

Romantic Involvement and Adolescents' Academic and Psychosocial Functioning in  
Chinese Societies

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## Abstract

This study explores the effects of romantic involvement and dating behaviors on adolescent academic and psychosocial functioning in Chinese societies, where adolescent dating is generally discouraged and believed to bear adverse outcomes. Adolescents (male = 48.6%;  $Mean_{Age} = 15.20$  years) from Taiwan ( $N = 1,081$ ) and Mainland China ( $N = 684$ ) were recruited through stratified sampling to complete self-report surveys on their academic performance, depressive symptoms, self-esteem, relationship status, and gender-role beliefs. Adolescents with current or past dating experiences were also asked about specific dating behaviors such as onset of dating, number of relationships, and breakup experiences. Approximately one-third of Chinese adolescents surveyed have past or ongoing dating experience, who showed poorer academic performance and mental health outcomes than never-dated teens. Currently single adolescents with past dating experiences showed the greatest depressive symptoms. Dating experiences also seem to promote boys' self-esteem but dampen girls' self-esteem. Early dating, over-dating, sexual activities, and breakup experiences could undermine adolescents' academic and psychosocial well-being, especially for girls. These findings have significant implications for practice and policy regarding adolescent education and mental health.

*Keywords:* adolescent development, romantic involvement, dating behavior, academic performance, Chinese

### **Romantic Involvement and Adolescents' Academic and Psychosocial Functioning in Chinese Societies**

Adolescent romance has been a classic theme of literature and art across cultures. While attraction, dating and love have been the focus of scholarly study for the past 50 years (e.g. Berscheid & Walster, 1969, Byrne, 1971), much of the early work focused on college students, who are considered adolescents by developmental psychologists but who operate more like young adults than younger adolescents still navigating home, school and peer encounters.; yet only recently did the scholarly analysis start to catch up with the public interest (Collins, 2003; Furman, Brown, & Feiring, 1999). Systematic inquiries into the nature, content, and consequences of younger adolescent (e.g. ages 13-18) romance began in the 1990s and adolescent romance was since integrated into general theories of human development (Collins, Welsh, & Furman, 2009). Recently, a growing number of studies have established links between adolescent romance and other developmental contexts such as family and peer relationships (Connolly, Craig, Goldberg, & Pepler, 1999; Beyers & Seiffge-Krenke, 2007; Gray & Steinberg, 1999), as well as developmental outcomes such as depression, teenage pregnancy, juvenile delinquency, and interpersonal violence (Davila, 2008; Smith, White, & Holland, 2003).

Despite the rapid progress, research on adolescent romance is heavily focused on middle-class, Euro-American teenagers. The rich documentation of the diverse relationship forms, courtship rituals, and romantic ideals in different cultures, however, confirm the necessity of a multicultural perspective on the study of adolescent romance (Coates, 1999; East, 1998; Dion & Dion, 1996; Zimmer-Gembeck & Helfand, 2008). The current study thus aims to depict romantic involvement of Chinese adolescents and to explore how adolescent romantic involvement and dating behaviors associate with academic and socioemotional functioning.

### **Adolescent Romantic Involvement and Its Developmental Consequences**

The various aspects of romantic involvement, such as relationship status, dating onset, the number and length of romantic relationships, and incidents of breakups (Collins, 2003), present the adolescents with both growth opportunities and challenges during their formative years (Collins et al., 2009; Furman, Ho, & Low, 2007; Smith et al., 2003), especially in the emergence of psychopathology, self and identity development, and academic performance.

For adolescents, unrealized romantic yearning, conflicts and violence in relationship, or the termination of a partnership can be challenging at best and severely upsetting at worst. Existing literature has consistently found that adolescents' romantic involvement relates to a broad range of negative outcomes (Starr et al., 2012; Zimmer-Gembeck, Siebenbruner, & Collins, 2001), especially depressive symptoms (Davila, 2008), concurrently and longitudinally (Davila, Steinberg, Kachadourian, Cobb & Finchham, 2004) particularly for adolescent with a pre-occupied relational style. Dating teenagers, especially girls, demonstrated higher depressive symptoms than their non-dating counterparts during early and middle adolescence (Natsuaki, Biel & Ge, 2009). Romantic involvement could act as a predictor of depressive symptoms for teenagers (Davila et al., 2009) and breakups, in particular, may trigger pathological symptoms, such as the onset of depression (Maciejewski, Prigerson, & Mazure, 2001; Monroe, Rohde, Seeley & Lewinsohn, 1999). Moreover, the presence and quality of breakups were related to increased episodic and chronic depressive symptoms, especially among girls who are interpersonally sensitive (Rizzo, Daley & Gunderson, 2006). Furthermore, romantic breakups could alter the content of affect late adolescents' self-concept and affect their academic

performance (Field, 2012; Slotter et al., 2010). Taken together, these studies provide evidence that romantic involvement and breakups could affect adolescents' emotional well-being.

Adolescence is a key stage for developing self and identity (Erikson, 1968). So far, the findings on the relationship between adolescent dating and self-concepts are mixed: some found dating associated with higher self-esteem (Samet & Kelly, 1987); others found a negative correlation between dating and self-esteem (McDonald & McKinney, 1994); and still others found no significant association between dating and global self-esteem (Quatman, Sampson, Robinson & Watson, 2001). Steadily dating adolescents both felt more secure in their relationship with peers and in their personal security and suffered a decrease in self-esteem related to academic achievement (Quatman et al., 2001). Similarly, Zimmer-Gembeck et al.'s (2001) longitudinal study found that the quality of romantic relationship was positively associated with adolescents' self-perceptions of social acceptance and romantic appeal. Therefore, the romantic involvement is associated with self-concepts in specific areas, but the relations between romantic involvement and overall self-esteem remains unclear.

Given that adolescence is a time for career preparation, romantic involvement might distract adolescents from school work or interfere with academic performance due to emotional fluctuations or the spillover of negative affect. Quatman and colleagues (2001) found that the adolescents who date twice or more per week showed lower academic performance than less frequent daters. Orpinas, Horne, Song, Reeves, and Hsieh (2013) followed adolescents from the sixth to the twelfth grade and found that, compared to non-dating teenagers or those who started dating later, those with early dating experiences (at Grade 6) and those who have dated throughout secondary school (Grade 6 to Grade 12) had poorer study skills and higher drop-out rate, among other problem behaviors. However, the association between romantic involvement

and academic performance might be bidirectional: teenagers with poor grades might resort to romantic relationship to escape undesirable achievements, which further distracts them from school work. Indeed, Zimmer-Gembeck et al. (2001) followed adolescents from 12 to 16 years of age and found that adolescents who were over-dating (seeing many people in the past year) at age 16 had greater declines of academic performance and motivation over time.

### **Individual Variances in Adolescent Romantic Involvement**

Specific dating behaviors, such as dating onset, over-dating, and sexual activities, influence adolescent development beyond romantic status (Barber & Eccles, 2008). Timing matters: Dating in early adolescence (before 14 years of age) has been speculated to bear bitter fruits due to the non-normative and unstable nature of romantic relationships before middle adolescence (Collins, 2003; Smetana, Campione-Barr & Metzger, 2006). Early onset of dating was indeed associated with poorer academic performance, lower self-esteem, greater depressive symptoms, and more alcohol and substance abuse (Carver, Joyner & Udry, 2003; Compian, Gowan, & Hayward, 2004; Smetana et al., 2006). Neemann and colleagues (1995) compared the influence of romantic involvement among early, middle, and late daters in their ten-year longitudinal study, and found that dating in late childhood and early adolescence predicted poorer academic and job competence and more conduct problems. However, such negative impact was less prominent and even absent among teenagers who started dating during middle or late adolescence. Over-dating, or having had many relationships, could signify poor relationship quality or adolescents' failure from entering committed, dyadic relationships (Davis & Windle, 2002). Over-dating might be both a reaction to challenges in other domains of life and a precursor for later maladjustments (Zimmer-Gembeck et al., 2001). Similarly, Davies and

Windle (2000) found adolescents who shifted from steady dating to casual dating with multiple partners exhibited more problem behaviors than those remaining in steady relationships or retreat from steady relationships to casual dating with a single partner, although it was not clear whether the adverse effect came from the casual nature of the relationship or the number of dating partners.

Sexual activities, especially those in early adolescence, have been considered a risky behavior [leading to poorer academic performance](#) or a correlate of other delinquencies (Bingham & Crockett, 1996; Davila et al., 2009; [Frisco, 2008](#); James, Ellis, Schlomer, & Garber, 2012; Whitbeck, Yoder, Hoyt, & Conger, 1999). However, recent research argues that romantic involvement offers adolescents the opportunity for sexual exploration, which can be a valuable resource for normative sexual development (Florsheim, 2008; Russell, 2005; Tolman & McClelland, 2011). The onset of sexual activities per se may not be detrimental and can even be beneficial if it fits the group norms (Vrangalova & Savin-Williams, 2011).

Boys and girls experience different physical changes during adolescence (Crick & Zahn-Waxler, 2003; James et al., 2012; Natsuaki et al., 2009) and are socialized to have different understanding, feelings, and behavioral norms during romantic involvement (Moore, 1998). Boys were found to begin dating and having sex earlier than girls (Regan, Durvasula, Howell, Ureño, & Rea., 2004; Zimmer-Gembeck & Helfand, 2008), have greater power and influence over romantic partners, yet feel less confident than girls in navigating romantic relationships (Giordano, Longmore, & Manning, 2006). Girls, on the other hand, are more strongly influenced by their romantic experiences (Joyner & Udry, 2000; Natsuaki et al., 2009), possibly due to girls' greater emphasis on interpersonal relationships during adolescence (Feiring, 1996; Rizzo et al., 2006). In addition to biological sex, [processes of sociocultural gendering will influence the](#)

formation of self-esteem and self-competency in adolescence (Basow, & Rubin, 1999). Moreover, adolescents' traditional gender-role beliefs have been found to relate to problem dating behaviors such as dating violence, which might further lead to psychosocial maladjustment (Shen, 2014; Shen, Chiu, & Gao, 2012). In summary, these findings suggest that research on adolescent romantic involvement should consider possibly idiosyncratic pathways of influence for male and female teenagers.

### **Adolescent Romance in the Chinese Context**

Chinese adolescents have been largely absent in the literature on adolescent romance, although they comprise a significant proportion of the world's youth (United Nations Children's Fund, 2016<sup>1</sup>) and can offer valuable information on adolescent romance given their unique cultural and social backgrounds. Historical and ethnographic studies have identified cultural and contextual factors pertaining to adolescent romantic involvement in Chinese societies, such as romantic values, the parent-child relationship, and the academic competition. The Chinese culture embeds romantic relationship in the larger frame of family lineage, and adolescents in traditional China entered arranged marriage with partners chosen by family seniors to extend patrilineal family lines instead of realizing individual romantic goals (Riley, 1994). Such values have been challenged since early 20<sup>th</sup> century (Xu & Whyte, 1990), but the utilitarian view of romance as precursors leading to marriage and childbearing persists (Blair & Madigan, 2016; Liu, 2018), and Chinese parents remain heavily involved in their children's love lives (Sun, 2012). In addition, Chinese parents and teachers typically hold conservative values towards sex,

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<sup>1</sup> UNICEF 2016 statistics: Chinese adolescents population = 154,222,000 , out of 1,192, 785,000 of the world. Table download: <https://data.unicef.org/resources/state-worlds-children-2016-statistical-tables/>



resulting in lack of access to comprehensive sex education among Chinese adolescents (Cui, Li & Gao, 2001).

For today's urban Chinese youth, romantic involvement is frowned upon not only because of conservative romantic values, but also due to the fierce academic competition (Zhao, 2015). The high school entrance examination (at the end of Year 9, in Mainland China and Taiwan) and college entrance examination (at the end of Year 12, in Mainland China, Taiwan and Hong Kong) are decisive examinations for Chinese youth. Existing studies suggest that Mainland Chinese and Taiwanese adolescents indeed spend long time on academic work and are under high academic stress (Chen & L. Lu, 2009; Fuligni & Stevenson, 1995; Liu & Z. Lu, 2010; Sun, Dunne, & Hou, 2012). As a result, romance is seen as a distraction and is often forcefully terminated by anxious parents and teachers.

A few empirical studies have provided evidence on the quantity, quality, and developmental significance of adolescent dating in Chinese populations. Cross-cultural studies consistently found that Chinese youth are less romantically involved, date later and less frequently, and have more conservative sexual values than their western counterparts (Kaufman, Posten, Hirshl, & Stycos, 1996; Li, Connolly, Jiang, Pepler, & Craig, 2010; S. Moore & Leung, 2001; Tang & Zuo, 2008). One recent study by Chang, Hayter and Lin (2014) showed a similarly cautious attitude towards premarital sex among Taiwanese adolescents. Yet other studies indicate that Chinese teenagers, like those elsewhere, are curious about dating and are more approval of adolescent romance than their parents: A recent survey in Zhejiang, southeast China, suggests that approximately half of primary and secondary school students feel "neutral" or "approval" of secondary school students engaging in romantic relationship (Y. Li et al., 2017). Liu and colleagues (2018) found in a north Chinese city too that adolescents perceive romance and dating

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positively. Meanwhile, Chen et al. (2009) surveyed a large, stratified sample of secondary school students in Beijing and found that romantic involvement in early adolescence was associated with higher levels of depressive symptoms and behavior problems, compared to their non-dating peers. Hou et al. (2013) used multi-local survey data and found that romantic involvement and breakup were associated with externalizing and internalizing problems, especially in classrooms where dating was non-normative. **Several studies in Taiwan have demonstrated that the dissolution of a romantic relationship is among life's most stressful and painful experiences, and may affect late adolescents' academic performance, mental health and sense of self-identity (e.g., Li, 1996; Wang & Wang, 2007).**

These findings painted a mixed picture on Chinese adolescents' romantic experiences, demonstrating both cultural particularities and universality in developmental mechanisms:-

Chinese adolescents are similar to their counterparts in other part of the world in their motivation to engage in romantic relationships and the mechanism through which romantic involvement influence their development; at the same time, Chinese teens face culturally and socially specific constraints that prevent them from freely explore the world of romance.

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### **The Present Study**

Existing scholarship on the prevalence and developmental impact of romantic involvement among Chinese adolescents is still scant. To our knowledge, no study so far has explored the association between romantic involvement and academic performance among Chinese adolescents, despite this being the parents' and teachers' major concern. The present study thus aims to examine academic and psychosocial correlates of romantic involvement among Chinese adolescents using a ~~two~~multi-site sample (Taiwan and Shanghai), by comparing dating and non-

dating teenagers on their academic and psychosocial functioning and investigate the influences of specific dating behaviors such as dating onset, number of partners, sexual activities, and breakups.

Based on existing literature, we expect to see relatively low prevalence of romantic involvement among Chinese adolescents. We also hypothesize that romantic involvement, given its non-normativity, will be associated with adolescent maladjustment such as worse academic performance, lower self-esteem, and higher depressive mood. Moreover, we hypothesize that adolescents with an early dating onset, having many relationships, engaging in sexual behavior, and having breakups, will show compromised outcomes, namely lower grades and self-esteem as well as elevated depressive mood.

## Method

### Participants and Procedures

— Participants of the present study are part of a larger survey on youth dating violence approved and funded by the National Science Council of Taiwan. This larger sample consisted of 3,138 adolescents of Grade Eight through Twelve recruited from Shanghai, Taiwan and Hong Kong through a two-step stratified random sampling procedure (first stratified by school, then stratified by class). Forty-two out of 53 (79.2%) schools contacted agreed to participate, including 13 schools in Shanghai, 18 schools in Taiwan, and 11 schools in Hong Kong. It is worth noting that while most participating schools in Shanghai were located in urban areas because Shanghai is a metropolitan city, participating schools in Taiwan and Hong Kong were located in both urban and rural areas.

Prior to data collection, informed consent was obtained from school principals, teachers and students of a required class scheduled for data collection. Pilot study was conducted prior to the formal data collection on a small set of participants from all three sites. The formal data collection was conducted at school during class hours scheduled for data collection. Trained research assistants explained the research purpose and procedures to students, emphasized the voluntary and anonymous nature of the study, assured the rights to refuse or discontinue participation at any time, and collected consent forms from willing participants prior to the questionnaire administration. Self-report questionnaires were then distributed to consenting students. Questionnaire administration averaged 25 minutes in length.

The current study draws on the Taiwan and Shanghai data of this larger sample because of the uniqueness of Hong Kong's education system due to its history as a British colony. Although Taiwan and parts of Mainland China had also been colonized, their current education systems bear greater similarities. The final sample consists of 1,765 adolescents ( $N = 1,081$  from Taiwan;  $N = 684$  from Shanghai), who do not differ from the entire sample in age or sex ratio.

### **Measures**

Measures in the self-report, pen-and-paper questionnaire yielded information about demographics, gender-role beliefs, dating experience and behavior, academic performance, and psychological adjustment, among other scales and data not analyzed in this paper. The questionnaires were first examined by scholars at all three sites for content validity before the pilot study, and were revised according to their feedback and the psychometric properties yielded by the pilot data.

**Demographic information.** Participants reported their age (continuous variable), biological sex (male or female), and sample site (Taiwan or Shanghai), which were used as control variables in later analyses.

**Gender-role beliefs.** Adolescents' gender-role beliefs, which was examined as a covariate in this study, was measured using a modified version of the Attitudes Toward Women Scale (ATWS; Spence & Helmreich, 1978). The original measure includes 15 four-point Likert-type items (e.g., "The intellectual leadership of a community should be largely in the hands of men."; 1 = strongly disagree; 4 = strongly agree) and has been widely used, with good internal consistency and test-retest reliability (Spence & Hahn, 1997). The modified ATWS used in this study excludes three original items (e.g. "Swearing and obscenity are more repulsive in the speech of a woman than in that of a man") due to their low internal consistency loading in the pilot data. The remaining items added up to a sum ranging from 12 to 48, with higher scores indicating more traditional attitudes (Cronbach's  $\alpha = .78$ ; egalitarian items reverse coded).

**Dating behaviors.** Participants reported their relationship status (currently dating, currently single but had dated, never dated), age at first date, number of relationships experienced, breakup experiences, and sexual relationship with the dating partner (yes/no). For breakup experiences, participants could choose that their most recent relationship is "still ongoing" or indicate the time point when the last relationship ended. Considering the timing of data collection (March, which is two months after the last semester had ended), this variable was recoded into the following categories to best capture its possible influence on adolescent academic performance: Never broken up; broke up 0-2 months ago (after the last semester ended); broke up 3-5 months ago (during the last semester); broke up 6 or more months ago (before the last semester started). This categorical variable were later converted to three dummy

variables representing the three groups with different lengths since the last breakup, with the “Never broken up” group as the omitted reference group.

**Academic Performance.** Participants self-reported their average academic grade for last semester in five ordinal bands (1 = below 60; 2 = 60-69; 3 = 70-79; 4 = 80-89; 5 = above 90), with higher scores indicating better academic performance.

**Psychological Adjustment.** Adolescent psychological adjustment was measured by their global self-esteem and depressive mood. The Chinese version of the Rosenberg Self-Esteem Scale (Rosenberg, 1965) was employed to measure global self-esteem (e.g. “On the whole, I’m satisfied with myself.” ; “I certainly feel useless at times.”). This ten-item, four-point Likert-type scale yielded a total score ranging from 10 to 40 (keyed in the direction of self-satisfaction) and has shown good reliability and validity in different cultures and social groups, including Chinese societies (Blascovich & Tomaka, 1991; Guo & Hu, 2015; Schmidt & Allik, 2005; Shen, 2009; Sinclair et al., 2010), including the current sample (Cronbach’s  $\alpha = .82$ ).

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The 20-item Adolescent Depressive Mood Self-Detecting Scale (John Tung Foundation, 2008), developed using a large Taiwanese youth sample ( $N = 4,944$ ), was used to measure participants’ depressive mood during the past two weeks (e.g. “I have been uninterested in many things.”; “I want to disappear.”). The original scale adopted a dichotomous format (yes/no) and showed good internal consistency (Cronbach’s  $\alpha = .82$ ) and criterion validity (correlation with Beck Depression Inventory = .73,  $p < .001$ ). This current study used the scale in a four-point Likert-type format (1 = “strongly disagree”; 4 = “strongly agree”) to better capture variation in participants’ answers, yielding a total score between 20 and 80, with higher scores indicating more severe depressive mood (Cronbach’s  $\alpha = .92$ ).

### **Analytic strategy**

To test our hypotheses, we first conducted a general linear model (MANCOVA) in the whole sample to examine the effects of Chinese adolescents' current or past romantic involvement on their scholarly and socioemotional outcomes. We then focused on those adolescents with dating experience to investigate how specific dating behaviors (dating onset, number of relationships, sexual behavior, and breakup experiences) relate to adolescent outcomes. Hierarchical regression models were performed on each of the three outcome variables (academic performance, self-esteem, and depressive symptoms), with control variables (age, biological sex, ~~and~~ sample site) entered first into the model (Model 1), the covariate (gender-role beliefs) in the next step (Model 2) and dating behaviors in the final model (Model 3).

## Results

### Preliminary analyses

The descriptive statistics of all variables are presented in Table 1. Approximately one-third of the Chinese adolescents (34.2%) have been romantically involved, with the average dating onset at around 13.50 years ( $SD = 1.30$ ), although only very few had sexual experiences (6.5%) or had been over-dating (having had four or more relationships; 10.9%). 40.8% adolescents have not experienced a relationship breakup so far, 18.1% reported a breakup within the last two months (after the last semester ended), and 20.0% reported a breakup in the last three to five months (during the last semester). The adolescent participants showed, on average, progressive gender-role beliefs ( $M=21.55$ ,  $SD = 4.95$ ), medium level of self-esteem ( $M=18.49$ ,  $SD = 4.48$ ), and few depressive symptoms ( $M=44.62$ ,  $SD = 10.64$ ). Overall, their school grade centered on the band of 70-79 (29.7%).

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Comparing the sample sites, dating was significantly more common among Taiwanese (36.6%) than among Shanghai teenagers (29.9%). Taiwanese adolescents also started dating slightly earlier ( $M=13.35$  years,  $SD = 1.68$ ) than their Shanghai counterparts ( $M=13.93$  years,  $SD = 1.61$ ;  $t(516) = 3.549, p < .001$ ). Adolescents from the two sites did not differ in over-dating behavior, sexual engagement or breakup experience. Taiwanese adolescents expressed more progressive gender ideology ( $M=20.55, SD = 4.82$ ) than their Shanghai peer ( $M=23.12, SD = 4.73$ ;  $t(1689) = 10.747, p < .001$ ), but lower self-esteem ( $M=17.76, SD = 4.46$  in Taiwan, versus  $M=19.67, SD = 4.27$  in Shanghai;  $t(1698) = 8.699, p < .001$ ) and more depressive symptoms ( $M=45.29, SD = 11.01$  in Taiwan, versus  $M=43.48, SD = 9.95$  in Shanghai;  $t(172863) = 3.267804, p < .001$ ). In addition, the grade in Taiwan tended to fall in the range of 60-79, whereas it was typically 70-89 in Shanghai ( $\chi^2(4, 1752) = 106.635, p < 0.001$ ).

There were no gender differences in dating prevalence, age of first dates, sexual activities, and number of relationships between boys and girls. Boys were more likely to have experienced a relationship breakup than girls ( $\chi^2(1, 509) = 4.346, p < 0.05$ ). Girls outperformed boys academically, with a significantly lower likelihood of falling into the lowest grade band (below 60) and higher likelihood of obtaining a grade between 80 and 89 ( $\chi^2(4, 1712) = 15.314, p < 0.01$ ). Girls also assumed more egalitarian gender-role beliefs ( $M=19.66, SD = 4.52$  for girls, versus  $M=23.49, SD = 4.61$  for boys;  $t(1651) = 17.071, p < .001$ ). Boys and girls did not differ in self-esteem or depressive symptoms, but girls showed more depressive symptoms than boys ( $M=7.20, SD = 5.13$  for girls, versus  $M=6.71, SD = 5.14$  for boys;  $t(1723) = 1.966, p < .05$ ). The gender differences between boys and girls came primarily from the Taiwan subsample: Two-way ANOVA results suggested that Taiwanese girls showed significantly better academic

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~~performance and more depressive symptoms than boys, whereas no such differences were found in Shanghai.~~

### Does Romantic Involvement Influence Adolescent Adjustment?

General linear models were significant for all three outcome variables, explaining 14.45% of the variance of grades, 7.02% of the variance of self-esteem, and 3.25% of the variance of depression (Table 32). For academic performance, traditional gender-role beliefs was the strongest determinant ( $F(1) = 90.22094.594, p < .001; \eta^2 = .05810$ ), followed by sample site ( $F(1) = 825.1334, p < .001; \eta^2 = .05406$ ). ~~Biological s~~Sex of the respondent was not significant itself but had a significant interaction effect with sample site, in that Taiwanese girls outperformed Taiwanese boys but Shanghai boys outperformed Shanghai girls ( $F(1) = 9.7388.871, p < .01$ ). Relationship status was also significantly associated with academic performance ( $F(2) = 8.2417.831, p < .001; \eta^2 = .0110$ ): Posthoc pair-wise comparisons suggested that never-dated adolescents performed higher than current and past daters, although the latter two groups did not differ.

Self-esteem was significantly related to gender-role beliefs and site, which explained 2.45% ( $F(1) = 367.4595, p < .01$ ) and 2.89% ( $F(1) = 424.325557, p < .01$ ) of the variance, respectively. In addition, relationship status has different impact on boys' and girls' self-esteem: Boys with past dating experience self-reported higher self-esteem than their currently-dating and never-dated peers; in contrast, girls with past dating experience reported lowest self-esteem among all groups ( $F(2) = 4.198366, p < .05$ ). Depressive mood was most strongly related to respondents' ~~sex and~~ relationship status: ~~Girls showed significantly higher depressive mood than~~

boys did ( $F(1) = 4.680, p < .05$ ); Single adolescents with past dating experiences were more depressed than currently-dating and never-dated teens ( $F(2) = 105.851546, p < .01$ ).

### Which Dating Behaviors are Particularly Relevant to Adolescent Adjustment?

Linear regression models on the correlates of specific dating behaviors can be found in Table 43.1-43.3. Among the 5697 adolescents who were currently or previously romantically-involved, their academic performance of the last semester was significantly related to their age, gender-role beliefs, dating onset, romantic breakup, and the sample site. Demographic controls (age, biological sex, sample site), gender-role beliefs, and dating behaviors explained 4.2%, 6.5%, and 2.6% of the variance, respectively. Older adolescents ( $\beta = .144, p < .01$ ) and Shanghai participants ( $\beta = .244, p < .001$ ) had better grades; adolescents with more traditional gender-role beliefs had poorer academic performance ( $\beta = -.283, p < .001$ ). Age at first date was positively associated with grades, suggesting that later daters performed better academically ( $\beta = .140, p < .05$ ). Not surprisingly, the adolescents who broke up during the last semester showed significantly lower performance than those who have never experienced breakup ( $\beta = .103, p < .05$ ). A more distal breakup, on the other hand, did not show detrimental influence ( $\beta = .029, n.s.$ ).

The self-esteem of adolescent daters was significantly correlated with their gender-role beliefs, sexual behavior, as well as the sample site. Teenagers from Shanghai reported higher self-esteem than their Taiwanese counterparts ( $\beta = .177, p < .001$ ). Adolescents with more traditional gender-role beliefs and those with sexual experiences reported lower self-esteem ( $\beta = -.134, p < .05$  and  $\beta = -.104, p < .05$ , respectively). The biological sex of the respondent, age at first dating, number of relationship, or breakup experience were not associated with adolescent self-esteem (Table 43.2).

Adolescents' depressive mood were related to a different set of predictors, ~~and girls~~ ~~exhibited higher depressive mood than boys did~~ ( $\beta = .113, p < .05$ ). The number of relationship experienced was positively related to depressive symptoms ( $\beta = .219488, p < .001$ ). A fresh breakup within the last two months was the strongest correlate to depressive mood ( $\beta = .184244, p < .001$ ), although ~~relatively more~~ distal breakups ~~can~~ also have~~d~~ a significant, albeit milder, lingering effect ( $\beta = .1307, p < .05$  ~~for breakups 3-5 months ago, and~~  $\beta = .119, p < .05$  ~~for breakups 6 or more months ago~~). Age, ~~biological sex~~, sample site, gender-role beliefs, dating onset and sexual behavior did not have any significant impact; in fact, the first two models (including demographic predictors and gender-role beliefs, were not significant ( $\Delta R^2 = .00410$  and  $\Delta R^2 = .0064$  for Model 1 and 2,  $p > .05$ ; Table 43.3).

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### Discussion

In this study, we explored the developmental correlates of adolescent dating in a ~~two~~ multi-site sample (Taiwan and Shanghai) to examine the effects of romantic involvement on academic performance and psychosocial functioning among Chinese adolescents. To better illustrate the influence of dating, we also analyzed the association between specific dating behaviors and adolescent outcomes in a subsample of adolescents who have dating experience.

Our data revealed that a substantial proportion of current or past daters among Chinese adolescents (approximately one third), especially among Taiwanese teenagers. Such prevalence is similar to Chen et al.'s (2009) findings among Beijing adolescents (25% to 30%) and higher than Hou et al. (2013) and Li et al.'s (2010) findings (10% to 20%). Such discrepancy could be attributed to regional difference given that Shanghai ~~and Taiwan~~, like Beijing, are highly modernized compared to the areas that the Hou et al. (2013) and Li et al. (2010) studied and possibly have more liberal romantic values. The higher prevalence and earlier dating onset

among Taiwanese adolescents suggests greater acceptance of adolescent dating in Taiwan, which echoes Gao et al.'s (2012) study which found that Taiwanese adolescents are less restrained by traditional Confucian ethics in terms of dating and romance than their Mainland counterparts. Such regional variances underscore the necessity to consider the within-cultural differences in future research. Like previous studies (e.g., Higgins, Liu, Zheng, & Sun, 2002; R. Moore, 1998; Tang & Zuo, 2008), however, our respondents reported very low level of sexual activities, suggesting that adolescent sex remains a taboo for Chinese adolescents.

Consistent with our hypotheses, adolescents with ongoing or past dating experiences performed less well academically than their never-dated peers; also, adolescents who have dated but are currently single showed greater depressive symptoms than never-dated teens. [One of the possible reasons why youth might be more depressed when they had past dating relationships but were less depressed if in a current relationship or not dating is that they may know what they are missing and feel sad not to be in a relationship now. This possibility needs to be explored in future research.](#) Previous studies have found negative associations between problematic dating behaviors (early dating; multiple partners) and declined academic performance (Orphinas et al., 2013). However, no study so far found that romantic involvement itself has such detrimental effect on academic performance when problem dating behaviors are controlled. It is possible that the potential parental or teacher disapproval has led to extra stress for dating adolescents, which compromised their academic performance.

More fine-grained investigations indicated that earlier onset of dating was related to poorer scholarly performance; having ~~had many relationships and~~ sexual activities could dampen adolescents' self-esteem. In addition, breakup experiences significantly undermined adolescent adjustment through (temporary) negative influence on adolescents' academic performance and

mood. These findings are mostly in line with findings from previous studies on the negative consequences of early dating (Chen et al., 2009; Neemann et al., 1995), over-dating (Zimmer-Gembeck et al., 2001) as well as breakup experiences (Hou et al., 2013; Monroe et al., 1999; Rizzo et al., 2006). Interestingly, the effect of breakup seems to be time-bound in that only breakups during the semester had an influence on the academic performance, and ~~the only~~ fresh breakups ~~seemed to have had a particularly~~ significant impact on the depressive symptoms ~~compared to more distal ones~~. Although we found no empirical data on adolescent romantic breakup to compare our findings with, previous studies on romantic breakups among adults did show gradual decreases in distress and depressive moods after the breakup (Eastwick, Finkel, Krishnamurti, & Loewenstein, 2008; Mearns, 1991). ~~Previous research has already found that adolescents would indeed react strongly to emotionally salient events such as breakups, and our study suggests that adolescents do have the resilience to recover from breakups, given time.~~ Future research using time-diary or other intensive data collection methods can further explore the impact of romantic trajectory on adolescent development, ~~and the cognitive and emotional processes during adolescents' recovery from a romantic breakup.~~

In our ~~large sample that includes both dating and non-dating teens, girls' were generally more prone to depressive symptoms than boys, and their~~ self-esteem was more strongly hampered by having a past relationship, consistent with previous studies which showed that girls are more likely to be negatively impacted by romantic involvement (Joyner & Udry, 2000; Natsuaki et al., 2009). Although previous studies suggested that Chinese girls hold more traditional sexual values than boys (Blair & Madigan, 2016; Li et al., 2010), we found that both boys' and girls' self-esteem were negatively related to sexual activities, possibly due to the

overall conservative attitude towards sex in the Chinese societies where ~~adolescent~~ sex is non-normative for adolescents of both sexes~~both genders~~.

### **Contributions, Limitations, and Implications**

The present study is one of the first attempts to systematically investigate the influence of romantic involvement on adolescents' academic and psychosocial outcomes in Chinese societies, where patriarchal traditions and high academic stress prevail and teen dating is discouraged. Our findings, based on large, ~~multi-site~~ samples collected from two major Chinese societies through stratified random sampling, have good generalizability to ~~urban~~ Chinese adolescents. We examined academic performance as one of the key outcomes, which is often used by Chinese parents and educators to justify their interference with adolescent romantic relationships. We also went beyond relationship status and examined dating behaviors and their association with developmental outcomes, thereby capturing a more nuanced picture of how romantic involvement might influence adolescent development in the Chinese context.

There is still much to improve about this study. Conceptually, we focused on adolescents' romantic involvement without investigating other key processes such as partner choice, dating activities, relationship quality, or cognitive and emotional processes. It is unbeknown to us what Chinese young couples do on a date, how their romantic relationships look like, and whether adolescents feel accepted (or rejected) by their family, teachers and peers for their romantic involvement. Given the high percentage of adolescent daters found in this study, future studies that explore multiple facets of adolescent romance in Chinese contexts are both promising and necessary.

Methodologically, the correlational nature of the data limited examination of directionality of influence. For instance, although the dating experiences and behaviors may have influenced adolescent outcomes, it is also possible that academically low-performing adolescents resort to dating to escape the sense of failure or to obtain a sense of relational achievement. There could be further third factors that may influence both the romantic involvement and adjustment of the adolescents, such as personality and early-life experiences (e.g. childhood trauma). The sample consists of primarily urban adolescents whose values and lifestyle differ considerably from their rural counterparts who comprise a substantial proportion of Chinese youth, especially in Mainland China (National Bureau of Statistics of China, 2018). The survey only included minimal demographic information and therefore does not allow detailed investigations into socioeconomic variation in grades or psychosocial functioning. These limitations need to be considered when interpreting and generalizing our findings. Future research using a longitudinal design and including richer contextual and qualitative data could further advance our understanding of adolescent romance.

Despite these limitations, our novel and rich findings extend the existing adolescent research by shedding light on the romantic involvement of Chinese teenagers, one of the most understudied groups. Findings of our study can be potentially informative for parents, teachers, practitioners, and policy makers who work for and with Chinese adolescents. For instance, the prevalence of adolescent dating points to an urgent need for comprehensive sex and relationship education to provide guidance on romantic, and potentially sexual relationships which is currently absent in family and school education in Chinese societies. Although gender-equality education is already a statutory part of national policy in Taiwan, the current curriculum focuses on teaching children about the biological differences between the male and female, its

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development and rethinking gender roles and stereotypes. Important topics such as the development of romantic relationship during adolescence, the maintenance of healthy interpersonal relationships, and warning signs of intimate partner violence should also be included, because Relationship education that improves adolescents' skills to maintaining healthy, balanced intimate relationships can have a long-term positively effect on their-our health and well-being (Dush & Amato, 2005; Myers, 2003) and should be statutory part of national policy. The stressful nature of breakups also calls for better support for dating adolescents, especially girls. In addition, programs for de-stigmatizing adolescent sexual activities and promoting safe sexual practices should also be included as part of the compulsory education curriculum: The few extant studies on such programs in Shanghai proved to be effective (Lou, Zhao, & Gao, 2006; Wang, Hertog, Meier, Lou, & Gao, 2005). Future practices and policies could address these needs to mitigate the potential negative effects of the problematic dating behaviors and foster healthy psychosocial development.



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