs and attitudes towards dating violence. Additionally, the use of a longer-term longitudinal design will help to determine whether or not the positive effects that we found in the current study for female participants’ dating violence acceptance and Black males’ gender role beliefs continues beyond immediate post-assessment and to identify any possible delayed effects for subgroups that are a result of RE programming. Lastly, although youth RE programs are typically offered in general school-based settings, future studies may consider replicating this study targeting a more vulnerable population of youth that may report a higher average level of traditional gender role beliefs and dating violence acceptance, such as those who have been exposed to family violence (Graham-Byrne & Brescoll, 2000; Temple, Shorey, Tortolero, Wolfe, & Stuart, 2013).

Importantly, this study is a step forward in inclusivity by exploring the impact that sociodemographic identities have on individuals’ beliefs and attitudes in the context of youth RE participants. This is particularly valuable for educators and program developers seeking to understand for whom programs are most effective. As such, further research with adolescents may offer a better understanding as to whether and how intersectionality influences gender role beliefs and dating violence acceptance. Furthermore, previous research highlights the relationship between gender role beliefs and dating violence acceptance (Berkel et al., 2004; Flood & Pease, 2009; Lichter & McCloskey, 2004), yet to date only one study of youth RE has examined their relationship (Whittaker et al., 2014). This study (Whittaker et al., 2014) only noted the association between residual change in gender role beliefs and residual change in dating violence acceptance. In future work it will be valuable to explore the nature of this relationship (i.e., do traditional gender role beliefs predict dating violence acceptance or vice versa?) and to explore the links to actual behaviors. Once this relationship has been determined and the more influential cognitive factor is discovered then, due to the known relationship between these variables and later dating violence perpetration and victimization, intervention programs such as RE can focus on the more important belief or attitude as a target for preventing dating violence perpetration and victimization.

This work serves to broaden the evidence of the benefits of participation in RE programs such as RS+, extending beyond positive effects in knowledge and skills related to interpersonal competence and social development. Work focused on the potential effects of RE on gender role beliefs and dating violence acceptance for adolescents serves to situate RE within the realm of prevention science (Coie et al., 1993) and provide information on its value for protecting against dating violence perpetration and victimization.

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