

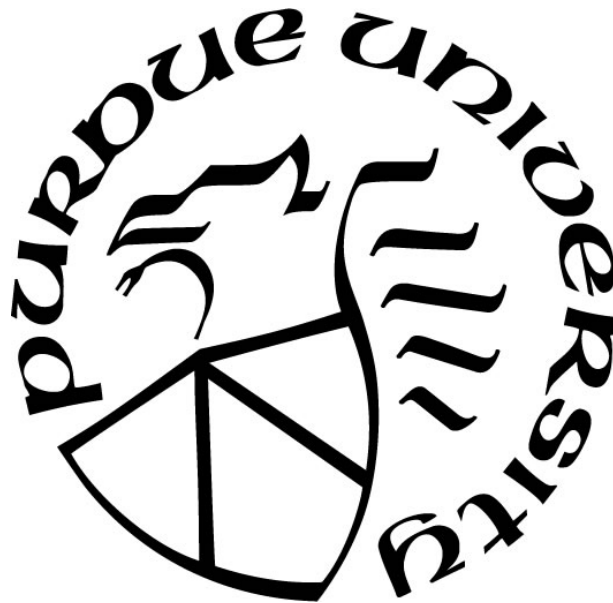
**ROMANCE AND THE PSYCHOSOCIAL ADJUSTMENT OF
INDONESIAN ADOLESCENTS**

by
Mengqian Shen

A Thesis

*Submitted to the Faculty of Purdue University
In Partial Fulfillment of the Requirements for the degree of*

Master of Science



Human Development and Family Studies

West Lafayette, Indiana

August 2019

**THE PURDUE UNIVERSITY GRADUATE SCHOOL
STATEMENT OF COMMITTEE APPROVAL**

Dr. Doran French, Chair

Department of Human Development and Family Studies

Dr. Melissa Franks

Department of Human Development and Family Studies

Dr. Robert Duncan

Department of Human Development and Family Studies

Approved by:

Dr. Melissa Franks

Head of the Graduate Program

In Dedication to Minghao

ACKNOWLEDGMENTS

The author would like to thank Dr. Doran French, Dr. Robert Duncan, and Dr. Melissa Franks for their support and guidance throughout this project. The author would also like to recognize Dr. Urip Purwono for their help in project design and data collection.

TABLE OF CONTENTS

LIST OF TABLES	7
LIST OF FIGURES	8
ABSTRACT.....	9
INTRODUCTION	10
Theoretical Framework.....	10
Interpersonal Perspectives	10
Ecological Perspectives	11
Romance of North American Adolescents	12
Developmental Levels of Romantic Involvement	12
Developmental Course of Romantic Involvement.....	13
Associations between Adolescent Romance and Social Development and Adjustment.....	14
Adolescent Romance and Peer Status.....	14
Psychosocial Outcomes Associated with Adolescent Romance.....	17
Romance and Positive Adaptation.....	17
Romance and Problem Behavior and Negative Outcomes	18
Associations between Romance and Religion in the United States.....	20
Cultural Perspectives on Adolescent Romance	21
Romance of Indonesian Adolescents.....	22
Religion and Indonesian Adolescents	23
Peer Relationships of Indonesian Adolescents	24
The Current Study.....	25
METHOD	28
Participants.....	28
Measures	28
Romantic Involvement.....	29
Religiosity	30
Peer Nominated Popularity	30
Problem Behavior	30
RESULTS	32
Descriptive Analysis.....	32

Romantic Interest	32
Romantic Socialization	33
Dating.....	33
Serious Relationship	33
Correlations.....	33
Cross-sectional Analysis.....	34
Cross-lagged Analyses.....	35
DISCUSSION.....	37
Romantic Involvement of Indonesian adolescents	37
Adolescent Romance and Religiosity in Indonesia	39
Popularity and Adolescent Romance.....	40
Problem Behavior and Adolescent Romance	42
Gender and Romance in Indonesia	46
Limitations and Future directions	47
REFERENCES	49

LIST OF TABLES

Table 1: Means, and Standard Deviations, and Sex Differences including Effect Size for Variables	59
Table 2: Means, and Standard Deviations, and Proportion of Youth Who Reported Involvement in Four Types of Romantic Activities	60
Table 3: Correlations among Popularity, Religious Practice, Romantic Involvement, and Problem Behavior across Grades Separately for Boys and Girls (Respectively Below and Above the Diagonal).....	61

LIST OF FIGURES

Figure 1. Cross-lag model connecting romance and religiosity over time. All estimates shown in the model are unstandardized. Estimates shown are the same for boys and girls. 62

Figure 2. Cross-lag model connecting romance and popularity over time. All estimates shown in the model are unstandardized. Separate parameter estimates for popularity from tenth to twelfth grades are provided, respectively, for boys/girls; otherwise estimates shown are the same for boys and girls..... 63

Figure 3. Cross-lag model connecting romance and problem behavior over time. All estimates shown in the model are unstandardized. Separate parameter estimates for romantic involvement from tenth to eleventh, from eleventh to twelfth, and from tenth to twelfth grades are provided, respectively, for boys/girls; otherwise estimates shown are the same for boys and girls..... 64

ABSTRACT

Author: Shen, Mengqian. MS

Institution: Purdue University

Degree Received: August 2019

Title: Romance and the Psychosocial Adjustment of Indonesian Adolescents.

Committee Chair: Doran French

The associations between religiosity, popularity, problem behavior, and adolescent romantic involvement were examined with both concurrent regressions and longitudinal cross-lagged models in this three-year longitudinal study of 869 high-school Indonesian Muslim adolescents. A problem behavior construct was formed from three variables (i.e., self-reported tobacco use, self-reported alcohol use, and self-reported deviancy). Religiosity, problem behavior, and adolescent romance were self-reported, and popularity was peer-reported. Indonesian adolescents reported high percentages of romantic involvement across three grades, and their romantic involvement increased with age. In the concurrent analyses, both problem behavior and popularity were positively associated with romance at tenth grade, but the main effect of popularity was significant for girls only. Religiosity was negatively associated with romance for girls at tenth grade. In the cross-lagged models, tenth-grade popularity was positively associated with changes in adolescent romance from tenth to eleventh grade. Bidirectional associations emerged between problem behavior and adolescent romance across three grades. No gender difference emerged in the longitudinal analyses. These patterns of association showed both similarities and differences to those found in the US. This study provides evidence that adolescent romance is intertwined with other aspects of adolescent development in Indonesia, and highlights the importance of exploring the influences of culture on adolescent romance in future studies.

INTRODUCTION

Romantic experiences are believed to be one of the hallmarks of adolescent development. The term “romantic experiences” refers to a wide range of activities and cognitions (Collins, Welsh, & Furman, 2009). In addition to mutually acknowledged ongoing voluntary interactions (“romantic relationships”), these also include one-sided attractions (e.g., “crushes”), interactions with potential romantic partners (e.g., “hanging out”), and sexual encounters that occur outside of romantic relationships (e.g., “hooking up”) (Collins et al., 2009).

Almost all of the research on adolescent romantic involvement has come from either the US or Canada, and consequently there is a need to expand this research to other regions of the world. In this study, this research will be extended to Muslim adolescents in Indonesia, a population that is of particular interest because the norms of adolescent romance differ from those that exist in North America, and influence of Islam on romance and interactions between boys and girls. In the sections that follow, I will first focus on theoretical perspectives pertaining to adolescent romantic relationships. Then, the literature on adolescent romance in North America will be reviewed. The limited research on adolescent romance in Indonesia will be discussed.

Theoretical Framework

Adolescent romantic experiences have attracted increasing research attention during the past few decades. A variety of theoretical perspectives have been applied to this research, the most prominent of these are interpersonal and ecological perspectives.

Interpersonal Perspectives

Interpersonal perspectives focus primarily on how changes in adolescent development and particularly changes in social relationships contribute to the development of adolescent romantic

interests and activities. One focus of interpersonal perspectives is autonomy. Intimacy and autonomy in adolescent romantic relationships are interconnected with both parent and peer relationships (Taradash, Connolly, Pepler, Craig, & Costa, 2001). During adolescence, adolescents seek greater distance from parents. The interpersonal bonds between parents and their children become weaker and those between peers or romantic partners become stronger (Collins, 2003).

Also included in the category of interpersonal perspectives is romantic attachment. Attachment theory posits that romantic relationships provide adolescents with a safe and secure base that derives from the one that they experienced with the parents during infancy and childhood (Connolly & McIsaac, 2011). Their infant and childhood experiences affect the strength and form of the attachment that they build with their romantic partners. It is thought that the attachments that adolescents had with their parents, as well as their past experiences with peers and people they dated affect their current romantic relationships (Furman & Simon, 1999).

Ecological Perspectives

Ecological perspectives emphasize social and cultural contexts, the process through which these contexts affect interpersonal relationships, and the meaning that these contexts afford (Collins et al., 2009). This approach acknowledges that other's relationships and the contexts in which these relationships exist may contribute to adolescent romance and both the positive and negative consequences for these relationships (Collins et al., 2009). Networks of peer groups and culture are among the most frequently studied contexts (Connolly, Furman, & Konarski, 2000; Connolly et al., 2004; Kreager et al., 2016; Li et al., 2010).

Involvement with peers becomes increasingly important during adolescence. Most adolescents reported having extensive daily contact and receiving ongoing support from friends (Hartup, 1993). The intimacy, mutuality, self-disclosure, and bonding that exists between peers contributes to the developmental significance of peer friendship networks during adolescence;

these become the key social system within which adolescent romantic interactions are embedded (Collins & Laursen, 2004). There is a developmental progression from same-gender friendships, to mixed-gender groups, and then to dyadic romantic relationships. In later adolescence, adolescents spend increasing amounts of time with potential romantic partners at the expense of involvement with same-sex friends and crowds (Collins et al., 2009).

There is considerable cultural diversity in the extent to which adolescent romance is accepted. In North America and much of Europe, adolescent romantic experiences are thought to be normal and even desirable (Collins, 2003). In some cultures, there are institutions such as high school proms to promote this. In contrast, in other cultures, including many in Asia, adolescent romance is discouraged, and parents try to prevent children from participating in such activities (Li et al., 2010). Thus, cultural contexts are also reflected in adolescent peer relationships, including friendship and romantic experiences. The section below focuses on the literature review of studies concerning romantic involvement of US adolescents.

Romance of North American Adolescents

This literature review pertaining to the romantic involvement of US adolescents is grouped into five sections. First is the discussion of developmental levels of adolescent romantic involvement. Then the frequency of adolescent romance in the United States is introduced. Finally discussions of how peer status, psychosocial adjustment, and religiosity are each associated with adolescent romance are provided.

Developmental Levels of Romantic Involvement

Dunphy (1963) developed a sequential stage model that explained the connection between peer and romantic relationships by observing the friendships of 303 Australian adolescents. He identified two peer structures: small groups of same-sex close friends (cliques), and large mixed-

sex networks (crowds). During early adolescence, same-sex friendships (unisexual peer groups) predominate. As the first voluntary intimate relationships, same-sex friendships serve as a template for subsequent intimate relationships (Furman & Buhrmester, 1992). During middle adolescence, adolescents typically progress from unisexual peer groups to mixed-gender groups. Same-sex cliques of boys and girls interact and subsequently merge to form mixed-sex crowds. These mixed-sex crowds provide young adolescents with opportunities to establish romantic contacts, and these further serve as contexts within which preliminary romantic activities can occur (Connolly et al., 2000). During later adolescence, there is a disintegration of large groups and the rise of dating activities and romantic relationships (Dunphy, 1963).

Empirical support for Dunphy's sequential stage theory was provided by Connolly et al. (2000) who followed a sample of 180 high school students for three years from ninth grade to eleventh grade. They found that membership in small groups of close friends (cliques) predicted later involvement in large mixed-sex groups (crowds) and that membership in mixed-sex groups then predicated future romantic activities. The sequential organization of romantic involvement was also found in a sample of 1284 Canadian adolescents with diverse cultural backgrounds (Asian, European, and Caribbean backgrounds) (Connolly et al., 2004). Dunphy's stage model illustrates that peer groups serve as a one of the most important contexts for the emergence of dating activities and romantic relationships.

Developmental Course of Romantic Involvement

Most US young people become romantically involved sometime during adolescence. Carver, Joyner, and Udry (2003) reported that more than half of 15-year-old U.S. adolescents (56% of girls and 49% of boys) reported having had at least one romantic relationship during the prior 18 months. This proportion is likely greater if a broader definition of romantic relationship is applied (Furman & Hand, 2006). Studies that include both dating activities and romantic

relationships reported higher estimates of adolescent romantic involvement; at tenth grade, 99% of adolescents reported that they hung around with both boys and girls, 84% said that they had gone on dates, and 82% reported having a boyfriend or girlfriend (Furman, Low, & Ho, 2009).

The percentage of adolescents who report having romantic experiences increases with age. The National Longitudinal Study of Adolescent Health (Add-Health) reported that about 25% of 12-year-old, about 50% of 15-year-old, and more than 70% of 18-year-old youth, reported having had a “special romantic relationship” in the past 18 months (Carver et al., 2003). Although many youths during early adolescence (11 to 14 years old) expressed interests in romance, most do not participate in such activity (approximately 15% to 40%) (Brendgen, Vitaro, Doyle, Markiewicz, & Bukowski, 2002; Carlson & Rose, 2007; Simon, Aikins, & Prinstein, 2008). There is an important transition during middle adolescence (14 to 16 years old). At this time, most youths have become romantically interested, and about half of adolescents reported having an ongoing romantic relationship (Furman et al., 2009). By late adolescence (17 to 18 years old), most young people (approximately 50% to 80%) have had some kind of romantic experience (Carver et al., 2003; Nieder & Seiffge-Krenke, 2001).

Associations between Adolescent Romance and Social Development and Adjustment

In the sections below, the associations between engagement in romance during adolescence and other aspects of social development and adjustment will be reviewed. In addition to providing a general overview, this his section will specifically highlight the relation between romance, and popularity, problem behavior, and religion as these are the focus of the current study.

Adolescent Romance and Peer Status

Existing empirical literature and theory suggests that peer status plays a key role in adolescents’ choice of dating partners. Brown (1999) proposed a four-stage model in which peer

context strongly influences the nature of romantic relationships during adolescence. During the *initiation phase*, adolescents' romantic desires emerge under the influence of puberty and peer group pressure. Following this is the *status phase*, during which adolescents are concerned about the peer group's perceptions of their potential romantic partners' status. Adolescents at this time tend to care more about the status implication of their relationships than they do about the specifics of the relationship. Those with higher peer status are regarded as having higher status-enhancing potential, with the consequence that adolescents may improve their status in the peer groups by dating those with high status. During the *affection phase*, adolescents shift their concerns from peer perceptions to the development of meaningful affectionate ties. Finally, during the *bonding phase*, adolescents consider the emotional and practical issues associated with entering into long-term relationships. An important implication conclusion can be drawn from Brown's *developmental-contextual approach* that adolescents tend to desire romantic partners who are high in peer status (Houser, Mayeux, & Cross, 2015).

A particularly important aspect of peer status for understanding of adolescent romance is popularity. Popularity is an index of social visibility and power (Houser et al., 2015). Popularity differs from social preference, which refers to being well-liked by peers. Popular adolescents may not be necessarily liked by their peers; instead, they are usually well-known, powerful, aggressive, and socially centered (Cillessen & Rose, 2005). Popularity is positively associated with both pro-social behaviors and aggression (Borch, Hyde, & Cillessen, 2010; Cillessen & Rose, 2005; Houser et al., 2015; Niu, Jin, Li, & French, 2016).

Popular adolescents are more likely than others to have romantic experiences. Houser et al. (2015) found a positive relationship between peer popularity and romantic popularity for ninth grade boys and girls. Similar positive relationships between popularity and romantic involvement

in third-, fifth-, and seventh-graders were found by Carlson and Rose (2007), such that having a reciprocal romantic relationship was associated with being perceived as “popular”.

Becoming involved in dating may also lead to improved social status. As suggested in the four-stage model, dating is a source of peer status of adolescents (Brown, 1999). Dating may lead to improved peer status for two reasons. First, based on the stage-model, adolescents move through different stages of romantic involvement. Thus, those adolescents who are involved in romantic activities earlier than their peers may be regarded as cooler, more mature, and attractive. Second, adolescents may also gain higher status by dating popular peers and consequently they may enter popular peer cliques by being close to insiders. This is particularly the case of low-status adolescents who date high-status partners. Simon et al. (2008) found that partners’ popularity significantly predicted changes in adolescents’ own popularity. Furthermore, those who dated high-status partners changed significantly more than those who dated low-status peers after controlling for the initial level. Thus, low-status adolescents were more likely to improve their status by dating a high-status partner, but high-status adolescents were unlikely to lose their status by dating a low-status partner. Marks et al. (2012) also found that friends’ popularity levels predicted the change in adolescent’s popularity after controlling for the initial levels.

In a few studies, the associations between popularity and romantic involvement was moderated by gender. Houser et al. (2015) found that girls with high peer popularity were higher on romantic involvement than boys with high peer popularity; there was no gender difference for adolescents with low peer popularity. Thus, popular girls may be particularly desirable dating partners. Nevertheless, there was also evidence suggesting the opposite direction with a stronger association between popularity and romance for boys than for girls. In an experimental vignette study, Ha et al. (2010) found that, popularity became important only when a potential partner was

found attractive for boys, but that both attractiveness and popularity of a potential partner played important roles in girls' romantic attraction.

Psychosocial Outcomes Associated with Adolescent Romance

Early romantic relationships and dating activities play a major role in the lives of adolescents and become increasingly important in youth's lives as they move from early to late adolescence (Sorensen, 2007). Researchers have found that the developmental roots of these romantic involvement are associated with psychosocial changes in adolescence. Recently, however, researchers have become increasingly aware of the complex influence of adolescent romance. The section below will review both positive and negative outcomes of adolescent romantic involvement.

Romance and Positive Adaptation

Researchers have suggested that adolescent romantic experiences are associated with many positive outcomes. For example, adolescent romantic interactions may contribute to positive peer relationships, such that they spend more time with peers, which helps them to develop their capacities to cooperate with each other, learn to co-construct and keep a relationship (Furman & Shaffer, 2003). Adolescent romantic experience also plays a key role in sexual development. Friendship and romantic relationships are the contexts where the majority of adolescents' sexual behaviors occur (Furman & Shaffer, 2003). In an eight-year longitudinal study of youth from 13 to 21 old, romantic partners, in addition to parents and peers, were found to be an important source of social support (Seiffge-Krenke, 2003). Hand and Furman (2009) suggested that becoming involved in healthy romantic relationships often brings adolescents support, companionship, and intimacy, which helps adolescents cope with daily stressors and adjust to developmental challenges. The quality of adolescent romantic experience also appears to be positively associated

with romantic self-concept and self-perceived competence, and predicts healthy and normative relationships in later life stages (Collins, 2003; Collins et al., 2009). In short, dating activities and romantic relationships can have a positive impact on adolescent psychosocial development.

Romance and Problem Behavior and Negative Outcomes

A growing body of evidence has also shown that adolescent romantic involvement is associated with negative outcomes. These negative outcomes include deviancy and substance use.

Results from several studies reveal that adolescent romantic experiences are associated with deviant behavior (Haynie, Giordano, Manning, & Longmore, 2005). Davies and Windle (2000) found that tenth- and eleventh-grade adolescents with greater romantic involvements reported rising levels of delinquency. Other researchers have reported similar results with seventh-grade students, such that those who had a romantic partner reported more deviant behaviors and more symptoms of depression than those youths who did not have a romantic partner (Miller et al., 2009; Joyner & Udry, 2000).

Adolescent romance is also associated with substance use. For example, Zimmer-Gembeck, Siebenbruner, and Collins (2004) found that early initiation of romantic experiences predicted more frequent use of alcohol during middle adolescence. Davies and Windle (2000) and Miller et al. (2009) found similar results with seventh to eleventh grade students, such that middle adolescents who were involved in romantic relationships reported higher levels of alcohol use. Furthermore, adolescent romance is also associated with substance use later in adulthood. With the data drawn from the National Longitudinal Study of Adolescent Health, Gudonis-Miller, Lewis, Tong, Tu, and Aalsma (2012) found that romantic relationships during adolescence (11 to 19 years old) predicted future alcohol and tobacco use in adulthood regardless of relationship continuity, although individual factors generally played a more important role than partner effects.

The negative consequences of romantic involvement fades with age. Neemann, Hubbard, and Masten (1995) suggested that romantic involvement during late childhood and early to middle adolescence is more deviant but that this becomes more normative and less problematic during later adolescence. Using a three-wave longitudinal study, participants were followed from late childhood (8 to 12 years old) to early adulthood (17 to 23 years old). The longitudinal analyses showed bi-directional effects between romantic involvement and deviant behavior from late childhood to middle adolescence, such that romantic relationship in late childhood predicted an increase in middle adolescent deviant behaviors, and deviant behavior in late childhood also predicted an increase in middle adolescent romantic relationship. In contrast, however, there were no relations between romance and deviant behaviors from middle to late adolescence with the exception of continuity of deviant behaviors. To conclude, the meaning of romantic involvement changes with age and become less problematic but more normative and positive in late adolescence.

The negative associations between romantic involvement and adolescent competence may also be moderated by gender. Brendgen et al. (2002) found that the negative association between romantic relationships and academic achievement was stronger for girls than boys. The authors speculated that boys may be less distracted than girls from their schoolwork when involved in a romantic relationship. There are considerable gender differences in problem behavior. Boys tend to have higher levels of overt aggression, problem behavior and substance use when they are in same-sex peer groups than in mixed-sex groups. In contrast, girls are more likely to have higher levels of relational aggression and initiate deviant behaviors and substance use in mixed-sex than in same-sex peer groups perhaps because of the influence of deviant boys or partners (Capi, Lynam, Moffitt, & Silva, 1993; Giordano & Cernkovich, 1979; Rhule-Louie & McMahon, 2007).

Associations between Romance and Religion in the United States

Very few studies have been done to explore the association between religiosity and romantic involvement in the U.S.; almost all research has focused on the relation between religiosity and adolescent sexual attitudes and behaviors. Pre-marital sexual activities are considered to reflect a lack of responsibility and low self-control, and are morally unacceptable in Western Christianity-based religion (Smith-Hefner, 2005). With the data from the 1995 National Survey of Family Growth (NSFG), Jones, Darroch, and Singh (2005) found that the religious affiliation and frequency of attendance at 14 years old were associated with later first sex, greater contraception use at first sex, less teen births, and fewer number of sexual partners among women aged 15 to 24 years. Similar results were also reported by Hardy and Raffaelli (2003) with a two-year longitudinal study, such that teens' importance of religion and frequency of church attendance in middle adolescence (15 to 16 years old), as a composed of, was related to lower likelihood of first sexual intercourse after two years in late adolescence (17 to 18 years old).

Only one study could be located that assessed the effects of change of romantic relationships on religiosity in adolescence. Granqvist and Hagekull (2003) in a 15-month longitudinal sample of 196 Swedish 16-year-old adolescents, those who separated from their partners were more likely to experience increased religiosity whereas those who form new romantic relationships were more likely to decrease their religiosity. The authors suggested that perhaps adolescents' attachment to God is transferred to their partners when they form new romantic relationships, and the reverse happens when they break up with their partners.

This literature review has specifically focused on adolescent romance in the United States and Europe. The question remains as to whether adolescent romance in other countries is similar to that seen in Western countries. In addition, there remain questions generalizability of findings pertaining to the associations between romance and popularity, problem behavior, and religion.

Cultural Perspectives on Adolescent Romance

Most research focused on adolescent peer relationships has come from studies of Western countries, particularly North America (Chen, French, & Schneider, 2006). As mentioned above in the section of ecological perspective, Western and Asian cultures may differ in their expectations and attitudes regarding adolescent romance (Collins, 2003; Li et al., 2010). There is evidence of significant ethnic and culture differences in adolescent romantic relationships. Connolly et al. (2004) found that adolescents from European-Canadian and Caribbean-Canadian families were more likely to have a boyfriend or girlfriend than those from Asian-Canadian families. Li et al. (2010) further compared 496 Chinese adolescents and 395 Canadian adolescents and found that Chinese adolescents were less likely to have any form of romantic involvement, had lower levels of romantic experiences, and had fewer romantic relationships than their Canadian peers. Carver et al. (2003) found the similar results with Asian American sample, such that Asian American adolescents were less likely to become involved in a romantic relationship than their African American, Hispanic, Native American, and European American peers. Thus, there is some evidence that North American youth are more likely to become romantically involved during adolescence than those in some other ethnic groups.

The study of Indonesian adolescents will be particularly useful for understanding the generalizability of findings pertaining to adolescent romance across cultures. As discussed below, there are many similarities and differences between the US and Indonesia with respect to adolescent development. For example, to the extent that adolescent romance is discouraged and regarded as deviant in Muslim culture, we would expect the positive association between adolescent romance and problem behaviors to be particularly strong in Indonesia. In addition, findings regarding the characteristics of popularity in the U.S. and Indonesia showed similar patterns of associations between popularity and adolescent psychosocial adjustments (French et

al., 2016). Thus, we also expect popularity to be positively associated with adolescent romance in Indonesia. The goal of this study is to identify the developmental changes in adolescent romance and to understand the relations between adolescent romantic experiences and religiosity, problem behavior and popularity. A further goal of this study is to understand how romance exists within a predominately Muslim culture with the accompanying perspectives on gender roles and adolescent sexuality.

Romance of Indonesian Adolescents

In this study, the characteristics associated with adolescent romantic experience in Indonesia and how these differ from those in Western countries will be reviewed. In particular, three topics pertinent to this study will be discussed. These include the associations between romance and popularity, problem behavior, and religion.

Indonesia is a South East Asian archipelagic nation that is comprised of thousands of islands. It has an estimated population of over 252 million people, which ranks fourth in world population. Indonesia consists of hundreds of distinct ethnic and linguistic groups, and Javanese are the largest and the most politically dominant group. Indonesia is a Muslim-majority society, such that about 90% of the population are Muslim. The participants of our study are Muslim adolescents that are primarily Sundanese in ethnicity.

Only a few studies examined *pacaran* (romantic or dating relationship) among adolescents in Indonesia. Smith-Hefner (2005) suggested that there is a strongly gendered pattern to the cultural norms related to adolescent romance and sexuality. Traditionally it is thought to be normal for Indonesian young men to be romantically interested, whereas adolescent girls are expected to stay close to home and to refrain from premarital sexual activities. In the past 30 years, with the far-reaching political, economic and religious change, accompanied with the spread of women's higher education, young people have increased opportunities to interact with member of opposite

sex independent of parental oversight. Many English words and phrases pertaining to romantic relationships have been incorporated in Indonesian and widely used (e.g. *having fun*, *trauma*, *serius*, *enjoy* ('having fun', 'trauma', 'serious', 'enjoy')). Many young people especially young women, however, still reported feeling deeply ambivalent about the new opportunities and freedom. On one hand, modern social changes offer them new possibilities to interact with opposite sex peers. Adolescent girls, however, are still expected to control themselves, limit their desires, and remain chaste consistent with traditional Muslim norms.

As a part of the Central Java Sexuality Research Project (2002-2006), Winarno (2007) found that Indonesian adolescents regarded dating relationships as a way to find a fitting soul mate and a potential life partner. The in-love adolescents seriously considered the possibility of future marriage. In the description of functions of romantic relationships, Indonesian adolescents did not mention recreation, sexual experimentation, status, or identity formation, which were all regarded as normal in Western societies. The very limited amount of information about Indonesian Muslim youth's romance and dating suggests the need for future research. It is, however, impossible to understand adolescent romance in Indonesia without considering the place of Islam in this culture.

Religion and Indonesian Adolescents

Religion is an important component of cultural meaning systems (Tarakeshwar, Stanton, & Pargament, 2003), and in Indonesia, religion is inseparable from culture. Indonesia is characterized as a collectivist culture with high levels of religiousness and shared common religious affiliation of the members (French et al., 2013). Indonesian adolescents experience very limited boundaries between the secular and religious world, and religious practice is observable and an important part of daily life (French, Purwono, & Rodkin, 2014; Lippman & Keith 2006).

Religiosity is defined as engagement in behavior that is either expected (e.g., fasting during Ramadan) or recommended (e.g. praying in addition to the required daily prayers) behavior for

Indonesian Muslim youth. This definition of religiosity emphasizes the consistent religious practices rather than personal or private relationships with God emphasized in protestant religions. Religiosity is associated with multiple aspects of Indonesian Muslim adolescents' social-emotional adjustment. Specifically, religiosity of Indonesian adolescents has been shown to be associated with self-esteem, peer status, regulation, prosocial behaviors, low problem behavior, low depression, and low substance use (French, Eisenberg, Vaughan, Purwono, & Suryanti, 2008; French, Purwono, & Triwahyuni, 2011; French, Purwono, & Rodkin, 2014; Purwono & French, 2016). These findings provide empirical support for the argument that religiosity is associated with Indonesian adolescents' adjustment.

Religiosity also plays an important role in Indonesian adolescents' romantic involvement. According to Smith-Hefner (2005), Muslim students in the Indonesian educational system are instructed not only in basic ritual and intellectual tenets of their faith, but also "proper" gender roles and behaviors. Some Indonesian Muslim adolescents are encouraged not to interact with opposite sex peers as it is thought that such interactions are dangerous because they may lead to sinful acts. Although the majority of Indonesian adolescents embrace Islam and regard religion as very important in their life, there is an erosion of traditional and religious values (Jaafar, Wibowo, & Afiatin, 2006). Globalization and youth culture have given youth a more liberal perception toward opposite-sex friendship and adolescent romance.

Peer Relationships of Indonesian Adolescents

Comparison of adolescent peer groups in Indonesian and US reveals both similarities and differences. Indonesian adolescents appear to attach more importance to their involvement in social networks than to dyadic friendships (French, Lee, & Pidada, 2006). French et al. (2003, 2011) found both differences and similarities between the friendships of Indonesian children and those of Western children. On one hand, the friendships of Indonesian adolescents are less close,

more focused on instrumental aid but less focused on enhancement of worth, more extensive, and less exclusive than those of Western youth (French, Pidada, & Victor, 2005). On the other hand, the patterns of the associations between Indonesian adolescents' friendships and psycho-social adjustment are consistent with those found with Western adolescents. Indonesian youth who had friends were less aggressive and social withdrawn, but but were higher in academic achievement and social preference. To conclude, peer relationships, which are important for establishing romantic relationships, shares both similarities and difference in Indonesia and in the US.

Characteristics of popularity in Indonesian peer groups appear to be similar in Indonesian and the US. In particular, the distinction between social preference and popularity exists in Indonesia. French et al. (2016) found similar patterns of associations between popularity and psychosocial adjustments, including prosocial behaviors, number of mutual friends, academic achievement, aggression, and tobacco use, in Indonesia and in the United States. Few studies have examined the relation between popularity and romance in Indonesia. Based on the extent that patterns of popularity in Indonesian youth are similar to those in the US, I expect popularity is positively associated with adolescent romantic involvement.

The Current Study

In this two-year longitudinal study, research on the associations between adolescent romantic involvement and social competence and adjustment will be extended to a high school (tenth to twelfth grade) Muslim Indonesian population. Descriptively, it is expected that similar developmental progressions in romantic involvement will emerge in this high school population. Thus, over the course of the three years of assessment, it is expected that adolescents will increasingly move from interest in romance, interactions in mixed gender groups, to increased dating and the development of partner relationships.

It is also expected that religiosity will be associated with involvement in romantic activities. Muslim adolescents are not encouraged to interact with opposite sex peers (Smith-Hefner, 2005). Religiosity is hypothesized to be negatively associated with progression from romantic interest to dating and romantic coupling both at tenth grade. It is also expected that religiosity will predict changes over the three years of high school in romance, such that adolescents with higher levels of religiosity will be less likely than those lower in religiosity to become involved in romance over the three-year period of this study.

The final set of questions will focus on the associations between romantic involvement and popularity and problem behavior. Popularity and problem behavior will be analyzed in separate models because there is no interest in including problem behavior as a control in the analysis of popularity nor is there interest in controlling for popularity when assessing the association between romantic involvement and problem behavior. Romantic involvement is expected to be positively associated with popularity at tenth grade and over the three-year period of the study. Romantic involvement is also expected to be positively associated with problem behavior at both tenth grade and throughout the three years of high school.

A longitudinal model will be constructed to explore the longitudinal associations between romantic involvement and popularity using cross-lagged analyses. It is hypothesized that bidirectional longitudinal associations between popularity and romantic involvement will emerge. According to Brown's *developmental-contextual approach*, high peer status is highly preferred in adolescents' choice of dating partners (Houser et al., 2015). Thus, popular adolescents are expected to be more likely to increase their romantic involvement over time. It is also possible that engagement in romantic activity will be associated with subsequent increased popularity. Adolescents who start dating early may be regarded as "mature" and receive respects by their peers; they may gain their status by dating with those higher-status partners (Brown, 1999; Simon

et al., 2008). It is possible that these relations will differ for boys and girls, such that popularity plays a more important role for girls and popular girls are especially desirable in boys' mate selection (Houser et al., 2015). We are also open to the possibility that the association between peer popularity and dating popularity may be stronger for boys than for girls (Ha et al., 2010).

A second model will be constructed to assess the longitudinal associations between romantic activity and problem behavior. Because adolescent romantic activity tends to be discouraged by teachers and parents in Indonesia, it is likely that this will be associated with other indices of rule-breaking. It is also possible that engagement in romantic activity will be associated with increases in subsequent problem behavior. Research in US has found that increasing romantic involvement is associated with rising levels of delinquency and substance use. In the US and other Western countries, romantic involvement is usually considered problematic in late childhood to middle adolescence but normal in late adolescence, and the positive association between romance and problem behavior fades with the increase of age (Neemann et al., 1995). Nevertheless, romance may still be problematic for Indonesian adolescents in high school because of cultural norms related to adolescent romance and sexuality. This is likely to be particularly the case for girls given findings that involvement with boys, particularly deviant boys, is associated with escalated problem behavior for girls (Capi et al., 1993).

In order to assess the longitudinal sequence of the effects, we will use three cross-lagged models to estimate the reciprocal relations between adolescent romantic involvement and religiosity, popularity, and problem behavior. These will be conducted in separate models based on the rationale presented above.

METHOD

Participants

Adolescents were recruited from three high schools in the city of Bandung, the capital of West Java in Indonesia and the nation's third most populous city. Bandung is a center for technology and university education in Indonesia. The sample was almost entirely Muslim, and the few non-Muslim participants were not included in the analyses. Most adolescents came from middle-class families. Educational levels for fathers and mothers were 4.1% and 7.0% with less than a high school education, 36.5% and 42.4% with a high school education, 17.6% and 24.7% with post high school technical education, and 41.8% and 25.9% with a college education. As such, this sample was more affluent and highly educated than most of the Indonesian population.

The analyzed sample included 865 adolescents (461 girls) participated in at least one year of data collection. The initial tenth grade sample included 470 adolescents (mean age = 15.7 years, $sd = .51$ years). Because we assessed all students in the classroom, the movement of students into new classroom groups led to the increase in sample size over time. This resulted in samples of 470 tenth, 590 eleventh, and 757 twelfth grade participants. We assessed the effects of attrition by comparing the attributes of the 441 students who participate at tenth grade and continued in subsequent years with the 40 students who exited the sample. There were no differences between these groups on romantic involvement, problem behavior, or religiosity.

Measures

All measures, with the exception of romantic involvement, have previously been used in other Indonesian studies. The measure of romantic involvement was adapted from U.S. measures (Dating History Questionnaire; Furman & Wehner, 1992) by teams of Indonesian researchers

fluent in English. The Indonesian version was created using forward and backward translation, and meanings were evaluated to ensure that these were similar across English and Indonesian versions.

Romantic Involvement

The Indonesian version of Furman and Wehner's (1992) Dating History Questionnaire consisted of thirteen items that were adapted from the sixteen items included in the original measure. Participants answered "yes" or "no" to each item, and thus the sum of scores could range between 0 and 13. A proportional score was calculated for each participant by dividing the sum score by 13. One item of the original scale, "Get engaged, married, or lived with someone", was deleted because it is very rare for Indonesian high school students to have such experiences. Two other items, "Do you feel at the time that you are 'in love' with someone you are dating?" and "Do you date or go out with someone, but with a group friends?" were also excluded because of very low frequency and low internal consistency. The items were grouped into four categories of romantic interests or involvement. Two items assessed romantic interest (e.g., "Are you romantically interested in boys/girls?"). The next five items assessed romantic socialization in mixed sex groups (e.g., "Do you hang around with both boys and girls?"). The following three items assessed dating activities (e.g., "Do you date or go out with someone, just the two of you?"). The remaining three items assessed the extent to which participants had a serious committed relationship (e.g., "Do you have a committed relationship in which you are planning to get engaged, married, or live together?"). The romantic involvement score was comprised of the proportion of the remaining thirteen items endorsed as having gotten involved in. α 's = .74 to .77 across grades.

Religiosity

Adolescents self-reported their engagement in religiously required activities (e.g., “I do the 5 daily obligatory prayers”) and religiously recommended but not required behavior (e.g., “I add the non-obligatory Sunnah prayer before or after the obligatory prayers”) using a five-point scale developed by Purwono (2010): 0 = *Almost never*, 1 = *Occasionally*, 2 = *Once a week*, 3 = *Once a day*, 4 = *More than once a day*. The scale consisted of 16 items for boys and 15 items for girls. The item “How many times did you attend the Friday prayer?” was only answered by boys, because girls typically pray at home instead of attending the mosque. No question in this scale referred to alcohol and tobacco use. The internal consistency across grades was .73 to .83 for boys (with 16 items) and .60 to .79 for girls (with 15 items).

Peer Nominated Popularity

Popularity was assessed with one peer nomination item (“who are the most popular kids in my class?”; *populer di*). The proportion of number of nominations each participant received was computed and standardized within classrooms to control for the different numbers of nominators.

Problem Behavior

Problem behavior consisted of three subscales, deviancy, tobacco use and alcohol use. Scores for each of these came from responses to items embedded in a 15-item problem behavior scale. Adolescents self-reported their engagement in deviant behaviors in the past twelve months with 13 items (e.g., “During the past twelve months, how often did you do something dangerous because you were dared to?”) on a six-point scale: 0 = *never*, 1 = *once or twice*, 2 = *once a month*, 3 = *2 or 3 days a month*, 4 = *once or twice a week*, 5 = *3 to 5 days a week*, 6 = *nearly everyday*. These items were derived from the Problem Behavior Checklist (adolescent version) (Elliot-Delbert, Huizinga, & Ageton, 1985). α 's = .77 across all grades. Adolescents self-reported their

tobacco and alcohol use during the prior year with a four-point scale: 0 = *never*, 1 = *once or twice*, 2 = *monthly use (once or twice a month)*, 3 = *weekly use (more than once a week)*. Self-reported deviancy scores were transformed into a four-point scale ranging from 0 to 3 by dividing the original scores by two, and the mean scores of deviancy, tobacco and alcohol use were computed with higher scores reflecting greater problem behavior. The correlations between the three subscales ranged from .48 to .72 across grades.

RESULTS

Descriptive Analysis

Multivariate analyses of variance (MANOVA) were conducted to examine gender differences in popularity, religious practice, romantic involvement, and problem behavior across grades. There were significant main effects of gender, Wilks' $\Lambda = .63$, $F(12, 207) = 10.37$, $p < .001$. Boys reported higher levels of religiosity at eleventh grade, but there were no significant gender differences at tenth and twelfth grades. Boys reported more romantic involvement than girls in eleventh and twelfth grades, and more problem behavior across the three grades. Means and standard deviations of measures are presented separately for boys and girls in Table 1.

The means and standard deviations, as well as the proportion of youth who reported involvement in at least one item in each type of romantic activities, are presented for four types of romantic activities respectively in Table 2. Indonesian adolescents reported high percentages of romantic involvement across three grades.

Four univariate mixed design analyses conducted to assess examine gender and grade differences in romantic involvement. In these analyses, grade (tenth, eleventh and twelfth) was the repeated measures factor, and gender (boys and girls) was the between subject factor.

Romantic Interest

Significant main effect of grade emerged in romantic interests, $F(2,239) = 4.90$, $p < .01$, such that Indonesian adolescents reported significantly higher levels of romantic interests in twelfth grade than in eleventh grade, $t = 3.02$, $p < .01$, $d = .10$. The gender main effect not the gender by grade interaction were significant.

Romantic Socialization

Similar main effect of grade also emerged in romantic socialization, $F(2,240) = 29.44, p < .001$, such that Indonesian adolescents reported significantly higher levels of romantic socialization in twelfth grade than in tenth grade, $t = 7.10, p < .001, d = .36$. There was also a significant gender by grade interaction in romantic socialization, $F(2,240) = 5.34, p < .01$. Boys reported higher levels of romantic socialization in eleventh grade than in tenth grade, $t = 2.71, p < .05, d = .25$, and higher in twelfth grade than in eleventh grade, $t = 3.80, p < .01, d = .27$, but girls only reported higher romantic socialization in twelfth grade than in tenth grade, $t = 3.20, p < .001, d = .42$.

Dating

Significant main effect of grade emerged in dating, $F(2,233) = 7.65, p < .01$, such that Indonesian adolescents reported significantly higher levels of dating in twelfth grade than in tenth grade, $t = 3.89, p < .001, d = .42$. There was also a significant main effect of gender, such that boys reported more dating than did girls, $F(1,234) = 12.87, p < .001, d = .35$. No significant gender by grade interaction emerged.

Serious Relationship

There was a significant main effect of gender, such that boys reported more serious relationship than girls, $F(1,239) = 5.62, p < .05, d = .23$. The main effect of grade nor the gender by grade interaction were significant.

Correlations

Correlations between popularity, religious practice, romantic involvement, and problem behavior are displayed in Table 3. Popularity was positively correlated with romantic involvement for girls across all three grades, whereas this was significant only at twelfth grade for boys.

Problem behavior was positively correlated with romantic involvement across all three grades for both boys and girls. Religiosity was negatively associated with romance for boys at eleventh grade, and for girls at tenth and twelfth grade. Religiosity was negatively correlated with problem behavior for boys across all three grades and for girls at tenth and twelfth grade. Popularity was positively associated with problem behavior for boys at eleventh and twelfth grade, and for girls at tenth and twelfth grade. Popularity was negatively associated with religiosity only for boys at eleventh and twelfth grade. For both boys and girls, there were moderate to high stability of variables from tenth to twelfth grade.

Cross-sectional Analysis

Regression analyses were conducted to examine the association between gender, religiosity, popularity, problem behavior, and romantic involvement at tenth grade. The main effect of gender, religiosity, popularity, and problem behavior was introduced at Step 1, and the three two-way interactions (gender by religiosity, gender by popularity, and gender by problem behavior) were introduced into the model. To reduce multicollinearity, all independent variables were centered at mean, and the multicollinearity score VIF ranged from 1.03 to 2.72 in the models.

Both peer-rated popularity and self-reported problem behavior were positively associated with romantic involvement at tenth grade, $b = .04, \beta = .16, se = .01, t = 3.63, p < .001$; $b = .21, \beta = .38, se = .03, t = 7.05, p < .001$. Self-reported religiosity was marginally negatively associated with romantic involvement at tenth grade, $b = -.04, \beta = -.09, se = .02, t = -1.94, p = .06$. Significant interactions between gender and popularity, $b = .05, \beta = .15, se = .02, t = 7.05, p < .05$, and between gender and religiosity, $b = -.08, \beta = -.14, se = .04, t = -2.11, p < .05$, were found. Simple effect tests revealed that the main effects of popularity and religiosity were significant for girls, $b = .06, \beta = .26, se = .01, t = 4.28, p < .001$; $b = -.07, \beta = -.17, se = .02, t = -2.78, p < .01$, but not for boys, $b = .01, \beta = .04, se = .02, t = .62, ns$; $b = .01, \beta = .03, se = .03, t = .45, ns$.

Cross-lagged Analyses

Three cross-lagged models were constructed to examine the pairwise lagged association between romantic involvement and religiosity, popularity, and problem behavior across grades. Pathways were initially constrained to be equal over time and between boys and girls. A series of likelihood ratio tests in which the models with the constrained paths were compared to the models with unconstrained paths and those paths with non-significant differences across time or gender were constrained to be equal.

The cross-lagged model testing the relationship between romantic involvement and religiosity is presented in Figure 1. The model fit was excellent, $\chi^2(16) = 15.40, p > .05$, CFI = 1.000, TLI = 1.004, RMSEA = 0.000. The pathway from tenth grade romantic involvement to eleventh grade romantic involvement significantly differed from this pathway from eleventh grade to twelfth grade. These pathways were not constrained to be equal in the model. The model revealed no significant pathways between religiosity and romantic involvement across time.

The cross-lagged model for the association between romantic involvement and popularity is presented in Figure 2. Model fit was good, $\chi^2(14) = 19.98, p > .05$, CFI = 0.991, TLI = 0.982, RMSEA = 0.031. Pathways were consistent across gender with the exception of the pathway from popularity at tenth to twelfth grade. The only pathways that were equal across the two time periods were the pathways from tenth and eleventh grade romantic involvement to eleventh and twelfth grade popularity. The model revealed a significant pathway from tenth grade popularity to eleventh grade romantic involvement, such that tenth grade popularity was positively associated with romantic involvement at eleventh grade after controlling for romantic involvement at tenth grade. Similar effect did not emerge between eleventh grade popularity and twelfth grade romantic involvement.

Finally, the cross-lagged model for the association between romantic involvement and problem behavior is presented in Figure 2. Model fit was good, $\chi^2(13) = 17.25$, $p > .05$, CFI = 0.996, TLI = 0.991, RMSEA = 0.028. Pathways were consistent for boys and girls with the exception of the pathways from romantic involvement from tenth to eleventh grade and from eleventh to twelfth grade, and the pathway from tenth grade romantic involvement to twelfth grade romantic involvement. The pathway from tenth to eleventh grade romantic involvement significantly differed from the pathway from eleventh to twelfth grade romantic involvement. Similarly, the pathway from tenth to eleventh grade problem behavior significantly differed from the pathway from eleventh to twelfth grade problem behavior. The model revealed significant and positive pathways from tenth and eleventh grade romantic involvement to eleventh and twelfth grade problem behavior, such that romantic involvement at previous levels was positively associated with later problem behavior after controlling for problem behavior at previous levels. The pathways from tenth and eleventh grade problem behavior to eleventh and twelfth grade romantic involvement were also significant and positive, such that previous problem behavior was positively associated with later romantic involvement after controlling for romantic involvement at previous levels. To conclude, the model revealed the existence of bi-directional effects between romantic involvement and problem behavior across time.

DISCUSSION

This study was conducted to examine the longitudinal associations between religiosity, popularity, problem behavior, and adolescent romantic involvement from tenth to twelfth grade among Muslim adolescents in Indonesia. We first assessed Indonesian adolescents' romantic involvement across three grades. Then we looked at the cross-sectional associations between the variables at tenth grade. Finally, we assessed the extent to which the trajectories of adolescent romantic involvement and other three variables covaried from tenth to twelfth grade with three separate cross-lagged models.

Romantic Involvement of Indonesian adolescents

We found that a high percentage of Indonesian adolescents reported romantic involvement across all three grades. At tenth grade, about 90% of Indonesian high school adolescents reported being romantically interested, approximately 95% socially interacted in mixed-gender groups, about 60% to 75% had gone on dates, and about 30% to 45% had a girlfriend or boyfriend. There are a few possible explanations for these findings in which there appears to more dating and cross-gender interaction than could be inferred from few studies that pertain to this topic (Jaafar et al., 2006).

First, it is possible that contemporary Indonesia youth are less conservative about romance than were those from prior generations. Jaafar et al. (2006) suggested that the current generation of Indonesians have been increasingly exposed to Western media, such as publications, music, films, and televisions and that these often include romantic or sexual themes. Their opinions and behaviors have been significantly affected by the Western youth culture, which promotes earlier engagement in romance and early sexual initiation. Thus, it is possible that the rapid westernization

and globalization have given Indonesian youth a more liberal perception toward adolescent romance although it is considered socially unacceptable in traditional Indonesian culture.

A second possibility is that the population sampled in this research are less conservative than the average Indonesian youth. Jaafar et al. (2006) sampled Indonesian adolescents from both Jakarta and Yogyakarta, which is a mixture of large and medium size cities. Participants in the present came from Bandung, which is a large city that is the home of technology and a number of large universities. In addition, the participants in this study came from families with higher levels of education than the vast majority of Indonesians. Although we did not assess income, it is likely that these families were much more affluent than most Indonesians. It is possible that the cosmopolitan living environment, parental education, and family affluence might be associated with more liberal attitudes toward romance and increased exposure to Western influences than was reported by Jaafar et al. (2006).

The present result also showed that adolescent romantic experiences increase with age, which is consistent with the findings from the US and other Western countries (Carver et al., 2003). It is interesting that the percentage of dating increased from 61% to 75.4% from tenth to twelfth grade. This may be explained by the important transition during middle adolescence (Furman et al., 2009). Most adolescents tend to be romantically interested during early adolescence, but they do not participate in romantic activities, such as dating, until middle adolescence (e.g., Carlson & Rose, 2007; Furman et al., 2009). This result is also consistent with Dunphy's stage model (1963), which suggests the precedence of mixed-sex crowds to dating dyads and romantic relationships (Dunphy, 1963). Considering the unique characteristics of friendship and peer groups in Indonesia, where almost every child is required to be involved in at least one large peer group but not necessarily any friend dyad, it would be necessary to assess the associations between the change

of friendship and peer network and romantic involvement across time in Indonesia to further verify the stage model in Indonesian culture.

Although there is a high percentage of romantic involvement, the number of Indonesian adolescents who report having romantic experiences is lower than the estimates of US adolescents at tenth grade in all forms of romantic involvements. This is illustrated by comparing the tenth-grade Indonesian data with Furman's (2009) US data. The percentage of adolescents who reported participating in mixed gender groups was 94% in Indonesian compared to 99% in the US. Similarly, the percentage of adolescents who reported participating in dating and serious relationships in the current study were about 62% and 32% in Indonesia, compared to 84% and 82% in the US. This finding may provide further support for the argument that adolescent romantic involvement is still viewed as negative and not encouraged in Indonesian society.

Adolescent Romance and Religiosity in Indonesia

Religion plays an important role in Indonesian adolescents' lives and traditional Islam values prohibit sex before marriage. Numerous studies have reported the negative relationship between religious affiliations and adolescent sexual engagement (e.g., Hardy & Raffaelli, 2003). In the present study, religiosity was negatively associated with romance for boys at tenth grade and for girls at tenth and twelfth grade. In the cross-sectional regression analyses, religiosity was negatively associated with romance for girls in tenth grade. Our findings suggested that religion is associated with romantic involvement of Muslim adolescents.

The absence of pathways between religiosity and adolescent romantic involvement across time was inconsistent with our hypothesis that religiosity would predict changes in romantic involvement over time. This result is also inconsistent with Granqvist and Hagekull's (2003) finding in Sweden, where involvement in the formation of new romantic relationship was associated with decreases in religiosity. One possible reason is that we assessed multiple aspects

of adolescent romance whereas Granqvist and Hagekull's focused on the changes in romantic relationships. It is possible that religiosity has a greater effect on the development of serious romantic relationships rather than general romantic involvement. Future study is also needed to examine the associations between religiosity and different stages of adolescent romance in Indonesia and in other countries.

Westernization process may have affected the dominance of traditional religious values in Indonesia. The influence of traditional Islam values has declined, and contemporary Muslim adolescents are more tolerant of premarital sex (Jaafar et al., 2006). Traditional and religious values in Indonesia may be superseded by adolescents' pursuit of love. It is possible that adolescents today may perceive themselves to be less highly religious but regardless continue to engage in religious behavior. It would be very useful to measure both the cognitive and behavior domain of religious affiliations to better understand the role of religious in adolescent romance in contemporary Indonesia.

Popularity and Adolescent Romance

Both the correlation and the cross-sectional regression analyses revealed that popularity was positively associated with adolescent romance for girls but not for boys. In interpreting these results, it is important to note that the term used for popularity in Indonesia is very similar to the one used in the US, and the characteristics associated with popularity in Indonesia are also similar to those emerged in the US (French et al., 2016). Our findings are generally consistent with the hypothesis that popular adolescents are more likely than others to become involved in romantic activities (Ha et al., 2010; Houser et al., 2015). These findings are also consistent with the suggestions that popularity plays a more important role for girls than for boys, such that girls with higher peer popularity are particularly preferred in mate selection (Houser et al., 2015). These patterns may provide support for the argument that the role of popularity in the US is also typical

to Indonesia, such that adolescent girls who are more popular also appear to have more opportunities to be romantically involved.

The cross-lagged model provided limited evidence that popularity predicted increases in adolescent romantic involvement. The pathway from tenth grade popularity and eleventh grade romantic involvement was the only significant effect and this was not replicated in the analysis of the pathway from eleventh grade popularity to twelfth grade romantic involvement. One possible explanation of this finding is that the effect of popularity fades with age. There is some evidence from the US that popularity is less strongly associated with romantic involvement during high school than it is during elementary and middle school.

In contrast to limited evidence of pathways between popularity and romance from eleventh to twelfth grade, researchers in the US have typically found that peer popularity is associated with romantic involvement during elementary school and middle school (e.g., Carlson & Rose, 2007; Houser et al., 2015). Our results suggested that peer popularity may be of limited effectiveness in attaining romantic attractiveness during late adolescence. This can be understood in light of Brown's four-stage model (1999), adolescents care more about the peer group's perception during the *status phase*. Once they enter the next stage, the *affection phase*, peer status is no longer emphasized; instead, adolescents tend to pay more attention to the affectionate bonding between each other, which will further turn into long-term relationships in the final stage, the *bonding phase*. It is likely that more and more adolescents enter the *affection phase* with the increase of age and thus become less concerned about peer status. It is also likely that the developmental stages of romantic involvement in peer context differs across cultures, and we do not know what aspects of romantic relationships Indonesian youths are concerned about in late adolescence. It is possible that during late adolescence, Indonesian youths regard romantic relationship as a significant predictor of marriage. Although peers undoubtedly play an important role in affecting adolescent

decisions to engage in romantic relationships, they may pay more attention to other practical issues in long-term relationships or future marriages, such as affection and companionship.

Problem Behavior and Adolescent Romance

Problem behavior was positively related with adolescent romance across all three years in Indonesia for both boys and girls. The present results are consistent with the findings in the US and other Western countries, such that romantic experience is associated with higher levels of deviancy and substance use (e.g., Furman et al., 2009; Giordano & Cernkovich, 1979). This pattern of simultaneous positive association between adolescent romance and problem behavior can be understood in two directions.

Because adolescent romantic involvement in Indonesia is typically considered deviant, adolescents in some deviant peer groups may be more likely to be romantically involved and may co-occur with other adultlike behaviors, such as drinking and smoking. Lonardo, Giordno, Longmore, and Manning (2009), for example, found that adolescents reported higher levels of involvement in deviant behaviors with the higher proportions of delinquency in the peer group. Billy, Landale, Grady and Zimmerle (1988) found that sexually-active adolescents tend to have more supportive attitudes toward deviant behaviors such as smoking and drinking displayed by their precocious peer group members who are also sexually active. Adolescents may perceive these delinquent behaviors as necessary to achieve greater affiliation with their peer groups, and the positive views about “early maturation” toward these delinquent behaviors from their peer group members may reinforce these “adult-like privileges” such as dating. Adolescent involvement in romance may be also associated with peer rejection in Indonesia, such that those romantically active adolescents may be isolated by their friends or peers, and the experience of isolation may be associated with increasing conduct problems. It would be interesting to examine the moderation

effects of peer rejection and isolation in the association between adolescent romance and problem behavior in future studies.

The cross-lagged model yielded bi-directional associations between problem behavior and adolescent romance from tenth to twelfth grade, such that adolescents with higher levels of problem behavior were more likely to become romantically involved, and those with more romantic activities are also likely to have more problem behavior one year later. Eklund, Kerr, and Stattin (2010) found a similar bidirectional effect with a three-year longitudinal sample of middle school students in Sweden, such that pre-existing deviancy was associated with earlier romantic involvement, and romantic relationship also amplified adolescents' existing delinquency over the three years. One possible explanation of this bidirectional association is the selection and socialization effects (Aikins, Simon, & Prinstein, 2010).

The pathways from problem behavior to romance may be understood to result from a selection process. The similarity in behaviors may be particularly important during the initial selection phase of adolescent romance. Delinquent adolescents may tend to hang out with delinquent peers in friendship or peer groups, and from these groups, adolescents may develop romantic relationships. Aikins et al. (2010) found that pre-relationship similarities on alcohol use significantly predicted the romantic partner selection on eighth grade. Lonardo et al. (2009) suggested that romantic partners' delinquent behaviors are significantly associated with one's own self-reported delinquency, after controlling for the effects from parents and friends.

The pathways from romance to problem behavior may be understood as resulting from socialization. Adolescents may select their partners based on the similarities in other domains but not their levels of problem behavior. After they get romantically involved with each other, greater exposure to problem behavior via partners may also promote one's own behavioral problems. Miller et al. (2009) found that youth who had a partner with high levels of alcohol use and

aggression were also more likely to increase their own amount of drinking and become more aggressive with their partners. Future studies may apply longitudinal network analyses to untangle the selection and socialization process in adolescent romance.

Although this discussion has focused on the direct association between adolescent romance and problem behavior, there are multiple factors that may moderate this association. For example, adolescents' attitudes toward romantic relationships may also be associated with changes in substance use. Fleming, White, Oesterle, Haggerty, and Catalano (2010) suggested that a more committed romantic relationship status is associated with decreases in substance use. A similar effect was also suggested by Davies and Windle (2000) who suggested that casual dating is associated with increasing problem behaviors, but steady relationships are associated with a decline of problem behaviors. This question may be particularly interesting to discuss in Indonesian culture because of its strict restrictions on casual or entertaining romantic relationship before marriage. Consequently, adolescent casual dating may be particularly unacceptable and thus associated with significantly higher levels of problem behavior. This question remains open and it would be particularly interesting for future studies to address it by including the measurement of Indonesian adolescents' attitudes towards romance.

One interesting cultural difference is that association between problem behavior and romance did not decline with age in Indonesia. Researchers in the US have typically found the bi-directional effects between romantic involvement and problem behavior from late childhood to middle adolescence, but no relations between these two variables from middle to late adolescence (Neemann et. al, 1995). One possible explanation is that the age groups of the participants in this study are different from those in Neemann's study. Neemann's nine-year longitudinal study incorporated data from Time 1 with subjects in grade three through six (8 to 12 years old) and two follow-ups (14 to 19 years old at Time 2, $M = 17$; 17 to 23 years old at Time 3, $M = 19.7$). As a

comparison, this two-year longitudinal study followed a sample of Indonesian high-school adolescents from tenth grade to twelfth grade. It is more likely for Neemann et al. (1995) to find significant age group differences with larger age gaps between assessment points. Besides, participants in the Time 3 sample of Neemann's study are slightly older than our participants at twelfth grade. We have no idea if the bidirectional associations we found in this study could be generalized to the older age groups such as emerging adults in Indonesia. It is likely that romance may be regarded as less problematic in adulthood than in adolescence. Further studies are necessary to examine the association between romance and problem behavior in emerging adulthood in Indonesia. Overall, the consistent evidence of the pathways linking problem behavior and romance with this Indonesian high-school sample provide further support for the argument that adolescent romance is still considered problematic and deviant from middle to late adolescence in Indonesia.

It is also noteworthy that we did not find a significant gender difference on the association between problem behavior and romance. There are far more restrictions placed on adolescent girls' romantic involvement in Indonesia (Smith-Hefner, 2005). Traditionally adolescent girls are prevented from pre-marital sexual activities, but young boys are allowed to do so. If a girl was romantically involved and have sexual activities before marriage, she would be considered "ruining the family's name". It is possible that the absence of this strongly gendered pattern in this study may be explained by the significant social changes over the past several decades in Indonesia (Smith-Hefner, 2005). More and more young women have gained their autonomy with the expansion of educational opportunities, employment opportunities, and economic securities. It is no longer common for young women to get married during adolescence. Adolescent girls today have greater opportunities to complete the first nine-year schooling and continue their education after that. In addition, girls also have more chances to interact with opposite-sex peers in school

and independent from their parents' oversight. Although parents still get concerned with the early romantic involvement of their daughters because of its negative effects on educational achievement, parents and even the whole society tend to put less emphasis on the effect of adolescent romance on family honor and become more liberal about the flirtations or less serious relationships during adolescence. To conclude, adolescent romance may be regarded as no more problematic for girls in the current generation than for boys because of the progress in gender equality in Indonesia. It is also worth noting that we did not study sexual behaviors in this study. Pre-marital sexual activities may be still considered very deviant for girls in Indonesia. Research on adolescent sex would be valuable but perhaps difficult to do in Indonesia.

Gender and Romance in Indonesia

In general, we found that both peer-rated popularity and self-reported problem behavior were positively associated with romantic involvement at tenth grade with the cross-sectional analyses. The results revealed significant gender moderation effects. Popularity was positively associated with romance for girls but not for boys at tenth grade. This finding is consistent with the findings of previous studies in the US in which the associations between popularity and romance were stronger for adolescent girls (e.g., Capsi et al., 1993; Houser et al., 2015). We also found religiosity to be negatively associated with romance for tenth-grade girls, and this finding is consistent with the finding that Muslim girls are discouraged from interacting with opposite sex peers (Smith-Hefner, 2005).

With the results of cross-lagged analyses, we found a bidirectional longitudinal association between problem behavior and romance. There was also a longitudinal path from tenth grade popularity and eleventh grade romantic involvement, but there was no longitudinal association between religiosity and romance. Inconsistent with our hypotheses, no significant gender interactions emerged in the cross-lagged paths between adolescent romance and the religion,

problem behavior, or popularity in the cross-lagged models. It is likely that although boys and girls differ on the initial levels, the developmental patterns of romance are similar for adolescent boys and girls in Indonesia. Further studies are needed to assess the gender difference in longitudinal analyses and determine the replicability of this finding.

Limitations and Future directions

The first limitation of this study is that romantic involvement was based on self-report. Since adolescent romance is discouraged by parents and teachers in Indonesia, adolescents may tend to underreport their romantic involvement. It would be useful for future studies to incorporate peer nominations in assessing romantic involvement and compare the similarity between self-reported and peer-rated romance in Indonesia.

Second, we used an operational definition of religiosity that included only self-reported engagement in both religiously required activities and recommended but not required behavior. It is likely that adolescent romance is associated with other aspects of adolescent religiousness, such as religious experience or spiritual beliefs. It is important for future studies to assess the relations between adolescent romance and multiple aspects of religious involvement in Islam.

Third, our sample included Indonesian high school students. The current sample limits our ability to generalize our findings to other age groups such as early adolescence. It is likely that the associations may be moderated by age. For example, the association between romance and popularity may be stronger for those in early and middle adolescence than in late adolescence. In addition, romance may be regarded as more deviant in early teen age. In order to better understand the developmental changes in the associations between religiosity, popularity, problem behavior, and romance across the complete adolescent period, it is also important to conduct longitudinal studies with a wider range of age, such as following adolescents from the beginning of middle school to the end of high school.

Fourth, the current sample came from middle class youth living in city that is the center of technology and university education in Indonesia. It is possible that the adolescents included in this study are more exposed to Western culture and thus hold more liberal attitudes towards romance. It is also unclear whether these findings could be generalized to other regions of Indonesia.

Finally, although this study focused on romance, it is important to note that friendship and peer groups play important roles in understanding adolescent romance. Experience with other-sex friends is important for establishing romantic relationships in adolescence. Having large mixed-sex friendship network is related to higher likelihood of later developing romantic relationships (Connolly et al., 1999, 2000, 2004). As suggested by Dunphy's stage model, peer groups serve as a one of the most important contexts for the emergence of dating activities and romantic relationships. It would be very useful for future studies to examine the associations between the longitudinal changes in friendship, peer groups, and romance.

REFERENCES

- Aikins, J. W., Simon, V. A., & Prinstein, M. J. (2010). Romantic partner selection and socialization of young adolescents' substance use and behavior problems. *Journal of Adolescence*, 33, 813-826. doi:10.1016/j.adolescence.2010.07.007
- Billy, J. O., Landale, N. S., Grady, W. R., & Zimmerle, D. M. (1988). Effects of sexual activity on adolescent social and psychological development. *Social Psychology Quarterly*, 51, 190. doi:10.2307/2786919
- Borch, C., Hyde, A., & Cillessen, A. H. (2011). The role of attractiveness and aggression in high school popularity. *Social Psychology of Education*, 14, 23-39. doi:10.1007/s11218-010-9131-1
- Brendgen, M., Vitaro, F., Doyle, A. B., Markiewicz, D., & Bukowski, W. M. (2002). Same-sex peer relations and romantic relationships during early adolescence: Interactive links to emotional, behavioral, and academic adjustment. *Merrill-Palmer Quarterly*, 48, 77-103. doi:10.1353/mpq.2002.0001
- Brown, B. (1999). "You're going out with who?" Peer group influences on adolescent romantic relationships. In W. Furman, B. B. Brown, and C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 291-329). New York: Cambridge University Press.
- Carlson, W., & Rose, A. J. (2007). The role of reciprocity in romantic relationships in middle childhood and early adolescence. *Merrill-Palmer Quarterly*, 53, 262-290. doi:10.1353/mpq.2007.0008

- Carver, K., Joyner, K., & Udry, J. R. (2003). National estimates of adolescent romantic relationships. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 23-56). Mahwah, NJ: Lawrence Erlbaum Associates.
- Caspi, A., Lynam, D., Moffitt, T. E., & Silva, P. A. (1993). Unraveling girls' delinquency: biological, dispositional, and contextual contributions to adolescent misbehavior. *Developmental Psychology*, 29, 19-30. doi:10.1037/0012-1649.29.1.19
- Chen, X., French, D. C., & Schneider, B. H. (2006). Culture and peer relationships. In X. Chen, D. C. French, & B. H. Schneider (Eds.), *Peer relationships in cultural context* (pp. 3-20). New York: Cambridge University Press.
- Cillessen, A. H., & Rose, A. J. (2005). Understanding popularity in the peer system. *Current Directions in Psychological Science*, 14, 102-105. doi:10.1111/j.0963-7214.2005.00343.x
- Collins, W. A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of Research on Adolescence*, 13, 1-24. doi:10.1111/1532-7795.1301001
- Collins, W. A., & Laursen, B. (2004). Changing relationships, changing youth: Interpersonal contexts of adolescent development. *The Journal of Early Adolescence*, 24, 55-62. doi:10.1177/0272431603260882
- Collins, W. A., Welsh, D. P., & Furman, W. (2009). Adolescent romantic relationships. *Annual Review of Psychology*, 60, 631-652. doi:10.1146/annurev.psych.60.110707.163459
- Connolly, J., Craig, W., Goldberg, A., & Pepler, D. (1999). Conceptions of cross-sex friendships and romantic relationships in early adolescence. *Journal of Youth and Adolescence*, 28, 481-494. doi:10.1023/a:1021669024820

- Connolly, J., Craig, W., Goldberg, A., & Pepler, D. (2004). Mixed-gender groups, dating, and romantic relationships in early adolescence. *Journal of Research on Adolescence, 14*, 185–207. doi:10.1111/j.1532-7795.2004.01402003.x
- Connolly, J., Furman, W., & Konarski, R. (2000). The role of peers in the emergence of heterosexual romantic relationships in adolescence. *Child Development, 71*, 1395–1408. doi:10.1111/1467-8624.00235
- Connolly, J., & McIsaac, C. (2011). Romantic relationships in adolescence. *Social Development: Relationships in Infancy, Childhood, and Adolescence, 3*, 180-203. doi:10.1002/9780470479193.adlpsy002005
- Davies, P. T., & Windle, M. (2000). Middle adolescents' dating pathways and psychosocial adjustment. *Merrill-Palmer Quarterly, 46*, 90-118. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2000-03716-005&site=ehost-live>
- Dunphy, D. C. (1963). The social structure of urban adolescent peer groups. *Sociometry, 230-246*. doi:10.2307/2785909
- Eklund, J. M., Kerr, M., & Stattin, H. (2010). Romantic relationships and delinquent behaviour in adolescence: The moderating role of delinquency propensity. *Journal of Adolescence, 33*, 377-386. doi:10.1016/j.adolescence.2009.09.002
- Elliott-Delbert S., Huizinga D., & Ageton S. S. (1985). *Explaining delinquency and drug use*. Beverly Hills, CA: Sage.
- Fleming, C. B., White, H. R., Oesterle, S., Haggerty, K. P., & Catalano, R. F. (2010). Romantic relationship status changes and substance use among 18-to 20-year-olds. *Journal of Studies on Alcohol and Drugs, 71*, 847-856. doi:10.15288/jsad.2010.71.847

- French, D. C., Eisenberg, N., Vaughan, J., Purwono, U., & Suryanti, T. A. (2008). Religious involvement and the social competence and adjustment of Indonesian Muslim adolescents. *Developmental Psychology, 44*, 597. doi:10.1037/0012-1649.44.2.597
- French, D. C., Eisenberg, N., Sallquist, J., Purwono, U., Lu, T., & Christ, S. (2013). Parent–adolescent relationships, religiosity, and the social adjustment of Indonesian Muslim adolescents. *Journal of Family Psychology, 27*, 421. doi:10.1037/a0032858
- French, D. C., Jansen, E. A., Riansari, M., & Setiono, K. (2003). Friendships of Indonesian children: Adjustment of children who differ in friendship presence and similarity between mutual friends. *Social Development, 12*, 605-621. doi:10.1111/1467-9507.00251
- French, D. C., Lee, O., & Pidada, S. (2006). Friendships of Indonesian, South Korean, and US youth: Exclusivity, intimacy, enhancement of worth, and conflict. In X. Chen, D. C. French, & B. H. Schneider (Eds.), *Peer relationships in cultural context* (pp. 379-402). New York: Cambridge University Press.
- French, D. C., Niu, L., & Purwono, U. (2016). Popularity of Indonesian adolescents: Do the findings from the USA generalize to a Muslim majority developing country? *Social Development, 25*, 405–421. doi:10.1111/sode.12148
- French, D. C., Pidada, S., & Victor, A. (2005). Friendships of Indonesian and United States youth. *International Journal of Behavioral Development, 29*, 304-313. doi:10.1080/01650250544000080
- French, D. C., Purwono, U., & Triwahyuni, A. (2011). Friendship and the religiosity of Indonesian Muslim adolescents. *Journal of Youth and Adolescence, 40*, 1623-1633. doi:10.1007/s10964-011-9645-7

- French, D. C., Purwono, U., & Rodkin, P. (2014). Indonesian Muslim adolescents' use of tobacco and alcohol: Associations with use by friends and network affiliates. *Merrill-Palmer Quarterly*, 60, 385-402. doi: 10.13110/merrpalmquar1982.60.4.0385
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, 63, 103-115. doi:10.2307/1130905
- Furman, W., & Hand, L. S. (2006). The slippery nature of romantic relationships: Issues in definition and differentiation. In A. C. Crouter & A. Booth (Eds.), *The Penn State University family issues symposia series. Romance and sex in adolescence and emerging adulthood: Risks and opportunities* (pp. 171-178). Mahwah, NJ: Lawrence Erlbaum Associates.
- Furman, W., Low, S., & Ho, M. J. (2009). Romantic experience and psychosocial adjustment in middle adolescence. *Journal of Clinical Child & Adolescent Psychology*, 38, 75-90. doi:10.1080/15374410802575347
- Furman, W., & Shaffer, L. (2003). The role of romantic relationships in adolescent development. *Adolescent Romantic Relations and Sexual Behavior: Theory, Research, and Practical Implications*, 3-22. doi:10.4324/9781410607782
- Furman, W., & Simon, V. A. (1999). Cognitive representations of adolescent romantic relationships. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 75-98). New York: Cambridge University Press.
- Furman, W., & Wehner, E. A. (1992). *Dating History Questionnaire*. Unpublished measure, University of Denver, Colorado.
- Giordano, P. C., & Cernkovich, S. A. (1979). on complicating the relationship between liberation and delinquency. *Social Problems*, 26, 467-481. doi:10.1525/sp.1979.26.4.03a00100

- Granqvist, P., & Hagekull, B. (2003). Longitudinal predictions of religious change in adolescence: Contributions from the interaction of attachment and relationship status. *Journal of Social and Personal Relationships*, 20, 793-817. doi:10.1177/0265407503206005
- Gudonis-Miller, L. C., Lewis, L., Tong, Y., Tu, W., & Aalsma, M. C. (2012). Adolescent romantic couples influence on substance use in young adulthood. *Journal of Adolescence*, 35, 638-647. doi:10.1016/j.adolescence.2011.08.011
- Ha, T., Overbeek, G., & Engels, R. C. M. E. (2010). Effects of attractiveness and social status on dating desire in heterosexual adolescents: An experimental study. *Archives of Sexual Behavior*, 39, 1063–1071. doi:10.1007/s10508-009-9561-z
- Hand, L. S., & Furman, W. (2009). Rewards and costs in adolescent other - sex friendships: Comparisons to same-sex friendships and romantic relationships. *Social Development*, 18, 270-287. doi:10.1111/j.1467-9507.2008.00499.x
- Hardy, S. A., & Raffaelli, M. (2003). Adolescent religiosity and sexuality: An investigation of reciprocal influences. *Journal of Adolescence*, 26, 731-739. doi:10.1016/j.adolescence.2003.09.003
- Hartup, W. W. (1993). Adolescents and their friends. *New Directions for Child and Adolescent Development*, 1993, 3-22. doi:10.1002/cd.23219936003
- Haynie, D. L., Giordano, P. C., Manning, W. D., & Longmore, M. A. (2005). Adolescent romantic relationships and delinquency involvement. *Criminology*, 43, 177-210. doi:10.1111/j.0011-1348.2005.00006.x
- Houser, J. J., Mayeux, L., & Cross, C. (2015). Peer status and aggression as predictors of dating popularity in adolescence. *Journal of Youth and Adolescence*, 44, 683-695. doi:10.1007/s10964-014-0174-z
- Jaafar, J., Wibowo, I., & Afiatin, T. (2006). The relationship between religiosity, youth culture, and premarital sex among Malaysian and Indonesian Adolescents. *Asia Pacific Journal of Social Work and Development*, 16, 5-18. doi:10.1080/21650993.2006.9755999

- Jones, R. K., Darroch, J. E., & Singh, S. (2005). Religious differentials in the sexual and reproductive behaviors of young women in the United States. *Journal of Adolescent Health, 36*, 279–288. doi:10.1016/j.jadohealth.2004.02.036
- Joyner, K., & Udry, J. R. (2000). You don't bring me anything but down: Adolescent romance and depression. *Journal of Health and Social Behavior, 41*, 369-391. doi:10.2307/2676292
- Kreager, D. A., Molloy, L. E., Moody, J., & Feinberg, M. E. (2016). Friends first? The peer network origins of adolescent dating. *Journal of Research on Adolescence, 26*, 257–269. doi:10.1111/jora.12189
- Li, Z. H., Connolly, J., Jiang, D., Pepler, D., & Craig, W. (2010). Adolescent romantic relationships in China and Canada: A cross-national comparison. *International Journal of Behavioral Development, 34*, 113-120. doi:10.1177/0165025409360292
- Lippman, L. H., & Keith, J. D. (2006). The demographics of spirituality among youth: International perspectives. In E. C. Roehlkepartain, P. L. Benson, P. E. King, & L. Wagener (Eds.), *The handbook of spiritual development in childhood and adolescence* (pp. 109-123). Thousand Oaks, CA: Sage.
- Lonardo, R. A., Giordano, P. C., Longmore, M. A., & Manning, W. D. (2009). Parents, friends, and romantic partners: Enmeshment in deviant networks and adolescent delinquency involvement. *Journal of youth and adolescence, 38*, 367-383. doi:10.1111/j.1745-9125.2010.00208.x
- Marks, P. E. L., Cillessen, A. H. N., & Crick, N. R. (2012). Popularity contagion among adolescents. *Social Development, 21*, 501–521. doi:10.1111/j.1467-9507.2011.00647.x

- Miller, B. C., & Benson, B. (1999). Romantic and sexual relationship development during adolescence. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 99–122). New York: Cambridge University Press.
- Miller, S., Lansford, J. E., Costanzo, P., Malone, P. S., Golonka, M., & Killea-Jones, L. A. (2009). Early adolescent romantic partner status, peer standing, and problem behaviors. *The Journal of Early Adolescence*, 29, 839–861. doi:10.1177/0272431609332665
- Neemann, J., Hubbard, J., & Masten, A. S. (1995). The changing importance of romantic relationship involvement to competence from late childhood to late adolescence. *Development and Psychopathology*, 7, 727. doi:10.1017/s0954579400006817
- Nieder, T., & Seiffge-Krenke, I. N. G. E. (2001). Coping with stress in different phases of romantic development. *Journal of Adolescence*, 24, 297–311. doi:10.1006/jado.2001.0407
- Niu, L., Jin, S., Li, L., & French, D. C. (2016). Popularity and social preference in Chinese adolescents: Associations with social and behavioral adjustment. *Social Development*, 25, 828–845. doi:10.1111/sode.12172
- Purwono, U. (2010). *Assessment of religiosity of Indonesian Muslim adolescents*. Unpublished manuscript. Department of Psychology, Padjadjaran University, Bandung, Indonesia.
- Purwono, U., & French, D. C. (2016). Depression and its Relation to Loneliness and Religiosity in Indonesian Muslim Adolescents. *Mental Health, Religion, and Culture*, 218–228. doi:10.1080/13674676.2016.1165190
- Rhule-Louie, D. M., & McMahon, R. J. (2007). Problem behavior and romantic relationships: assortative mating, behavior contagion, and desistance. *Clinical Child and Family Psychology Review*, 10, 53–100. doi:10.1007/s10567-006-0016-y

- Sallquist, J., Eisenberg, N., French, D. C., Purwono, U., & Suryanti, T. A. (2010). Indonesian adolescents' spiritual and religious experiences and their longitudinal relations with socioemotional functioning. *Developmental Psychology*, 46, 699-716. doi:10.1037/a0018879
- Seiffge-Krenke, I. (2003). Testing theories of romantic development from adolescence to young adulthood: Evidence of a developmental sequence. *International Journal of Behavioral Development*, 27, 519-531. doi:10.1080/01650250344000145
- Simon, V. A., Aikins, J. W., & Prinstein, M. J. (2008). Romantic partner selection and socialization during early adolescence. *Child Development*, 79, 1676-1692. doi:10.1111/j.1467-8624.2008.01218.x
- Smith-Hefner, N. J. (2005). The new Muslim romance: Changing patterns of courtship and marriage among educated Javanese youth. *Journal of Southeast Asian Studies*, 36, 441. doi:10.1017/s002246340500024x
- Sorensen, S. (2007). Adolescent romantic relationships. *Research facts and findings*. Retrieved from https://dibbleinstitute.org/Documents/reasearch_facts_romantic_0707.pdf
- Taradash, A., Connolly, J., Pepler, D., Craig, W., & Costa, M. (2001). The interpersonal context of romantic autonomy in adolescence. *Journal of Adolescence*, 24, 365-377. doi:10.1006/jado.2001.0404
- Tarakeshwar, N., Stanton, J., & Pargament, K. I. (2003). Religion: An overlooked dimension in cross-cultural psychology. *Journal of Cross-Cultural Psychology*, 34, 377-394. doi:10.1177/0022022103034004001
- Tarakeshwar, N., Stanton, J., & Pargament, K. I. (2003). Religion: An overlooked dimension in cross-cultural psychology. *Journal of Cross-Cultural Psychology*, 34, 377-394. doi:10.1177/0022022103034004001

Winarno, A. R. D. (2007). Indonesian adolescent sexuality and romantic relationships. Retrieved from <https://repository.uibn.ru.nl/bitstream/handle/2066/56268/56268.pdf>

Zimmer-Gembeck, M. J., Siebenbruner, J., & Collins, W. A. (2004). A prospective study of intraindividual and peer influences on adolescents' heterosexual romantic and sexual behavior. *Archives of Sexual Behavior*, 33, 381-394.
doi:10.1023/b:aseb.0000028891.16654.2c

Table 1: Means, and Standard Deviations, and Sex Differences including Effect Size for Variables

	Boys		Girls		<i>F</i>	<i>d</i>
	M	SD	M	SD		
Grade 10 Popularity	.08	1.00	-.13	.88	.93	.22
Grade 11 Popularity	.03	1.02	-.02	.99	1.19	.05
Grade 12 Popularity	.05	.98	-.04	.98	1.32	.09
Grade 10 Religiosity	3.27	.60	3.22	.51	.48	.11
Grade 11 Religiosity	3.07	.55	2.99	.45	4.74*	.16
Grade 12 Religiosity	3.14	.56	3.12	.55	.28	.04
Grade 10 Romance	.48	.23	.43	.19	.39	.24
Grade 11 Romance	.55	.23	.46	.22	8.11**	.40
Grade 12 Romance	.60	.22	.52	.21	13.75** *	.37
Grade 10 Problem behavior	.44	.52	.11	.11	54.73** *	.88
Grade 11 Problem behavior	.57	.58	.13	.17	49.87** *	1.03
Grade 12 Problem behavior	.70	.60	.18	.24	65.55** *	1.14

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 2: Means, and Standard Deviations, and Proportion of Youth Who Reported Involvement in Four Types of Romantic Activities

Romantic Involvement	Tenth Grade						Eleventh Grade						Twelfth Grade					
	Boys			Girls			Boys			Girls			Boys			Girls		
	M	SD	%	M	SD	%	M	SD	%	M	SD	%	M	SD	%	M	SD	%
Romantic Interests	1.55	.72	86.8%	1.52	.74	85.2%	1.60	.70	87.8%	1.50	.75	84.8%	1.66	0.68	88.4%	1.56	.70	88.0%
Romantic Socialization	2.91	1.46	94.2%	2.84	1.37	94.5%	3.27	1.47	95.5%	2.80	1.46	93.1%	3.66	1.42	95.8%	3.43	1.47	94.9%
Dating Activities	1.10	.96	67.7%	.82	.89	46.7%	1.40	1.02	77.5%	1.03	.88	68.8%	1.56	.98	82.7%	1.17	.96	69.4%
Serious Relationship	.70	.99	39.8%	.43	.84	25.5%	.92	1.06	51.4%	.65	.92	40.4%	.98	1.11	52.4%	.66	1.01	35.7%

Table 3: *Correlations among Popularity, Religious Practice, Romantic Involvement, and Problem Behavior across Grades Separately for Boys and Girls (Respectively Below and Above the Diagonal).*

	1	2	3	4	5	6	7	8	9	10	11	12
1. Grade 10 Popularity		.58***	.73***	-.03	.01	-.07	.31***	.35***	.30***	.18**	-.02	.28***
2. Grade 11 Popularity	.27**		.49***	-.08	-.00	-.07	.19***	.16**	.18**	.21**	.03	.20**
3. Grade 12 Popularity	.53***	.42***		-.11	.01	-.09	.33***	.28***	.24***	.30***	.13	.25***
4. Grade 10 Religiosity	.00	-.01	-.04		.55***	.59***	-.25***	-.04	-.16*	-.27***	-.15	-.26***
5. Grade 11 Religiosity	-.12	-.13*	-.16*	.52***		.56***	-.12	-.02	-.14*	-.19*	.08	-.15*
6. Grade 12 Religiosity	-.04	-.10	-.16**	.68***	.66***		-.12	-.04	-.15**	-.14*	-.09	-.18***
7. Grade 10 Romance	.12	.06	.08	-.25**	-.17	-.21*		.56***	.47***	.34***	.09	.26***
8. Grade 11 Romance	.17	.09	.13	-.22*	-.13	-.10	.56***		.48***	.22**	.25***	.30***
9. Grade 12 Romance	-.05	.04	.16**	-.11	-.18*	-.08	.39***	.40***		.23***	.20***	.30***
10. Grade 10 Problem behavior	.10	.10	.11	-.56***	-.38***	-.43***	.49***	.42***	.26**		.43***	.41***
11. Grade 11 Problem behavior	.10	.19**	.13	-.54***	-.44***	-.51***	.44***	.34***	.23**	.84***		.63***
12. Grade 12 Problem behavior	-.02	.18*	.11*	-.53***	-.35***	-.44***	.46***	.36***	.34***	.77***	.83***	

* $p < .05$, ** $p < .01$, *** $p < .001$

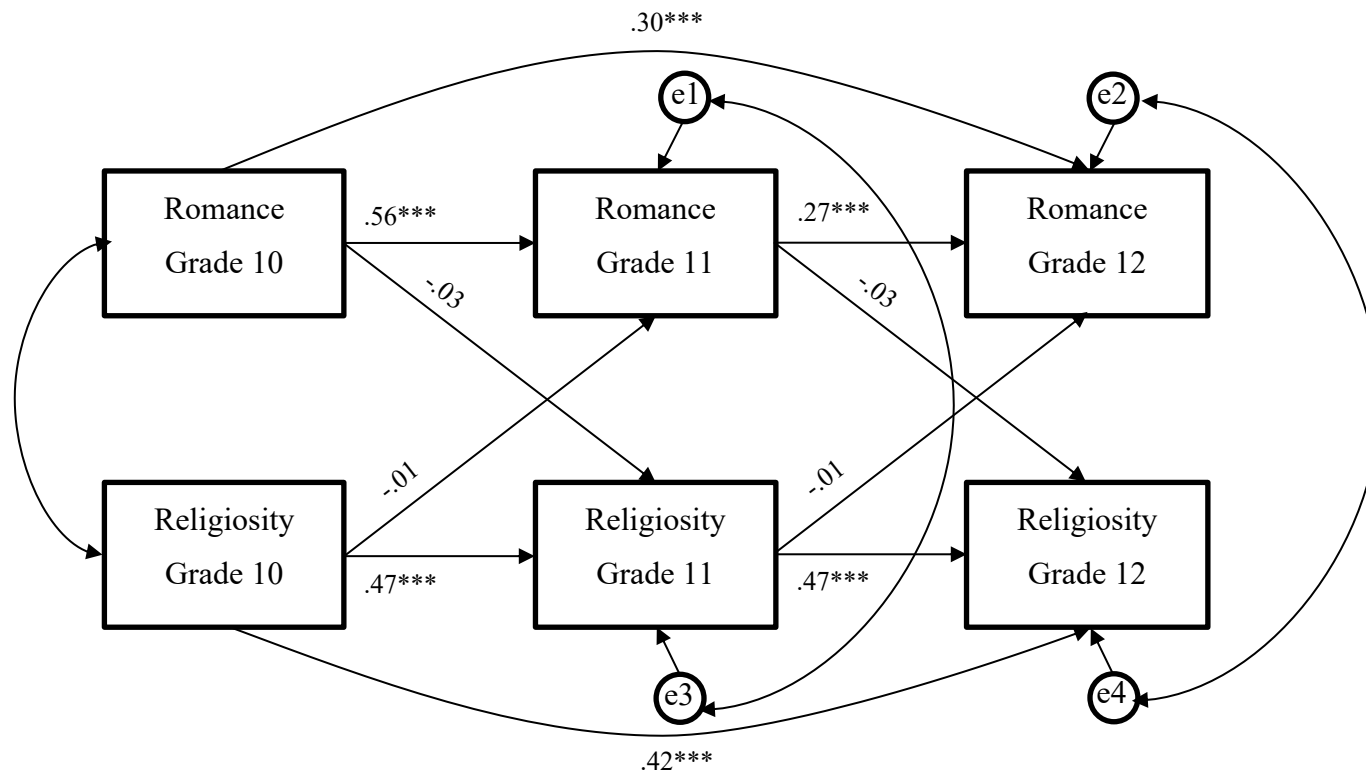


Figure 1. Cross-lag model connecting romance and religiosity over time. All estimates shown in the model are unstandardized. Estimates shown are the same for boys and girls.
 $*p < .05$. $**p < .01$. $***p < .001$

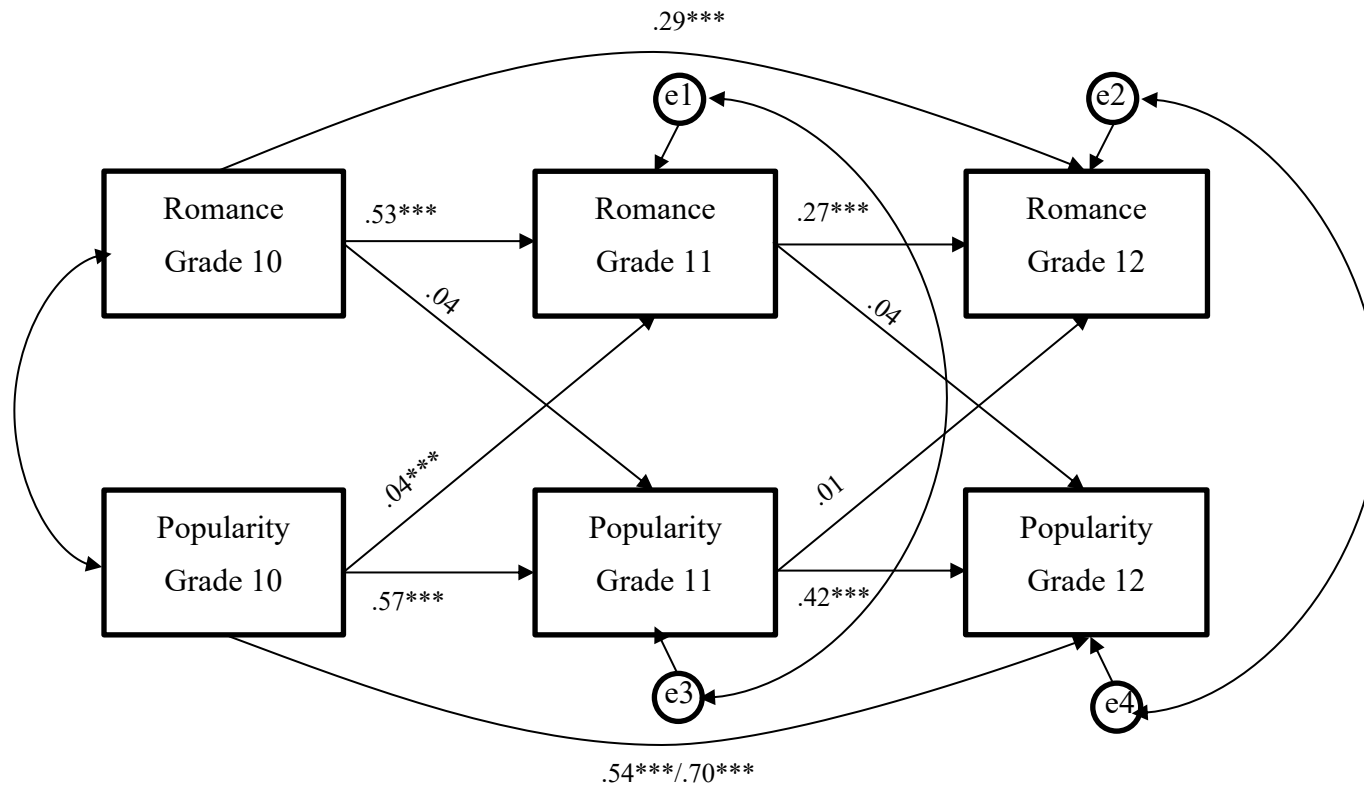


Figure 2. Cross-lag model connecting romance and popularity over time. All estimates shown in the model are unstandardized. Separate parameter estimates for popularity from tenth to twelfth grades are provided, respectively, for boys/girls; otherwise estimates shown are the same for boys and girls.

* $p < .05$. ** $p < .01$. *** $p < .001$

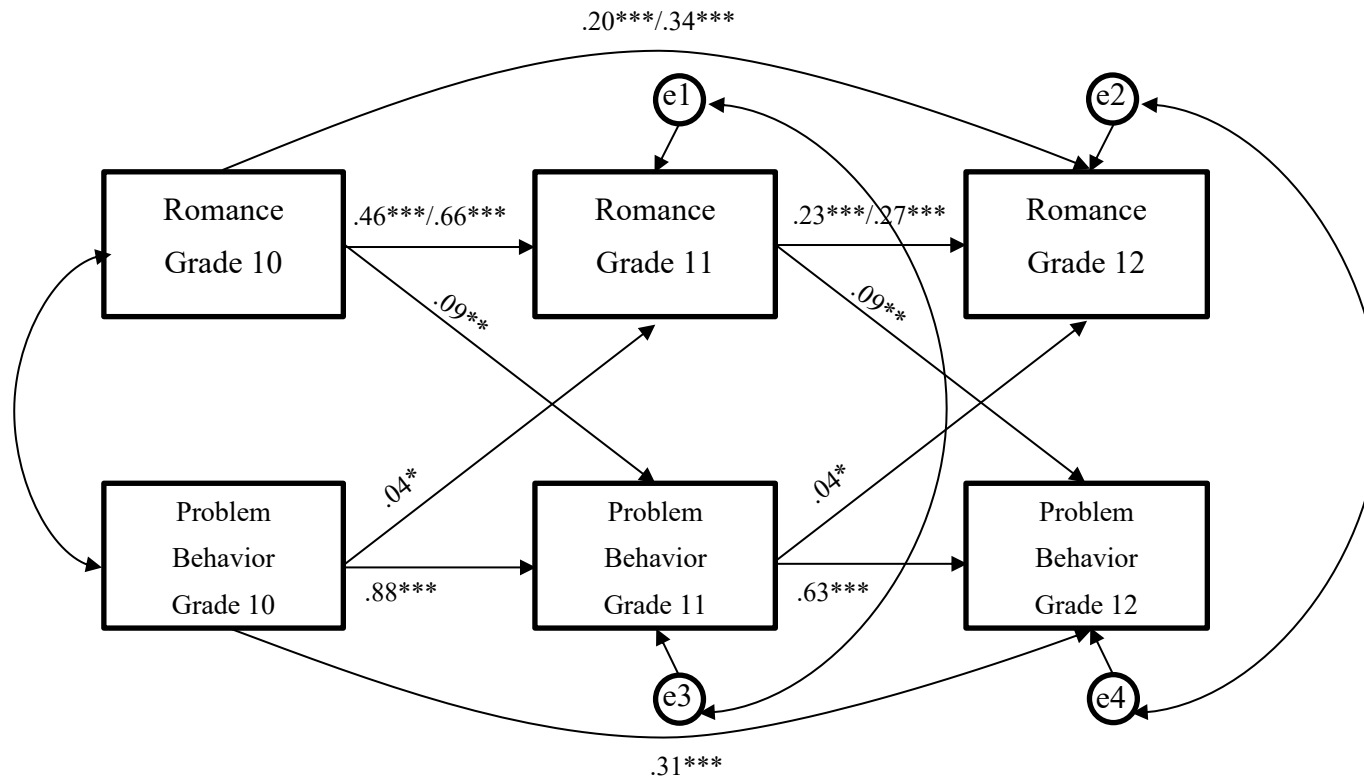


Figure 3. Cross-lag model connecting romance and problem behavior over time. All estimates shown in the model are unstandardized. Separate parameter estimates for romantic involvement from tenth to eleventh, from eleventh to twelfth, and from tenth to twelfth grades are provided, respectively, for boys/girls; otherwise estimates shown are the same for boys and girls.
 $*p < .05$. $**p < .01$. $***p < .001$