

Caught in a Bad Romance: Adolescent Romantic Relationships and Mental Health

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Brian Soller¹

Abstract

Integrating insights from cultural sociology and identity theory, I explore the mental health consequences of adolescent romantic relationship inauthenticity—incongruence between thoughts/feelings and actions within romantic contexts. Applying sequence analysis to National Longitudinal Study of Adolescent Health data, I measure relationship inauthenticity by quantifying the extent to which the ordering of events of actual romantic relationships (e.g., holding hands, saying "I love you") diverges from the sequence of events within idealized relationship scripts among 5,316 adolescents. I then test its association with severe depression, suicide ideation, and suicide attempt. I find that romantic relationship inauthenticity is positively associated with the risk of all three markers of poor mental health, but only for girls. This study highlights the importance of gender and culture in determining how early romantic involvement influences psychological well-being.

Keywords

adolescence, cultural scripts, identity, mental health, relationship inauthenticity

Romantic involvement is a hallmark of adolescence (Germanotta and Khayat 2009; Giordano, Manning, and Longmore 2006). Unfortunately, few studies examine the health and developmental consequences of early romances. Instead, research on youth romance is overshadowed by work focusing on early sexual behavior. Nevertheless, findings from a limited number of studies attest to the significance of early romantic relationships for adolescent well-being (Collins, Welsh, and Furman 2009; Giordano et al. 2006).

Relationship inauthenticity—that is, incongruence between thoughts/feelings and actions within relational contexts—is a key mechanism through which relationships influence adolescent well-being (Impett et al. 2008). Relationship demands, coupled with desires to gain partner approval, may suppress authenticity and promote behavior that reflects what adolescents perceive relationship partners wish to observe (Harter 1999). Compromised authenticity is in turn linked to adolescent depression (Impett et al. 2008). Despite evidence suggesting that inauthentic

peer relationships affect adolescent well-being, little sociological research focuses on the mental health consequences of inauthentic romances among youth.

This study explores the link between adolescent romantic relationship inauthenticity and mental health. Integrating insights from sociological theories of culture (Swidler 1986, 2001) and identity (Thoits 2013), I propose that romantic relationship inauthenticity compromises mental health by disrupting role-identity performances. Adequate identity performances involve adhering to the normative expectations of a particular role (e.g., parent, romantic partner, etc.) through one's actions (Thoits 1991). As Swidler (2001:87) notes, individuals develop

¹University of New Mexico, Albuquerque, NM, USA

Corresponding Author:

Brian Soller, Department of Sociology, University of New Mexico, MSC05 3080, 1915 Roma NE Ste. 1103, Albuquerque, NM, 87131, USA. E-mail: bsoller@unm.edu

strategies of action based on ideal self-concepts. Relationship scripts—ideal progressions of actions and emotional states within romantic relationships (e.g., holding hands, kissing, etc.)—are meaningful components of romantic partner roles that reflect individuals' idealized romantic selves. Enacting ideal scripts within relationships verifies components of self and enhances mental health. Conversely, deviating from idealized romantic relationship scripts involves inadequate role-identity performances and compromises psychological well-being (Thoits 2013). In this article I test whether relationship inauthenticity—conceptualized as behavior that diverges from the sequencing of events within one's idealized relationship script (Harding 2007)—is associated with multiple dimensions of adolescent mental health.

I also examine whether the association between relationship inauthenticity and adolescent mental health varies by gender. Past research suggests a stronger link between romantic dynamics and girls' mental health (Joyner and Udry 2000). At the same time, identity accumulation theory notes that the same role-identities potentially have different meanings and levels of importance across genders (Thoits 1991). Gender variation in the association between romantic relationship outcomes and mental health may be attributable to the increased salience of interpersonal relationships in girls' self-concepts (Rosenfield and Mouzon 2013). Accordingly, relationship inauthenticity may have a particularly strong association with the mental health of romantically involved girls.

This study uses data from the first two waves of the National Longitudinal Study of Adolescent Health (hereafter, Add Health). Using sequence analysis (Abbott and Tsay 2000), I measure romantic relationship inauthenticity by quantifying the extent to which the ordering of events within respondents' ideal romantic relationship script diverges from the sequencing of events within their first subsequent romantic relationship (Harding 2007). I then test associations between relationship inauthenticity and severe depression, suicide ideation, and suicide attempt. This study underscores the importance of gender and inauthenticity in determining how romantic involvement influences adolescent mental health.

BACKGROUND

Adolescent Romance and Mental Health

The transition to adolescence brings increased risk of mood disorders and emotional problems

(Costello, Erkanli, and Angold 2006). For instance, "storm and stress" perspectives (Arnett 1999) note that adolescents encounter new situations that compromise their well-being. In particular, relational stressors—that is, strains rooted in personal relationships—often trigger mental health problems among youth (Exner-Cortens, Eckenrode, and Rothman 2013; Joyner and Udry 2000).

Adolescence also entails growing interest and involvement in romantic relationships for most youth (Collins et al. 2009; Giordano et al. 2006). Unfortunately, early romances may contribute to mood disorders among adolescents for a number of reasons. Romantic relationships often disrupt friend and parent-child relationships (Joyner and Udry 2000). Dating violence and partner aggression—which occur within significant portions of adolescent romantic relationships—increase youths' risk of depression and suicide ideation (Exner-Cortens et al. 2013). Rejection and breakups are often emotionally taxing experiences (Joyner and Udry 2000). Romantic involvement also increases the likelihood of sexual intercourse. While the association between sexual intercourse and mental health depends on numerous factors (e.g., age, gender, romantic attachment) (Meier 2007), sexual intercourse is on average positively associated with adolescent depression (Hallfors et al. 2005). Given the stressors rooted in early romances, perhaps it is no surprise that romantic involvement is linked to poor mental health among youth (Joyner and Udry 2000).

Most research on adolescent romance and mental health focuses on more extraordinary and discrete events, such breakups, sexual initiation, and partner aggression. While the mental health consequences of such events are important to consider, more commonplace features of early romantic relationships are also related to adolescent well-being. For instance, general markers of relationship quality likely determine how romantic involvement affects adolescent behavioral health (Giordano et al. 2010; McCarthy and Casey 2008). Recently, Simons and Barr (forthcoming) found no average association between romantic involvement and adolescent delinquency. Conversely, love and commitment within romantic relationships protected against youthful offending. Importantly, Simmons and Barr found that cognitive processes (e.g., nonhostile views of relationships) mediate the association between relationship quality and delinquency. Although these studies focus on delinquency and other externalizing symptoms, these results suggest that the effect of romantic involvement on adolescent well-being is contingent upon general relationship processes.

A more holistic account of adolescent romances that attends to how relationships unfold may help identify additional mechanisms through which early relationships influence adolescent mental health. For instance, Collins (2003) argues that behavior that adheres to personal relationship ideals enhances positive emotions. Conversely, relationships that depart from idealized notions represent a source of stress that compromises mental health. As I argue below, romantic relationship inauthenticity—conceptualized as the extent to which the ordering of events within relationships deviates from ideal relationship scripts—may adversely affect mental health by disrupting romantic partner role-identity performances.

Ideal Scripts, Ideal Selves

Ann Swidler (1986) argues that culture is best understood as a "tool kit" of worldviews, habits, skills, and styles that individuals draw upon when formulating strategies of action. Strategies of action are persistent ways of ordering behavior that allow groups and individuals to realize desired ends or solve problems. Individuals formulate cultural repertoires—which contain varieties of cultural symbols and strategies—through interactions with individuals and institutions (e.g., religion, media, schools, etc.). Cultural contexts provide individuals with strategies for managing the social world, thereby influencing behavior by regulating which strategies of action are available to pursue.

Swidler (2001) subsequently expanded her cultural model and elaborated the link between strategies of action and identity. She proposes that culture operates in large part by attaching meanings to the self—a process that informs which strategies of action are conceptualized as more or less possible, promising, or worthy of enacting, given one's self-conception (Swidler 2001:81). In essence, strategies of action allow individuals to pursue ends that reflect and enhance important components of salient identities. Individuals in turn formulate and enact strategies of action to become a certain kind of idealized self. Culture relates to identity in part because individuals articulate and pursue strategies that are in concert with meanings attached to the self. In this sense, romantic strategies of action help individuals constitute ideal selves within romantic relationships.

Cultural "scripts"—templates for sequencing behavior over time—are akin to Swidler's concept of strategies of action in that they both specify how to achieve desired outcomes or solve problems (Harding 2007). Beyond guiding behavior within intimate settings, relationship scripts are crucial in developing ideal selves related to romantic and intimate partner roles. For instance, in his study of inner-city black adolescents, Anderson (1989) found that boys develop and enact scripts that reflect the esteemed "player" identity. Boys cultivate "game"—a component of one's cultural repertoire involving habits, styles, and scripts that constitute the behavioral components of the identity. Enacting sexualized relationship scripts ultidemonstrates competent identity performance, thereby enhancing feelings of selfworth (Anderson 1989).

Anderson notes that one underlying objective of "player" identity performances is to mislead a female partner into thinking she is enacting her ideal romantic relationship script. Girls in Anderson's study articulate conventional relationship scripts that involve first having a boyfriend, then a fiancé, then a husband; then having children; and ultimately attaining a middle-class lifestyle. Recognizing that girls typically undertake the romantic role-identity with this script in mind, a boy will play the "character the script calls for" (Anderson 1989:62) and direct actions toward assuring his partner that he is an ideal mate who will help her enact her romantic script. However, boys in Anderson's study describe their own prevailing ideal relationship script as taking a girl on a "walk through the woods" (Anderson 1989:62), which entails a series of acts intended to demonstrate one's status as an upstanding young man to a girl (e.g., attending church, visiting with the girl's family, etc.). The boy's ultimate aim is to have sexual relations, which is necessary to affirm his status as a "player," and verify the player identity. At the same time, relationship scripts provide cultural material that constitutes one's game. As Anderson illustrates, relationship scripts are important components of both masculine and feminine identities among youth. However, the "player" script is also geared toward enhancing a girl's positive emotions by appealing to her desires to enact a conventional romantic relationship script with an upstanding

Swidler and Anderson highlight the significance of culture in identity processes. However, they do little to address the mental health consequences of enacting relationships that diverge from ideal scripts. As Anderson's study suggests, discordance between boys' and girls' romantic scripts

likely contributes to relationship inauthenticity in romantic relationships (for at least one partner). However, the mental health consequences of inadequate romantic role-identity performance are only implied in Anderson's study. Identity accumulation theory (Thoits 1991, 2013) explicitly attends to the association between identity performances and mental health. By integrating insights from identity accumulation theory and Swidler's work, I elaborate how inauthentic relationships disrupt the romantic identity-role performances and contribute to poor mental health.

Identity, Inauthenticity, and Mental Health

Identity accumulation theory identifies key linkages between romantic relationships and mental health. According to Thoits (1991), individuals reap psychological benefits from occupying roleidentities (e.g., romantic partner, parent, etc.). Role-identities help individuals arrive at an awareness of who one is (in an existential sense), thereby enhancing psychological well-being by providing individuals with meaning and purpose in life (Thoits 2013). One expectation of identity accumulation theory is that occupying multiple role-identities improves mental health by fostering a sense of personal meaning and social significance. For adolescents, romantic involvement entails undertaking a new role-identity that may benefit mental health. Role-identities also involve behavioral scripts that delimit behavioral pathways for enacting certain role-identities. In this sense, identities help individuals answer the question "What should I do?" by providing behavioral roadmaps for role-identity occupants. Enacting cultural scripts pertaining to role-identities (i.e., adequately performing behavioral sequences attached to role-identities) further enhances mental health through the affirmation of such identities.

The importance of adequate script enactment emphasized in identity accumulation theory suggests that not all realize the same level of mental health benefits from occupying a particular role-identity. A role-identity entails normative expectations and scripts that denote which actions should be followed in order to affirm the identity. Adequate identity performances within romantic relationships require that behavior be consistent with established meanings and definitions associated with partner roles—for example, emotionally supporting one's partner, doing housework or yard work, behaving in a traditionally masculine or feminine manner, and so

on. Conversely, inadequate performance of roleidentities represents a stressor that contributes to poor mental health by threatening socially valued identities (Thoits 2013).

Relationship scripts are important components of role-identities that allow individuals to express and perform key components of the romantic self over the course of a relationship. While identity performances are continuous, mostly unconscious, and highly routinized, scripts pertaining to romantic relationships enable romantic partners to affirm key components of salient identity-roles. Therefore, enacting relationship scripts expresses components of identities that relate to romantic, sexual, or gender roles (see also Cornwell and Laumann 2011). For instance, Kornrich, Brines, and Leupp (2013) suggest that among heterosexual households with traditionally gendered divisions of household labor (e.g., the woman cleans while the man does the yard work), performance of domestic tasks expresses feminine or masculine components of partners' romantic identity-roles. Housework therefore represents an important avenue for verifying masculine or feminine components of romantic roleidentities for some relationship partners. More generally, individuals formulate ideal romantic relationship scripts that are consistent with the kind of romantic partners they wish to be, thus providing individuals with avenues to verify romantic roles.

There are emotional consequences for mismatches between one's actions and idealized relationship scripts. Enacting ideal romantic relationship scripts involves adequate performance of the romantic roleidentity and in turn leads to positive self-evaluations and improved mental health (Thoits 1991). Conversely, diverging from role-identity scripts contributes to emotional distress and mood disorders such as depression. Based on the above discussion, relationship authenticity likely enhances mental health because it involves the enactment of idealized romantic scripts, thereby verifying one's identity as a romantic partner. Conversely, mismatches between behavior and one's ideal script inhibit role-identity performances, thereby threatening romantic roleidentities (Thoits 2013). Thus, deviating from ideal sequences—or engaging in romantic relationship inauthenticity—harms mental health to the extent that it involves a mismatch between actions and romantic role-identity scripts. Accordingly, partner hypothesize:

Hypothesis 1: Romantic relationship inauthenticity is positively associated with poor mental health.

As identities are hierarchically nested within individuals, adequate performance of salient identities may have especially important consequences for mental health. As research on adolescent relationships suggests, romantic relationships are particularly important for girls' identities, and thus relationship inauthenticity may have especially strong effects on girls' mental health.

Gender and Inauthentic Romances

Thoits (2013) proposes that individuals organize their role-identities in prominence hierarchies. The prominence of a role-identity is primarily a function of the degree to which others positively support the identity, the extent of personal commitment to and investment in the identity, and the intrinsic and extrinsic gratifications that are gained through adequate role performance. Importantly, competent performance of prominent roles entails greater social rewards than less prominent roles. Conversely, inadequate performances of prominent role-identities are more psychologically damaging than inadequate performances of less salient roles.

Sociological perspectives suggest that romantic relationships may be particularly prominent roleidentities for girls (Rosenfield and Mouzon 2013; Simon and Barrett 2010). According to these perspectives, gender socialization leads girls to develop senses of self that are more intimately bound to interpersonal relationships. For instance, Cross and Madson (1997) propose that higher rates of assigning childcare and other domestic tasks leads girls to a heightened sense of nurturance and relatedness from an early age. Conversely, boys more often engage in activities and tasks outside of the home that allow more freedom and independence. In the end, girls are socialized to fully consider relationships and pursue harmony with others, while boys are socialized to distinguish themselves from others (Markus and Kitayama 1991).

The importance of interpersonal relationships for girls' developing sense of self is revealed in recent research on adolescence. As Impett, Schooler, and Tolman (2006) note, psychological research focusing on girls' desire to maintain relationships suggests that interpersonal relationships are especially salient aspects of girls' self-concepts. Qualitative sociological research also highlights the importance of romantic relationships in girls' developing self-concepts. For instance, Eder, Evans, and Parker's (1995) ethnography of a middle school revealed the importance of "being in love" with a boy for girls' senses of self. Pascoe's

(2007) ethnography of a high school suggests that a girl's status within the school peer hierarchy is intimately linked to the status of boy with whom she is romantically involved. While these studies do not explicitly focus on identity, they do suggest that romantic relationships are more salient components of girls' self-concepts when compared with boys. In turn, behavioral divergence from ideal scripts of romantic partner roles—as captured by romantic relationship inauthenticity-may have especially important consequences for girls' mental health. This is because the performance of relationship scripts through authentic behavior becomes increasingly tied to mental health as such roleidentities become more salient for an individual. This leads to the second hypothesis:

Hypothesis 2: Romantic relationship inauthenticity is more strongly associated with poor mental health among girls than boys.

DATA AND METHODS

This study uses data from Add Health, which includes a longitudinal, nationally representative survey focusing on the social context of adolescents' health and development in the United States. Respondents were nested within randomly selected schools drawn from a clustered random sample of 80 high schools; schools were stratified by racialethnic composition, size, public/private status, geographic region, and urbanicity. High schools including an eleventh grade and at least 30 enrollees were eligible for participation. Each school's largest feeder school (i.e., the middle school that most students attend prior to attending the focal high school) was recruited when available.

Respondents in this study completed a wave 1 interview in 1995 and a wave 2 interview that took place roughly 12 months after wave 1. Nearly 15,000 respondents participated in both waves. Of these respondents, 6,173 reported forming a new romantic relationship after the wave 1 interview. In this study, respondents were classified as forming a new romantic relationship if, at wave 2, they provided information on at least one new relationship that had a start date that occurred after the date of the wave 1 interview. I excluded 550 of those respondents who did not provide information on ideal scripts or actual romantic relationship sequences. I also excluded respondents with missing data on dependent variables (n = 12) or survey weights (n = 295). My final sample includes 5,316 respondents (2,905 girls and 2,411 boys).

Measures

Dependent Variables. I analyze three dependent variables, each measured at wave 2: severe depression, suicide ideation, and suicide attempt.

Severe depression is measured with the CES-D (Radloff 1977). Following Perreria et al. (2005), the measure is based on a subset of 5 items from the original 20 items.² Respondents indicated the frequency with which they "had the blues," "felt life was not worth living," "felt depressed," "felt sad," and "felt happy" throughout the week leading up to wave 2. Ordinal responses ranged from 0 ("never or rarely") to 3 ("most of the time/all of the time"). To measure severe depression, I summed the items, with responses for "felt happy" reverse-coded to indicate higher depression ($\alpha = .779$). Scores ranged from 0 to 15. I identified those with severe depression by setting cut-points for the summed scale. Research using the full CES-D (which has a possible total score of 60) determined cut-points for identifying major depressive disorders among adolescents to be 22 (a ratio of .367:1) for boys and 24 (a ratio of .4:1) for girls (Roberts, Lewinsohn, and Seeley 1991). Following research using reduced CES-D scales (Warren, Harvey, and Henderson 2010), I lowered the cut-point for severe depression to 6 for girls and boys (a ratio of .4:1). My binary measure of severe depression indicates whether the respondent's depressive symptomology score was greater than or equal to the cut-point (0 = no, 1 = yes).

The second outcome is suicide ideation. At wave 2, respondents were asked, "During the past 12 months, did you ever seriously think about committing suicide?" Responses were binary, with 1 indicating "yes." My measure of suicide ideation indicates whether the respondent contemplated suicide in the past year (1 = yes).³ The final mental health outcome is suicide attempt. Those experiencing suicide ideation were asked, "During the past 12 months, how many times did you actually attempt suicide?" Responses ranged from 0 ("0 times") to 4 ("6 or more times"). A number of recent studies based on Add Health have developed measures of suicide ideation and suicide attempt (e.g., Haynie, South, and Bose 2006; Maimon and Kuhl 2008). Following these studies, I measure suicide attempts by collapsing responses into binary categories, with "1" indicating "one or more suicide attempts" and "0" indicating "no attempts." Those not experiencing suicide ideation were recoded to "0".4

Romantic Relationship Inauthenticity. I measure romantic relationship inauthenticity with information on respondents' ideal romantic relationship

sequences and events that took place within respondents' first subsequent romantic relationship after wave 1. At wave 1, respondents indicated whether they would experience 17 events in an "ideal romantic relationship" at this stage in their lives. Events include: (1) We would go out together in a group; (2) I would meet my partner's parents; (3) I would tell others we were a couple; (4) I would see less of my friends to spend more time with my partner; (5) We would go out alone; (6) We would hold hands; (7) I would give my partner a present; (8) My partner would give me a present; (9) I would tell my partner I loved him/her; (10) My partner would tell me he/she loved me; (11) We would think of ourselves as a couple; (12) We would discuss contraception or sexually transmitted diseases; (13) We would kiss; (14) We would touch each other under our clothing; (15) We would have sex; (16) I/My partner would get pregnant; and (17) We would get married. Respondents then provided the sequence in which chosen events would ideally unfold. I use a subset of these items (see below) to measure respondents' ideal romantic relationship scripts.

At wave 2, respondents reported on actual events within specific romantic relationships that took place during the last 18 months. Relationship partners were identified in two ways. First, respondents identified up to three individuals with whom they had a "special romantic relationship." Those not reporting having a special romantic relationship were asked whether they held hands, kissed, or told another person that they liked/loved him/her after wave 1. Those engaging in all three activities identified up to three "liked" relationship partners. I use both special and liked romantic relationships to measure romantic relationship inauthenticity.⁵

Respondents provided the actual ordering of events within each relationship. These events were identical to those from the ideal script with a few exceptions. For actual relationship scripts, ideal script items 7, 8, 9, 10, and 17 were excluded. Additionally, respondents indicated whether they and their partner told each other they loved each other, exchanged presents, and touched each other's genitals/private parts. I drop "touched each other's genitals/private parts" from the actual script and combine items 7 (gave present) and 8 (received present), and items 9 (said I love you) and 10 (told I love you) from the ideal script into single items representing gift exchange and expressing love in order to make the ideal and actual relationship sequences fully comparable.6 In total, ideal and actual romantic scripts can include up to 14 events.

I quantify differences in the sequencing of events within each respondent's ideal relationship and "first liked" or "special romantic" relationship that occurred after the first interview to measure relationship inauthenticity.⁷ This difference captures an important dimension of relationship inauthenticity, namely discrepancies between how relationships ideally and actually unfold. Using sequence analysis (Abbott and Tsay 2000), I quantify the minimal "cost" of transforming respondents' actual scripts into the ideal romantic relationship scripts through inserting, deleting, and substituting events. The resulting values capture the extent of relationship inauthenticity, with higher values indicating greater inauthenticity. I describe sequence analysis procedures in more detail in the analytic strategy section below.

Control Variables. I control for a number of relationship confounders as well as demographic and individual factors. For each outcome, I control for the corresponding wave 1 measure (i.e., prior depression, prior suicide ideation, and prior suicide attempt). Descriptions of relationship variables (including items on which they are based and construction procedures) and control variables are provided in Table 1. Descriptive statistics for mental health variables, relationship measures, and control variables are displayed in Table 2.

Analytic Strategy

Optimal Matching. I measure relationship inauthenticity using Optimal Matching (OM). OM quantifies differences between two data sequences according to the substitutions, deletions, and insertions required to transform the data sequences to be equivalent. The OM algorithm alters data sequences based on the minimal total "cost" of transforming one's ideal and actual relationship scripts into another. Substitution costs are empirically defined by estimating a 14 × 14 substitution cost matrix.⁸ Matrix elements represent the mean logged inverse probability of transitioning to or from event i to event j. The cost matrix is estimated according to transition probabilities derived from ideal romantic relationship scripts among all Add Health respondents participating in wave 1. Substitutions are larger (and more costly) if items rarely follow/precede one another (e.g., holding hands and then having sexual intercourse). Conversely, substitutions are smaller (and less costly) if items frequently follow/precede one another (e.g., going out together alone and then holding hands). I set insertions/deletions to the largest substitution cost (Harding 2007).9

The OM procedure used to measure relationship inauthenticity quantifies the difference in the ordering of events for a respondent's actual and ideal relationship scripts. I normalize total costs by dividing them by the length of the longer script, which makes the difference represent the average cost per event in the longer script (Harding 2007). To take into account differences in the opportunity to progress through ideal scripts for completed versus ongoing relationships, I truncate ideal relationships to be equal in length to the actual relationship (in terms of the number of events) for those in ongoing relationships. I repeated this process for each respondent. Sequence analyses were performed with the TraMineR package for the R statistical analysis software program (Gabadinho et al. 2011).

Selection into Romantic Relationships. I model the association between relationship inauthenticity and mental health using a two-equation estimation procedure based on Heckman (1976). This procedure accounts for self-selection into romantic relationships between waves. Following McCarthy and Casey (2008), I first estimated the probability of entering a new relationship between waves with a probit regression model. This model includes covariates that are associated with adolescent romantic relationship formation but are only theoretically associated with mental health through selection processes. 10 After estimating the selection model, I divided the probability density function by the cumulative distribution function to calculate an inverse Mills ratio. The resulting measure captures the hazard of nonselection into my sample and is included in all regressions of mental health.

Regressions of Mental Health. I estimated a series of logistic regressions that test the association between relationship inauthenticity and three binary measures of mental health. I estimated these models separately by gender because I hypothesize that the association between romantic relationship inauthenticity and mental health varies by gender. Wald tests confirm that this is the appropriate modeling strategy (Frisco, Houle, and Martin 2010). Missing values on independent variables were imputed with the ICE command in the Stata13 statistical software program (Royston 2004). Additionally, I estimated weighted regression models of imputed data that adjust for the unequal probability of selection and school clustering with Stata's mi svy command suite (Chantala 2006).

Table I. Descriptions of Independent Variables.

| Variable Definition | | | | |
|---|---|--|--|--|
| Individual measures | | | | |
| Age | Age (in years) at wave 1. | | | |
| Black | Binary variable indicating that the respondent is black (I = black). | | | |
| Latino/a | Binary variable indicating that the respondent is Latino/a (I = Latino/a). | | | |
| Other | Binary variable indicating that the respondent's race-ethnicity is other than white, black, or Latino/a (I = other). | | | |
| Socioeconomic status | Interval measure consisting of the standardized values of parents' highest occupational status and education $(r = .458)$. | | | |
| One-parent household | Binary variable indicating that the respondent lives in a one-parent household (I = yes). | | | |
| Parental attachment | Five-item scale tapping parent/child bonding as captured by responses to questions such as "how close do you feel to your mother?" and "how much do you think your father cares about you?" Each question is asked in reference to the mother and the father, for a potential total of 10 questions. The maximum value from each paired item is taken, and the mean of the five items is measured (α = .844). | | | |
| School connectedness | Eight-item scale capturing attachment to teachers and schoolmates (e.g., "You feel close to people at your school" and "You feel like you are part of your school") (Resnick et al. 1997). School connectedness represents the mean of the standardized items, with higher score indicating greater connectedness (α = .771). | | | |
| Religiosity | Four-item scale capturing the frequency of prayer, service attendance, and religious youth-group participation, and a variable indicating how important religion is to the respondent. Religiosity consists of the mean of the reverse-coded and standardized items (α = .840). | | | |
| Body mass index | Calculated from self-reported height and weight as follows: $weight_{k_{\sigma}}/height_{m}^{2}$. | | | |
| Mental health treatment | Binary variable indicating that the respondent received emotional/physical counseling in the 12 months prior to wave I (I = yes). | | | |
| Violence victimization | Binary variable indicating that the respondent was a victim of a shooting, a stabbing, or an assault in the 12 months prior to wave 1 (1 = yes). | | | |
| Prior sexual intercourse | Binary variable indicating sexual intercourse prior to wave I (I = yes). | | | |
| Ideal script length | Count variable indicating the number of activities respondents would engage in within an ideal romantic relationship. | | | |
| Suicidal behavior of friends | Binary variable indicating that a friend attempted or committed suicide in the 12 months prior to wave I ($I = yes$). | | | |
| Suicidal behavior of family members | Binary variable indicating that a family member attempted or committed suicide in the 12 months prior to wave I (I = yes). | | | |
| Relationship measures | | | | |
| Relationship script length ^a | The number of activities respondents engaged in within first subsequent romantic relationship. | | | |
| Time to relationship ^a | Continuous measure indicating the number of days that elapsed between the first in-home interview and relationship onset, divided by 10. | | | |
| Special romantic relationship ^a | Binary variable indicating whether the respondent's first subsequent romantic relationship is a "special romantic" versus "liked" relationship (I = yes, 0 = liked relationship). | | | |
| Older partner ^a | Binary variable indicating the partner was at least three years older than the respondent $(1 = yes)$. | | | |
| Younger partner ^a | Binary variable indicating the partner was three (or more) years younger than the respondent (1 = yes). | | | |
| Ongoing relationship ^a | Binary variable indicating relationship was ongoing at wave 2 (I = yes). | | | |
| Sexual intercourse in relationship ^a | Binary variable indicating the respondent and partner had sexual intercourse (1 = yes). | | | |
| Psychological abuse ^a | Binary variable indicating that the partner ever insulted in public, cursed or swore at, or threatened the respondent with violence (1 = yes). | | | |
| Physical abuse ^a | Binary variable indicating that the romantic partner threw something at or pushed/shoved the respondent (I = yes). | | | |

^aVariable was measured at wave 2. All other variables were measured at wave 1.

Table 2. Descriptive Statistics by Gender (n = 5,316). National Longitudinal Study of Adolescent Health.

| | Girls $(n = 2)$ | | Boys $(n = 1)$ | .,411) |
|--------------------------------------|---------------------|-------|---------------------|--------|
| Variable | Mean/ Proportion | | Mean/ Proportion | SD |
| Dependent variables | | | | |
| Severe depression | .17 | | .08 | |
| Suicide ideation | .16 | | .09 | |
| Suicide attempt | .07 | | .02 | |
| Relationship variables | | | | |
| Romantic relationship inauthenticity | 2.47 | .65 | 2.53 | .71 |
| Relationship script length | 8.76 | 3.05 | 8.59 | 3.08 |
| Time to relationship | 18.72 | 11.62 | 19.97 | 12.00 |
| "Special romantic" relationship | .93 | | .90 | |
| Age discordance | | | | |
| Same age (reference) | .71 | | .78 | |
| Older partner | .26 | | .04 | |
| Younger partner | .03 | | .19 | |
| Ongoing relationship | .49 | | .41 | |
| Sexual intercourse | .52 | | .56 | |
| Psychological abuse | .19 | | .21 | |
| Physical abuse | .06 | | .08 | |
| Individual variables | | | | |
| Age | 15.76 | 1.48 | 16.06 | 1.51 |
| Race-ethnicity | | | | |
| White (reference) | .54 | | .52 | |
| Black | .21 | | .20 | |
| Latino/a | .15 | | .17 | |
| Other | .10 | | .11 | |
| One-parent household | .31 | | .31 | |
| Socioeconomic status | .01 | .86 | .07 | .86 |
| Parental attachment | 4.44 | .64 | 4.56 | .50 |
| School connectedness | 01 | .64 | 04 | .63 |
| Religiosity | .04 | .81 | 06 | .83 |
| Body mass index | 21.81 | 3.96 | 22.49 | 4.05 |
| Prior sexual intercourse | .36 | | .43 | |
| Violent victimization | .12 | | .29 | |
| Mental health treatment | .14 | | .11 | |
| Suicidal behavior of family members | .05 | | .03 | |
| Suicidal behavior of friends | .22 | | .12 | |
| Ideal script length | 9.54 | 2.35 | 10.02 | 2.39 |
| Relationship hazard | .83 | .21 | .89 | .20 |
| Lagged dependent variables | .00 | .41 | .07 | .20 |
| Prior severe depression | .18 | | .09 | |
| Prior suicide ideation | .20 | | .11 | |
| Prior suicide attempt | .07 | | .02 | |

For each measure of mental health, I first tested the association between romantic relationship inauthenticity and the outcome, adjusting for individual charac-

teristics. I then introduced potential relationship confounders (e.g., physical/psychological aggression) in a subsequent model. Models of girls' mental health

Table 3. Logistic Regressions of Girls' Mental Health (n = 2,905). National Longitudinal Study of Adolescent Health 1995–1996.

| | Severe Depression | | Suicide Ideation ^a | | Suicide Attempt ^a | |
|------------------------------------|--------------------|--------------------|-------------------------------|---------|------------------------------|-----------------|
| | Model I | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Relationship inauthenticity | .36** | .39* | .27* | .29* | .34* | .40* |
| | (.11) | (.15) | (.11) | (.14) | (.15) | (.19) |
| Relationship script length | | .03 | | .05 | | .08 |
| | | (.03) | | (.03) | | (.05) |
| Time to relationship | | .00 | | .00 | | .01 |
| | | (10.) | | (10.) | | (10.) |
| "Special romantic" relationship | | .15 | | 10 | | 06 |
| | | (.28) | | (.28) | | (.34) |
| Older partner | | .17 | | .08 | | .12 |
| | | (.17) | | (.17) | | (.22) |
| Younger partner | | .42 | | 06 | | .40 |
| | | (.34) | | (.35) | | (.41) |
| Ongoing relationship | | 19 | | 41* | | 43 |
| | | (.20) | | (.16) | | (.25) |
| Sexual intercourse in relationship | | .31 | | 28 | | .10 |
| | | (.19) | | (.21) | | (.30) |
| Psychological abuse | | .58** | | .41* | | .15 |
| | | (.18) | | (.19) | | (.26) |
| Physical abuse | | .30 | | .38 | | .73* |
| • | | (.26) | | (.27) | | (.34) |
| Lagged dependent variable | 1.35*** | 1.35*** | 1.46*** | 1.48*** | 1.83*** | 1.72*** |
| | (.19) | (.18) | (.13) | (.14) | (.27) | (.28) |
| Intercept | −l.67 [°] | −1.79 [°] | .75 [°] | .68 | 08 [°] | 26 [°] |
| • | (1.07) | (1.25) | (1.02) | (1.13) | (1.66) | (1.92) |

Note: All models control for age, race-ethnicity, one-parent household, socioeconomic status, parental attachment, school connectedness, religiosity, ideal script length, prior sexual intercourse, body-mass index, violent victimization, mental health treatment, and relationship hazard. Standard errors are in parentheses.

are displayed in Table 3, while models of boys' mental health are presented in Table 4. Tables 3 and 4 display unstandardized coefficients and standard errors. For the sake of presentation, I omit coefficients and standard errors for individual control variables from Tables 3 and 4 (omitted coefficients are displayed in the appendix).

RESULTS

Relationship Inauthenticity and Girls' Mental Health

Table 3 examines the association between relationship inauthenticity and *severe depression* (Models 1 and 2), *suicide ideation* (Models 3 and 4), and *suicide attempt*

(Models 5 and 6) among girls. Turning to severe depression, Model 1 indicates that romantic relationship inauthenticity is positively and significantly associated with the log-odds of severe depression after controlling for individual characteristics. When relationship characteristics are introduced in Model 2, the coefficient for romantic relationship inauthenticity slightly decreases in magnitude but remains significant. The magnitude of the coefficient for romantic relationship inauthenticity in Model 2 is such that a one standard deviation increase in romantic relationship inauthenticity is associated with a 29 percent increase in the odds of severe depression among girls.

Models 3 and 4 (Table 3) examine the association between romantic relationship inauthenticity and girls' suicide ideation, while Models 5 and 6

^aModels control for prior severe depression and suicidal behavior of family members and friends.

^{*}p < .05, **p < .01, ***p < .001 (two-tailed tests).

| Table 4. | Logistic Regressions of B | oys' Mental Health | (n = 2,411). Nation | al Longitudinal Study of |
|----------|---------------------------|--------------------|---------------------|--------------------------|
| Adolesce | nt Health 1995-1996. | | | |

| | Severe Depression | | Suicide Ideation ^a | | Suicide Attempt ^a | |
|------------------------------------|---------------------|----------------------|-------------------------------|----------------------|------------------------------|-----------------|
| | Model I | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
| Relationship inauthenticity | 07 | 05 | 16 | 34 | .38 | .05 |
| | (.14) | (.17) | (.13) | (.18) | (.26) | (.36) |
| Relationship script length | | 02 | | 04 | | 05 |
| | | (.05) | | (.04) | | (.09) |
| Time to relationship | | .01 | | .00 | | .01 |
| | | (10.) | | (10.) | | (.02) |
| "Special romantic" relationship | | .35 | | 09 | | .18 |
| | | (.33) | | (.42) | | (.83) |
| Older partner | | .20 | | 16 | | -1.92 |
| • | | (.37) | | (.47) | | (1.24) |
| Younger partner | | .51 | | .60* | | .53 |
| - ' | | (.29) | | (.24) | | (.58) |
| Ongoing relationship | | .12 | | 40 | | 94 [°] |
| | | (.28) | | (.26) | | (.52) |
| Sexual intercourse in relationship | | .49 | | 11 | | .53 |
| · | | (.30) | | (.29) | | (.59) |
| Psychological abuse | | .10 | | 16 | | .12 |
| , | | (.23) | | (.31) | | (.48) |
| Physical abuse | | .74** | | `.17 [′] | | 32 [°] |
| , | | (.28) | | (.40) | | (.58) |
| Lagged dependent variable | 1.51*** | ì.53 [*] ** | 1.80*** | ì.90 [*] ** | 3.87*** | 3.96*** |
| • | (.25) | (.26) | (.20) | (.24) | (.65) | (.68) |
| Intercept | -4 .16** | -4.04* | _l.33 [°] | .45 | -2.67 | `.H´ |
| • | (1.56) | (1.73) | (1.78) | (1.84) | (2.96) | (3.48) |

Note: All models control for age, race-ethnicity, one-parent household, socioeconomic status, parental attachment, school connectedness, religiosity, ideal script length, prior sexual intercourse, body-mass index, violent victimization, mental health treatment, and relationship hazard. Standard errors are in parentheses.

(Table 3) test the association between romantic relationship inauthenticity and girls' suicide attempt. In addition to individual characteristics, models of suicide ideation and suicide attempt control for prior severe depression, binary variables indicating friends' and family members' suicidal behavior, and prior suicide ideation or suicide attempt. Focusing on girls' suicide ideation in Model 3, romantic relationship inauthenticity is positively and significantly associated with the logodds of suicide ideation. When relationship characteristics are introduced in Model 4, the coefficient for romantic relationship inauthenticity slightly increases in magnitude and remains significant. Based on results from Model 4, a one standard deviation increase in romantic relationship inauthenticity is associated with a 21 percent increase in the odds of suicide ideation.

Turning to models of girls' suicide attempt (Models 5 and 6 in Table 3), I find that romantic relationship inauthenticity is positively and significantly associated with the log-odds of suicide attempt. When relationship characteristics are introduced in Model 6, the coefficient for romantic relationship inauthenticity increases in magnitude and remains significant. Results from Model 6 indicate a one standard deviation increase in romantic relationship inauthenticity is associated with a 30 percent increase in the odds of attempting suicide among girls. Girls' predicted probabilities of severe depression, suicide ideation, and suicide attempt across levels of romantic relationship inauthenticity are displayed in Figure 1.

^aModels control for prior severe depression and suicidal behavior of family members and friends.

^{*}p < .05, **p < .01, ***p < .001 (two-tailed tests).

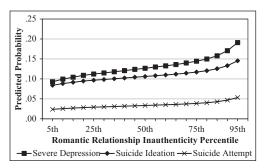


Figure 1. Predicted Probability of Girls' Severe Depression, Suicide Ideation, and Suicide Attempt by Romantic Relationship Inauthenticity. *Note*: All other independent variables are held at their means.

Relationship Inauthenticity and Boys' Mental Health

Table 4 examines the association between romantic relationship inauthenticity and boys' mental health. Turning to results for severe depression in Model 1 in Table 4, I find no significant association between romantic relationship inauthenticity and severe depression. The association between romantic relationship inauthenticity and boys' severe depression remains nonsignificant upon introducing romantic relationship characteristics in Model 2.

Table 4 also displays models testing the association between relationship inauthenticity and boys' suicide ideation (Models 3 and 4) and suicide attempt (Models 5 and 6). These models include all relevant individual controls, prior severe depression, and variables capturing friend and family members' suicidal behavior. Turning to results for boys' suicide ideation, I find no significant association between romantic relationship and the log-odds of suicide ideation in Model 3. After introducing relationship characteristics in Model 4, the coefficient for the romantic relationship inauthenticity remains nonsignificant. Models 5 and 6 (Table 4) examine the association between romantic relationship inauthenticity and boys' suicide attempt. Again, I find no significant association between romantic relationship inauthenticity and the log-odds of suicide ideation in Model 5. The coefficient representing the effect of romantic relationship inauthenticity on boys' log-odds of suicide remains nonsignificant in Model 6 after introducing relationship characteristics.

DISCUSSION

This study contributes to the literature on gender, identity, romantic relationships, and mental health.

Previous research highlights the mental health consequences of early romantic involvement. However, most of this prior work centers on more noteworthy events, such as sexual activity, partner aggression, and break-ups. Integrating theories of culture and identity, I examine the mental health consequences of adolescent romantic relationship inauthenticity—conceptualized as the extent to which the ordering relationship events diverge from the idealized relationship scripts. This study demonstrates that romantic relationship inauthenticity is tied to key dimensions of psychological well-being, but only among girls.

I found that girls are at greater risk of severe depression, suicide ideation, and suicide attempt as their relationships diverge from their ideal scripts. Conversely, I found no evidence that romantic relationship inauthenticity contributes to poor mental health among boys. These findings reflect past work suggesting that girls are at greater risk for the adverse effects of romantic involvement than are boys.

More generally, these results point to the importance of relationship progressions in determining how romantic involvement affects mental health. While I do not intend to downplay the significance of partner aggression and early and/or unwanted sexual activity for adolescent health, my study suggests that a more holistic approach to early romances—one attuned to culture and relationship progressions—provides novel insights into how romantic involvement potentially harms adolescent mental health.

I also integrate sociological theories of culture and identity to specify how romantic relationship inauthenticity influences mental health. Drawing from Swidler (1986), I suggest that romantic relationship inauthenticity is usefully conceptualized as the extent to which behavior within romantic relationships diverges from how relationships would ideally unfold. Noting Swidler's (2001) work on culture and identity, I further argue that romantic scripts are important components of adolescents' emerging identities. Increasing romantic involvement throughout adolescence, coupled with the novelty of romantic roles for youth, suggests that romantic relationships are central to the lives of young people. Thus, verifying romantic roles becomes most closely tied to mental health during adolescence. The amplified importance of interpersonal relationships for girls may mean that verification of romantic roles is more intimately tied to the psychological well-being of girls compared with boys.

I also contribute to the sociology of identity by addressing the link between cultural scripts and roleidentity performance. The vast majority of research grounded in identity accumulation theory focuses on role occupation and psychological well-being (Thoits 2013). The mental health consequences of inadequate role-identity performances have been overlooked in empirical tests of the theory. My findings reflect past research suggesting that scripts pertaining to romantic and sexual behavior detail meaningful strategies of action that, when enacted, allow individuals to adequately perform idealized role-identities (Cornwell and Laumann 2011; Kornrich et al. 2013; Thoits 2013). Conversely, failing to enact idealized romantic relationship scripts contributes to poor mental health among girls. Specifying how cultural scripts are implicated in role-identity performances highlights new linkages between role-identities and mental health. Future research that measures ideal scripts related to other role-identities (e.g., parent, worker, etc.) may help us understand how enacting ideal sequences of action relates to other identities and mental health.

This study opens other avenues for future research on identity, culture, and health. For better or worse, cultural scripts present individuals with means to constitute and verify salient components of self. For instance, some "player" scripts entail behavior that verifies esteemed identities but jeopardizes physical health (e.g., concurrent sexual partnering). In addition, such scripts involve "playing" partners and most likely necessitate some level of romantic relationship inauthenticity for female partners. Enacting "player" scripts therefore increases the risk of adverse outcomes for both partners. Related, certain scripts may be more developmentally optimal in the sense that their enactment enhances mental health—perhaps by facilitating intimacy in the relationship—even if the script diverges from the event trajectory of one's ideal script. In such cases, certain qualities of relationship scripts may mitigate the adverse effects of relationship inauthenticity. Focusing on the health consequences of enacting particular relationship sequences will provide new insight into the link between identity, relationship scripts, and health. Additionally, examining contextual variation in particular scripts may provide more insight into the link between culture, identity, and mental health across populations. Research focusing on the social precursors of relationship inauthenticity will enhance the understanding of why certain individuals experience more relationship inauthenticity than do others.

Future research would also do well to further examine variation in the association between romantic relationship inauthenticity and mental health. For instance, I hypothesized that girls would be more adversely affected by romantic relationship inauthenticity because of the heightened salience of romantic role-identities among girls. Studies that operationalize romantic role-identity salience will likely advance the understanding of why romantic relationship inauthenticity appears to strongly influence girls' mental health. Related, romantic involvement leads in a reconfiguration of individuals' existing role-identity hierarchies. This process may not unfold in the same manner for boys and girls. For instance, other role-identities (e.g., friend, athlete, etc.) may become increasingly less salient for girls upon entering into romantic relationships when compared with boys. As a result, girls' mental health may be increasingly tied to competent performance of the romantic partner role-identity. Conversely, inadequate performance of the romantic partner role may be less psychologically damaging for boys because the romantic role is less salient in their identity hierarchies. Future research focusing on gender and romantic role-identity salience may shed light onto why romantic involvement tends to be more strongly associated with mental health among girls than boys (see Joyner and Udry 2000).

Subsequent work would also do well to examine variation in the content and ideal ordering of relationship scripts across divergent social contexts. Because culture is relational, the events that are incorporated into ideal romantic scripts vary across societies (Schalet 2011). Therefore, the relevance of particular relationship activities (e.g., gift exchange, sexual activity) within ideal scripts likely varies across cultures. How relationship inauthenticity affects mental health also depends on larger cultural contexts in which adolescents are embedded. For instance, relationship inauthenticity may be less harmful when romantic involvement is a less salient role-identity among youth. At the same time, heterogeneity in ideal romantic scripts likely varies across contexts. For example, ideal relationship scripts may be more homogeneous within societies characterized by more uniform relationship progressions (e.g., societies with high rates of arranged marriage). The mental health consequences of relationship inauthenticity in turn may depend on the extent of behavioral and cultural heterogeneity across societies. Comparative research focusing on such issues may provide key

insights into contextual variation in the consequences of relationship inauthenticity. ¹¹

As with all studies I must address multiple study limitations. For boys, externalizing behaviors (e.g., aggression, substance use, etc.) may be more common reactions to disrupted identity performances (Rosenfield and Mouzon 2013). Thus, the null associations between romantic relationship inauthenticity and boys' mental health found in this study may reflect gendered reactions to relationship inauthenticity. To rule out this explanation, I ran parallel models of delinquency (violent and nonviolent forms) and numerous substance use behaviors (results not displayed). Relationship inauthenticity was not associated with these additional outcomes for boys. Conversely, relationship inauthenticity was positively associated with cigarette smoking among girls. These supplementary models further suggest that relationship inauthenticity is strongly related to girls' mental and behavioral health.

I also should note that adolescence is a period of identity exploration (Erikson 1968). Idealized romantic relationships evolve, and the salience of the romantic role fluctuates within individuals throughout adolescence. Unfortunately, I was unable to measure respondents' ideal relationship scripts immediately prior to, or during, the first subsequent romantic relationship. Therefore, I could not measure changes in ideal scripts between wave 1 and relationship onset. My measure of relationship inauthenticity may thus fail to fully capture discordance between ideal scripts and actual relationships for respondents who changed scripts prior to relationship onset. However, I ran supplementary models in which I interacted relationship inauthenticity with the length of time between wave 1 and relationship onset. Negative coefficients on interaction parameters in these models would indicate that relationship inauthenticity matters more for individuals whose relationships started sooner after wave 1 than later. This in turn would suggest that respondents changed their scripts between the time of the first interview and relationship onset. Across these supplementary models, the association between relationship inauthenticity and mental health variables did not vary by this time span. Thus, it appears that the time lapse between wave 1 and relationship onset did not affect my results.

I also could not control for some factors that may confound the association between romantic relationship inauthenticity and mental health. For instance, while partner aggression and sexual activity were controlled, I could not assess infidelity.

Infidelity and inauthenticity could share common causes and confound one another's association with mental health. I also could not take into account the time span between relationship events, as this information was not measured in Add Health. It may be that relationship inauthenticity is more damaging to mental health when it involves sexual activity that occurs early in relationships, regardless of its relative ordering in actual or ideal relationship scripts. To help ensure that the association between relationship inauthenticity and mental health does not depend on the timing of sexual activity in the relationship, I re-ran models with relationship inauthenticity interacted with a continuous measure of the time (in days) to sexual intercourse in the relationship (which equals the length of the relationship if sexual intercourse has not occurred). I did not find that the association between relationship inauthenticity and the outcomes varied according to the timing to sexual intercourse for boys or girls. That said, future studies that capture more detailed information on relationship dynamics (e.g., date of relationship events, infidelity, etc.) may help assess the relative effects of romantic relationship inauthenticity on adolescent mental health. Additionally, prospective accounts capturing adolescents' mental well-being as romances unfold may provide further insight into why girls appear to be more adversely affected by relationship authenticity than are boys.

When inauthentic relationships end, it may be especially harmful to mental health. To address this possibility, I ran supplementary models of mental health that included interactions between inauthenticity and a binary variable indicating whether the relationship is ongoing (1 = yes). Across these models I found no evidence that the association between relationship inauthenticity varied according to relationship status.

Despite these limitations, my study makes novel contributions to the understanding of romantic involvement and adolescent mental health. Romantic relationships are relevant to adolescent mental health for a number of reasons. One important, yet often overlooked aspect of youth romances is the importance of cultural scripts in romantic role-identity performances. Adolescents use scripts to guide actions within various contexts. Perhaps as important, youth rely upon scripts to affirm salient identities. My study suggests that enacting cultural scripts within romantic relationships is vital to identity processes and girls' subsequent mental health. In the end, enacting romantic scripts may be more closely related to mental health than is commonly assumed.

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NOTES

- Respondents who failed to indicate the onset date
 of any relationship were excluded as it is unknown
 whether their relationships started prior to wave
 As an empirical check, I re-ran analyses that
 included respondents with missing onset dates
 if the relationship was ongoing at the time of the
 wave 2 interview, the onset year was nonmissing
 and occurred during or after the year of the wave
 I interview, or the end date occurred after wave 1.
 Results from those models were nearly identical to
 those presented here.
- 2. Perreria et al.'s (2005) abbreviated CES-D scale demonstrates improved psychometric properties across racial-ethnic groups compared with the full scale. As an empirical check, I ran an analysis based on another depression measure that includes 19 of the original items. Results from those models were nearly identical to those presented here.
- Generally, respondents in my study had worse mental health compared with the entire sample. My sample only includes respondents who formed a new romantic relationship between waves. Thus, differences in mental health between my sample and the entire Add Health sample are perhaps expected, as romantic involvement is associated with depression among some adolescents (Joyner and Udry 2000).
- 4. Respondents were not asked the dates of suicide ideation or suicide attempts. Therefore, I am unable to determine whether suicide ideation/attempts followed experiences with relationship inauthenticity. To address the possibility of reverse causality, I regressed relationship inauthenticity on suicide ideation and suicide attempt prior to wave 1 (not displayed). These variables were not associated with relationship inauthenticity and the associations did not vary by gender, suggesting that neither suicide attempt nor ideation predicts later relationship inauthenticity.
- 5. I focus on both relationship types for two reasons. First, every "liked" relationship has/once had the potential to become a "special" relationship. Second, relationships once thought of as "special" romantic relationships may be reinterpreted as "liked" relationships, especially for inauthentic relationships. Excluding "liked" romantic relationships may thus bias my results toward the null. That said, the vast majority of relationships in this study are special relationships.
- The ordering of combined items is based on the order of the first of the two combined events. For instance, if "saying I love you" was event 3 and

- being told "I love you" was event 6, then "professed love to each other" was coded event 3.
- Numerous respondents reported more than 1 relationship after wave 1. As an empirical check, I reran analyses based on the most recent relationship (results not displayed). Results from those models were nearly identical to those presented here.
- Detailed information on OM procedures and substitution costs are provided in an online appendix (available at http://hsb.sagepub.com/supplemental).
- 9. Transition probabilities for relationship items likely vary by gender. For instance, given prevailing sexual double standards within adolescent contexts (Kreager and Staff 2009), boys may prefer that sexual intercourse occur earlier in relationships than do girls. To help ensure that my results were not biased by relying on transition probabilities derived from a pooled sample of boys and girls, I constructed gender-specific measures of relationship inauthenticity. This involved estimating gender-specific substitution cost matrices and re-running OM procedures based on this alternative cost specification. Results from models of mental health based on gender-specific measures of relationship inauthenticity were nearly identical to those presented here.
- Descriptions of variables used in the selection model and selection model results are provided in an online appendix (available at http://hsb.sagepub .com/supplemental).
- I thank the editor for suggesting the importance of comparative approaches to understanding the health consequences of relationship inauthenticity.

REFERENCES

- Abbott, Andrew and Angela Tsay. 2000. "Sequence Analysis and Optimal Matching Methods in Sociology Review and Prospect." Sociological Methods & Research 29(1):3–33.
- Anderson, Elijah. 1989. "Sex Codes and Family Life Among Poor Inner-city Youths." Annals of the American Academy of Political and Social Science 501(1):59–78.
- Arnett, Jeffrey Jensen. 1999. "Adolescent Storm and Stress, Reconsidered." American Psychologist 54(5):317–26.
- Chantala, Kim. 2006. *Guidelines for Analyzing Add Health Data*. Chapel Hill, NC: Carolina Population Center, University of North Carolina.
- Collins, W. Andrew. 2003. "More Than Myth: The Developmental Significance of Romantic Relationships During Adolescence." Journal of Research on Adolescence 13(1):1–24.
- Collins, W. Andrew, Deborah P. Welsh, and Wyndol Furman. 2009. "Adolescent Romantic Relationships." Annual Review of Psychology 60(1):631–52.
- Cornwell, Benjamin and Edward O. Laumann. 2011. "Network Position and Sexual Dysfunction:

- Implications of Partner Betweenness for Men." *American Journal of Sociology* 117(1):172–208.
- Costello, E. Jane, Alaattin Erkanli, and Adrian Angold. 2006. "Is There an Epidemic of Child or Adolescent Depression?" Journal of Child Psychology and Psychiatry 47(12):1263–71.
- Cross, Susan E. and Laura Madson. 1997. "Models of the Self: Self-construals and Gender." *Psychological Bulletin* 122(1):5–37.
- Eder, Donna, Catherine C. Evans, and Stephen Parker. 1995. School Talk: Gender and Adolescent Culture. New Brunswick, NJ: Rutgers University Press.
- Erikson, Erik H. 1968. *Identity: Youth and Crisis*. New York, NY: W.W. Norton.
- Exner-Cortens, Deinera, John Eckenrode, and Emily Rothman. 2013. "Longitudinal Associations Between Teen Dating Violence Victimization and Adverse Health Outcomes." *Pediatrics* 131(1):71–78.
- Frisco, Michelle L., Jason N. Houle, and Molly A. Martin. 2010. "The Image in the Mirror and the Number on the Scale: Weight Perceptions, and Adolescent Depressive Symptoms." *Journal of Health and Social Behavior* 51(2):215–28.
- Gabadinho, Alexis, Gilbert Ritschard, Nicolas S. Müller, and Matthias Studer. 2011. "Analyzing and Visualizing State Sequences in R with TraMineR." *Journal of Statistical Software* 40:1–37.
- Germanotta, Stefani and Nadir Khayat. 2009. "Caught in a Bad Romance" [Recorded by Lady Gaga]. Los Angeles, CA: Interscope.
- Giordano, Peggy C., Robert A. Lonardo, Wendy D. Manning, and Monica A. Longmore. 2010. "Adolescent Romance and Delinquency: A Further Exploration of Hirschi's 'Cold and Brittle' Relationships Hypothesis." Criminology 48(4):919–46.
- Giordano, Peggy C., Wendy D. Manning, and Monica A. Longmore. 2006. "Adolescent Romantic Relationships: An Emerging Portrait of Their Nature and Developmental Significance." Pp. 127–50 in Romance and Sex in Adolescence and Emerging Adulthood: Risks and Opportunities, edited by A. C. Crouter and A. Booth. Mahwah, NJ: Erlbaum.
- Hallfors, Denise D., Martha W. Waller, Daniel Bauer, Carol A. Ford, and Carolyn T. Halpern. 2005. "Which Comes First in Adolescence—Sex and Drugs or Depression?" *American Journal of Preventive Medicine* 29(3):163–70.
- Harding, David J. 2007. "Cultural Context, Sexual Behavior, and Romantic Relationships in Disadvantaged Neighborhoods." American Sociological Review 72(3):341–64.
- Harter, Susan. 1999. The Construction of the Self: A Developmental Perspective. New York: Guilford Press.
- Haynie, Dana L., Scott J. South, and Sunita Bose. 2006. "Residential Mobility and Attempted Suicide among Adolescents: An Individual-level Analysis." Sociological Quarterly 47(4):693–721.
- Heckman, James J. 1976. "The Common Structure of Statistical Models of Truncation, Sample Selection

- and Limited Dependent Variables and a Simple Estimator for Such Models." *Annals of Economic and Social Measurement* 5(4):475–92.
- Impett, Emily A., Deborah Schooler, and Deborah L. Tolman. 2006. "To Be Seen and Not Heard: Femininity Ideology and Adolescent Girls' Sexual Health." Archives of Sexual Behavior 35(2):129–42.
- Impett, Emily A., Lynn Sorsoli, Deborah Schooler, James M. Henson, and Deborah L. Tolman. 2008. "Girls' Relationship Authenticity and Self-esteem Across Adolescence." *Developmental Psychology* 44(3):722–33.
- Joyner, Kara and J. Richard Udry. 2000. "You Don't Bring Me Anything but Down: Adolescent Romance and Depression." *Journal of Health and Social* Behavior 41(4):369–91.
- Kornrich, Sabino, Julie Brines, and Katrina Leupp. 2013. "Egalitarianism, Housework, and Sexual Frequency in Marriage." *American Sociological Review* 78(1):26–50.
- Kreager, Derek A. and Jeremy Staff. 2009. "The Sexual Double Standard and Adolescent Peer Acceptance." Social Psychology Quarterly 72:143–64.
- Maimon, David and Danielle C. Kuhl. 2008. "Social Control and Youth Suicidality: Situating Durkheim's Ideas in a Multilevel Framework." American Sociological Review 73(6):921–43.
- Markus, Hazel R. and Shinobu Kitayama. 1991. "Culture and the Self: Implications for Cognition, Emotion, and Motivation." *Psychological Review* 98(2):224–53.
- McCarthy, Bill and Teresa Casey. 2008. "Love, Sex, and Crime: Adolescent Romantic Relationships and Offending." *American Sociological Review* 73(6):944–69.
- Meier, A. 2007. "Adolescent First Sex and Subsequent Mental Health." American Journal of Sociology 112(8):1811–47.
- Pascoe, C. J. 2007. Dude, You're a Fag: Masculinity and Sexuality in High School. Berkeley, CA: University of California Press.
- Perreira, Krista M., Natalia Deeb-Sossa, Kathleen Mullan Harris, and Kenneth Bollen. 2005. "What Are We Measuring? An Evaluation of the CES-D Across Race/Ethnicity and Immigrant Generation." Social Forces 83(4):1567–601.
- Radloff, Lenore Sawyer. 1977. "The CES-D Scale."

 Applied Psychological Measurement 1(3): 385-401.
- Resnick, Michael D., Peter S. Bearman, Robert W. Blum, Karl E. Bauman, Kathleen M. Harris, Jo Jones, Joyce Tabor, Trisha Beuhring, Renee E. Sieving, Marcia Shew, Marjorie Ireland, Linda H. Bearinger, and J. Richard Udry. 1997. "Protecting Adolescents from Harm: Findings from the National Longitudinal Study on Adolescent Health." *Journal of the American Medical Association* 278(10): 823–32.
- Roberts, Robert E., Peter M. Lewinsohn, and John R. Seeley. 1991. "Screening for Adolescent Depression:

- A Comparison of Depression Scales." *Journal of the American Academy of Child & Adolescent Psychiatry* 30(1):58–66.
- Rosenfield, Sarah and Dawne Mouzon. 2013. "Gender and Mental Health." Pp. 277–96 in *Handbook of the Sociology of Mental Health*, edited by C. S. Aneshensel, J. C. Phaelan, and A. Bierman. New York, NY: Springer.
- Royston, Patrick. 2004. "Multiple Imputation of Missing Values." *Stata Journal* 4(3):227–41.
- Schalet, Amy T. 2011. Not under My Roof: Parents, Teens, and the Culture of Sex. Chicago, IL: University of Chicago Press.
- Simon, Robin W. and Anne E. Barrett. 2010. "Nonmarital Romantic Relationships and Mental Health in Early Adulthood: Does the Association Differ for Women and Men?" *Journal of Health and Social Behavior* 51(2):168–82.
- Simons, Ronald L. and Ashley B. Barr. (2012). "Shifting Perspectives: Cognitive Changes Mediate the Impact of Romantic Relationships on Desistance from Crime." Justice Quarterly 1–29 iFirst article.
- Swidler, Ann. 1986. "Culture in Action: Symbols and Strategies." American Sociological Review 51(2):273–86.
- Swidler, Ann. 2001. *Talk of Love: How Culture Matters*. Chicago, IL: University of Chicago Press.

- Thoits, Peggy A. 1991. "On Merging Identity Theory and Stress Research." Social Psychology Quarterly 54(2):101–12.
- Thoits, Peggy A. 2013. "Self, Identity, Stress, and Mental Health." Pp. 357–77 in Handbook of the Sociology of Mental Health, Handbooks of Sociology and Social Research, edited by C. S. Aneshensel, J. C. Phelan, and A. Bierman. New York, NY: Springer.
- Warren, Jocelyn T., S. Marie Harvey, and Jillian T. Henderson. 2010. "Do Depression and Low Selfesteem Follow Abortion Among Adolescents? Evidence from a National Study." *Perspectives on Sexual and Reproductive Health* 42(4):230–35.

AUTHOR BIOGRAPHY

Brian Soller is an assistant professor of sociology and a senior fellow of the Robert Wood Johnson Foundation Center for Health Policy at the University of New Mexico. His research examines how social network and cultural processes influence adolescent health and developmental outcomes. His recent publications have appeared in *Journal of Youth and Adolescence, Sociological Inquiry*, and *Journal of Health and Social Behavior*.



Corrigendum

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