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Unpacking the Role of Conflict in Peer Relationships: Implications for Peer Deviance and Crime

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Abstract

Although criminologists have long recognized the role that peers play in crime, the specific mechanisms responsible for this relationship have been difficult to isolate. Drawing from the perspectives of differential coercion and social support and differential association, we examine how one type of coercion among friends – conflict – moderates the peer deviance/crime relationship. Using dyadic data, greater levels of conflict are related to higher levels of deviance and conflict weakens the peer deviance–crime relationship. Overall, conflict plays a dual role by relating to higher amounts of deviance while jointly reducing the influence of peer deviance on crime.

Introduction

Sociologists, social psychologists, and criminologists have long understood that the behavior of one's friends is considerably important for the behavior of the individual. Drawing on precedent established by the Chicago School (e.g., Shaw 1930), peers have become a central concept of both criminological theory (e.g., Sutherland 1947) and research (e.g., McGloin and Piquero 2010) alike. However, while it is well established that peer deviance is related to an individual's deviance (see Pratt and Cullen 2000; Pratt et al. 2010), scholars have highlighted that much less is known concerning how, why, and when friends exert the strongest influence on behavior (e.g., Warr 2002). As Warr and Stafford (1991, p. 851) suggest, "Although the association between delinquent friends and delinquent behavior is well established, the mechanisms by which delinquency is socially transmitted remains unclear." Considering the solutions to this issue have remained quite elusive, criminologists find themselves in the position where we continue to work toward understanding the specific "mechanisms" by which peers matter over two decades after this statement was made.

Despite the need for additional research on the relationship between friends and crime, theoretical traditions in criminology have readily accepted that peers are influential for

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criminal behavior (see Agnew 1991). As a result of this recognition, many theories have moved toward incorporating elements from differential association (Sutherland 1947) and/or social learning (Burgess and Akers 1966) theories. Among many other theories (e.g., interactional (Thornberry 1987), general strain (Agnew 2006), and deterrence (Stafford and Warr 1993)), differential coercion and social support (DCSS) theory is well equipped to explain how friends may impact criminal behavior. Informed through the work of Cullen (1994) and Colvin (2000), DCSS theory – popularized and refined by Colvin, Cullen, and Vander Ven (2002) – generally hypothesizes that elements of both social support (a positive influence) and coercion (a negative influence) relate to crime. In the context of peers, social support refers to the positive ways through which peers may influence crime. Social support is a protective factor. Coercion, on the other hand, refers to “a force that compels or intimidates an individual to act because of the fear or anxiety it creates” (Colvin, Cullen, and Vander Ven 2002, p. 19). Thus, as a theoretical orientation, DCSS recognizes that both positive and negative influences can coexist within any social relationship and that deviance can be restrained through support and incited through coercion (see Colvin, Cullen, and Vander Ven 2002; also Cullen 1994; Colvin 2000).

Key to this study is DCSS’s compatibility with Sutherland’s (1947) differential association theory and the extension of differential association theory by Burgess and Akers (1966). Briefly, Sutherland’s theory focuses on how the behaviors of differential associates, who most of the time are “peers” and/or “friends” (see an important note on the difference in terminology by Kreager 2004), are learned and imitated. The extent to which behavior is transmitted within Sutherland’s theory varies across the extent to which one feels the relationship is intense, how long it has lasted, the frequency of contact, and whether it was one of the first meaningful relationships the person has had (see Sutherland 1947, pp. 6–7). As DCSS recognizes the importance of friends while also making claims as to how social support and coercion could influence crime, it very much fits into the classification of being an integrated theoretical concept (see Thornberry 1987).

Drawing from both DCSS (Colvin, Cullen, and Vander Ven 2002) and differential association (Sutherland 1947) theories, the current study broadly positions itself into a recent body of literature (e.g., see McGloin and Piquero 2010; McGloin and Thomas 2016; Turanovic and Young 2016), seeking not to understand “if,” but rather “how, why, and when,” peers are the most influential for criminal behavior. Specifically, we explore whether the coercion element – defined by both Colvin and colleagues (2002) and this study as interpersonal conflict – of DCSS theory has a direct relationship with crime or whether it moderates the peer deviance–crime relationship. Using data from a large sample of friendship pairs, we test these research questions using estimates of conflict from both members of the friendship pair.

Conflict, friends, and peer deviance

Drawing on different theoretical traditions, many studies have sought to explore how friends and peers are influential for crime. To name only a few of the important findings in this arena, it has been discovered that unstructured time with friends leads to higher levels of crime (Osgood and Anderson 2004; also see McNeeley and Hoebe 2017) and having best

friends who commit crime make a person more criminal (Weerman and Smeenk 2005). Research has also shown that individuals befriend those with both deviant and normative behavioral histories (Haynie 2001, 2002; Haynie and Osgood 2005), friends co-offend with some frequency (e.g., McGloin and Nguyen 2012; also see Reid 2017), and people do not select into friendships because of personal traits (Boman 2017; Young 2011; cf. McGloin and Shermer 2009; Vogel and Keith 2015). Additionally, characteristics such as self-control (Meldrum, Young, and Weerman 2009), friendship quality (Boman et al. 2012), and homophily (Turanovic and Young 2016) have been found to change our understanding of the peer deviance–crime relationship. Collectively, these findings and those like them have dramatically progressed research on friends and crime and have helped to develop a comprehensive viewpoint as to *why* friends matter for crime rather than simply *if* friends matter (see Warr 2002).

Despite advances from this literature, DCSS theory has been tested irregularly and infrequently in the context of peers and/or friends and crime. In a relatively complete test of DCSS theory, Unnever and colleagues (2004) found that several distinct elements stemming from parents, neighborhoods, and schools were related to deviant behavior. However, and importantly for this project, they found that coercive peer relationships – measured primarily through bullying – were unrelated to deviant involvement. Studying men who were returning home from prison, Listwan and colleagues (2010) examined whether coercion – captured by a scale combining witnessed victimization with items tapping the threat of the prison environment – related to mental health outcomes during reentry. The authors concluded that coercion was indeed related to poorer psychological well-being for persons who were returning home. Similarly, in a pair of exhaustive tests, Baron (2009, 2015) concluded that coercion was related to higher amounts of violence (2009), car theft, burglary, and drug dealing (2015). As such, research supports the overall notion that coercion does indeed produce deleterious outcomes even though some research finds no such effect (Unnever, Colvin, and Cullen 2004).

Regardless of the extent to which coercion is effective in research, it has been measured in different ways. It is likely that part of the reason for this lies in the intentionally broad definition by Colvin and colleagues (2002, p. 19). Using five different measures capturing coercion across various life domains, one of the more exhaustive means of capturing coercion was done by Baron (2009; also see Zavala and Kurtz 2016). Specifically, coercion consisted of (1) physical abuse, (2) street victimization, (3) welfare, (4) incarceration experiences, and (5) homelessness. And while other authors use similar, albeit slightly narrower, definitions of coercion (e.g., Baron 2015; Listwan et al. 2010; Unnever, Colvin, and Cullen 2004; see the discussion of Brezina and Azimi 2017), these operational methods all stay true to the theoretical underpinnings behind Colvin's (2000) theory. Beyond extant research, however, it is quite noteworthy that many more ways of defining coercion exist, meaning only a portion of the theory's potential has been explored in research.

Considering the overall lack of research on coercion in friendship-focused studies, it is fair to say that DCSS has been underused as a theoretical mechanism through which to examine how peers could influence deviance. Although many types of behaviors could be considered coercive and the theory is certainly complex in nature, the theory is manageably written and

carries the distinct advantage of offering a theoretical understanding of how a wide variety of supportive and coercive types of peer behaviors and peer relationships can impact crime. Stated differently, DCSS theory has the ability to offer knowledge on how a person's friends might influence crime in different ways based on the good (supportive) and bad (coercive) elements of the relationship.

At the most fundamental level, friendships can be both warm and close and, to borrow a term from Hirschi (1969, p. 141), "cold and brittle." Despite Hirschi's expectations, research has found that friendships where persons are deviant are warm, close, and supportive. At the same time, though, these same relationships are also full of conflict. In a study of adolescents, Giordano et al. (2010) found that deviant friendships tended to be marked by both high levels of support as well as levels of conflict. In another study examining peer relationships in emerging adulthood, Boman et al. (2013) also find that high levels of deviance were present in the most conflictual friendships. As such, research paints a complex picture as to the nature of conflict and closeness within friendships as it appears that the two elements may often co-exist in the context of deviance.

This observation brings attention back to the contributions from DCSS and differential association theory. While DCSS would presume that coercive, conflictual friendships should directly lead to crime (a point which is quite in line with Hirschi 1969), the compatible concept of differential association would view the coercive element of conflict as something that might impact the extent to which peer deviance relates to criminal involvement. More specifically, Sutherland would view conflict as being an element which would certainly reduce, or moderate, the intensity – and potentially even the frequency, duration, and priority – of the friendship. Since definitions favorable to crime can come from anyone, the behavior of friends with whom a person shares high levels of conflict would, per differential association, be less influential for his/her own behavior.

Although both differential association and DCSS are directly compatible with one another by suggesting that conflict among friends should relate to behavior, they disagree on the direction that conflict should have on offending. To DCSS, the effect of conflict should be direct so that those with conflictual relationships are more likely to commit criminal behavior (a direct effect). This is because conflict, as a coercive force, should incite crime and deviance. In contrast, differential association would suggest that high levels of conflict would reduce the extent to which a friend's deviant criminal behavior would influence a person's crime (a moderating effect). The goal of this study is to help address this juxtaposition between each theory by examining the direct and indirect roles of conflict within a friendship on deviant behaviors.

Current study

Using a large dataset consisting of individuals nested within self-identified friendships, this study explores the extent to which DCSS and differential association collectively contribute to the understanding of how conflict relates to crime. We examine three specific research questions. First, does the respondent's conflict with the friend and the friend's conflict with the respondent each independently relate to the respondent's delinquency? Drawing from

research demonstrating that deviant persons often have high levels of interpersonal conflict in their relationships (e.g., Boman et al. 2013; Giordano et al. 2010), we hypothesize (H1) that conflict estimates from both the respondent and the friend will relate to higher overall amounts of self-reported deviance.

Second, does the respondent's perceptions of conflict with the friend moderate the extent to which peer deviance relates to the respondent's deviant behavior? Differential association theory (Sutherland 1947) would premise that high levels of conflict should dampen the peer deviance–crime relationship (e.g., differential association). However, DCSS suggests the opposite. To DCSS, conflict within meaningful peer relationships should amplify the peer deviance effect because coercion exerts a powerful, deleterious effect on the individual (sharing similarities with general strain theory, see Colvin, Cullen, and Vander Ven 2002). Thus, drawing from DCSS, we hypothesize that (H2) higher levels of conflict with the friend will amplify the magnitude of peer deviance on the respondent's deviance. In a similar vein, the third research question explores whether the friend's conflict with the respondent exacerbates the effect of peer deviance on crime. Again, placed within the context of DCSS, we expect (H3) that higher levels of friend conflict will further increase the effect of peer deviance on crime.

Because research has established that perceptions of peer deviance are consistently more strongly related to deviant behavior than measures of deviance gathered directly from the peer him/herself (e.g., Matsueda and Anderson 1998), we explore all three research questions using two different measures of peer deviance. First, we use the respondent's perception of the friend's deviance. Measures like this, which are often called “indirect” measures of peer deviance, are quite common in criminological research (see Boman and Gibson 2016; Meldrum and Boman 2013). The second variant replaces the perceptual measure with a scale of peer deviance that comes directly from the peer's self-reports. Referred to as a “direct” measure of peer deviance, this measure is less common and produces estimates of the peer deviance effect which some argue are more conservative (e.g., Young et al. 2014). Regardless of one's preference over which measure of peer deviance is most valid, the inclusion of both measures should provide for a comprehensive and thorough examination into the relationship between interpersonal conflict and peer deviance.

Methods

Data and sample

The data for this project come from a sample of persons nested within self-identified friendship pairs. The members of the friendship pairs, who are all undergraduate students enrolled in classes at a large university in the southern United States, were recruited from a list of the largest 50 classes offered at the university during the spring semester of 2009. To recruit participants, the principal investigator (PI) of the study acquired a list of the largest 50 classes offered at the university during the semester the data were to be collected. The instructor of each of the courses was contacted and asked if s/he would be interested in offering extra credit points to enrolled students for completing a study on friendships and behavior. A total of 24 instructors, who had class sizes ranging from as few as 50 to over

1,500 students and with a combined enrollment of over 5,000 persons, said they would allow the study to be taken for extra credit.

To recruit participants, the PI visited each class to tell the students several important procedural facts about the study and extra credit opportunity. First, each person was asked to attend the study with one of his/her five best friends who were currently enrolled in undergraduate studies at the same school. There was no stipulation the friend had to be enrolled in any of the selected classes. Second, the PI explained to students that they would be compensated with extra credit for participation. The extra credit amounts to be awarded varied from class to class. Third, potential respondents were told that the study would be a paper-and-pencil survey and they could participate during set operating hours at the campus-based research center.

Upon arriving at the research center, respondents were entered into a secured database that was designed to make sure that no one participated in the study more than once. After providing informed consent, the friends were sent to separate locations within the research center and given surveys with a pre-coded dyadic identification number to link them together. The surveys were identical and asked questions about the person who was responding (called the “actor”), the friend of the respondent (the “friend”), and the friendship itself (see Kenny, Kashy, and Cook 2006; or Campbell and Kashy 2002; for a discussion on the “actor” and “friend” terminology). Included in these measures were markers of perceptual (indirect) and peer self-reported (direct) deviance, conflict, closeness, and demographics. In total, 2,154 persons who were nested within 1,077 friendship pairs participated in the study. Due to the large sampling frame, one in every five friends was in a selected course and, as a result, was compensated with extra credit.

Dependent variable

Actor’s Self-Reported Deviance.—The dependent variable in the study captures the self-reported prevalence of the actor’s involvement in self-reported deviance. The actor was asked to respond to 24 items which captured his/her participation in theft (5 items), vandalism (5 items), fighting (3 items), sexual assault (1 item), alcohol consumption (2 items), alcohol infractions (3 items), drug use (3 items), and drug sales (2 items) over the past 12 months. Drawing from the precedent set by Elliott and colleagues’ (1985) National Youth Survey, the original items were measured on a 9-point metric which captured the frequency to which the actor engaged in the deviant behavior (range: “never” to “two to three times a day”). Because the current study is concerned primarily with the prevalence of crime as opposed to the frequency of it, each item was dichotomized to indicate whether the actor refrained from (scored “0”) or engaged in the criminal act (scored “1”). After collapsing the frequencies, the 24 items were summed together to create a variety index of self-reported crime ($M = 4.862$, $SD = 3.648$, observed range 0–24). Descriptives are reported in Table 1.

Focal independent variables

Conflict within the friendship—Both dyad members were asked about the conflict they experienced with the person with whom they attended the study. To maximize on the amount

of information in the analysis, we include estimates of conflict from both the actor and the friend in the forthcoming models (see the next section on modeling strategy for how this is possible). Each survey asked the actor to report on conflict with the friend across four items: (1) I can get into fights with my friend; (2) My friend can annoy me even though I ask him/her not to; (3) My friend and I can argue a lot; and (4) My friend and I disagree about many things. These four items were adapted for use in the current study from the Friendship Qualities Scale (the FQS; Bukowski, Hoza, and Boivin 1994). Each item was measured on a 5-point, Likert-type scale where people indicated how true each statement was (1 = not true; 2 = mostly not true; 3 = somewhat true; 4 = mostly true; 5 = really true). To construct the scale, the item scores were summed to capture the actor's conflict with the friend as well as the friend's conflict with the actor. These measures, which share the same descriptive statistics due to the structure of the dyadic data file (see the next section of this study; also Campbell and Kashy 2002), have a mean of 9.347, a standard deviation of 3.503, and a range of 4–20. The items scale together consistently ($\alpha = .78$), and higher scores capture higher levels of conflict.

Perceptual peer deviance—The indirect, or perceptual, measure of peer deviance used in this study does not capture the proportion of one's friends who engage in crime. Instead, it captures the actor's perception of the deviant involvement of the one friend with whom he/she attended the study. Like the dependent variable, the index of *perceived peer deviance* has 24 items that capture the extent to which the actor believed his/her friend was involved in theft (5 items), vandalism (5 items), fighting (3 items), sexual assault (1 item), alcohol consumption (2 items), alcohol infractions (3 items), drug use (3 items), and drug sales (2 items) over the past 12 months. The items, which are again binary (0 = actor perceived behavior did not occur; 1 = actor perceived friend committed the behavior), were summed to create a variety index ($M = 3.805$; $SD = 3.400$; observed range 0–24).

Friend's self-reported deviance—Research has rather firmly established that perceptual measures of peer deviance represent different constructs than the peer's self-reported deviance (e.g., Warr and Stafford 1991). Further, reports of peer deviance gathered directly from friend self-reports also function differently in multivariate models (e.g., Young et al. 2014). The preference of which measure is most appropriate is somewhat subjective and bears upon the ongoing debate between perspectives of socialization and selection (e.g., Akers 2009; Hirschi and Gottfredson 1993). To satisfy both perspectives, this study uses a direct, or peer self-reported, measure of peer deviance in addition to the perceptual measure.

The friend's self-reported deviance consists of the same 24 items which were included in the dependent variable and the perceptual measure. Again, the items were collapsed so that scores of "1" indicate engaging in the behavior while scores of "0" indicate abstention from the behavior. Due to nesting in the data (again, the reader is referred to the next section), the measure shares the same descriptive statistics as the outcome ($M = 4.862$; $SD = 3.648$; observed range 0–24).

Control variables

Friendship closeness—The amount of conflict within the friendship may be partially contingent upon how close friends are to each other. As such, we control for the actor's and the friend's reports of how close they are to each other. To capture *friendship closeness*, each survey included five items which asked the actor to report if he/she felt (1) close to the friend and (2) happy when with the friend; if the actor (3) missed the friend when he/she is not around; (4) if the friend would be missed if he/she moved away; and (5) if the friend is happy when the actor does a good job at something. Like the items capturing conflict, the closeness measures come from Bukowski and colleagues' (1994) Friendship Qualities Scale. The items, which are measured on a 5-point metric (1 = not true; 2 = mostly not true; 3 = somewhat true; 4 = mostly true; 5 = really true), are scaled so that higher scores capture higher levels of closeness ($\alpha = .86$).

Finally, several demographic characteristics of the actor and the friend are also controlled. Specifically, we covary sex (males = 1; females = 0), age ($M = 19.339$; $SD = 1.433$; range 18–42), race (white = 0; non-white = 1), and whether the actor and friend were of Latino/a descent (1 = Latino; 0 = non-Latino). About 34% of the sample is male, 37% are non-white, and 19% are Latino/a.

Analytical strategy

The research questions in this study place considerable importance on the dyadic structure of the data by examining how characteristics of the actor and the friend may uniquely relate to crime. As such, a modeling strategy is needed that can account for how characteristics of two people may relate to the actor's behavior. To account for this, we employ an analytical technique designed for dyadic data analysis called actor-partner interdependence models (APIMs; see Kenny, Kashy, and Cook 2006).

APIMs constitute a diverse array of techniques that are contingent on how the data is structured. In order to capture distinct effects from both the actor and the friend, the data file is structured in a double-entry format. In this type of data structure, each dyad is represented on two lines of data. On the first line, Person A is treated as the target respondent (the actor). Following Person A's information, Person B's (the friend) information is inserted. As a result, this nests the data so that Person B is the friend whose behavior and characteristics may be important for the actor's behavior. The next line of data is similar, except that it treats Person B as the actor and nests Person A's data as the friend. The end result of this is a data file that is capable of using the maximum amount of information from the dyad members, thus allowing for the exploration into how the actor's and friend's behavior and characteristics may both relate to the actor's behavior (see Campbell and Kashy 2002; Kenny, Kashy, and Cook 2006).

While friends are different, friendships are also different. This produces the situation where there is variation both within friendships as well as between friendships. To account for these two sources of variance, the current study employs the use of a series of two-level mixed-effects models. In these models, the actor's self-reported deviance is regressed onto the focal independent variables (i.e., the actor's conflict, friend's conflict, and peer deviance)

and actor and friend control variables. All of these measures are level one indicators (see Kenny, Kashy, and Cook 2006). The level two equation contains no standalone variables. Instead, it groups the level one equation around each dyad's unique numerical identifier.

Two series of mixed models are estimated. In Model 1 of the first modeling series, the actor's behavior is regressed onto measures of the actor's conflict, the friend's conflict, and perceptual peer deviance. This is a main effects model. Model 2 introduces an interaction term between the actor's conflict and his/her perception of his/her peer's deviance. Finally, Model 3 removes this interaction term in favor of one that includes the friend's estimate of conflict with the indirect peer deviance measure. Model series two is similar, but replaces the perceptual measure of peer deviance with the peer's self-reported deviance.

Due to significant skewness in the outcome measure ($p < .001$), negative binomial mixed models are used (Poisson assumptions were violated because the outcome's variance was not approximately equal to its mean). All interaction terms were created based on grand mean centered main effect variables. Listwise deletion on minor amounts of missing data resulted in the removal of 203 dyads, resulting in a final sample size of 1,748 unique individuals nested within 874 friendship pairs.¹ All models were estimated in Stata v. 14.2.

Results

Preliminary findings

Prior to presenting results from multivariate APIM mixed models, we present some basic, but informative, findings relevant to the current research question. The distribution of conflict is relatively normal, although it does have a small right tail. Only 145 of the 1,748 actors reported no conflict with their friend (eight dyads contained persons who reported zero conflict with each other). As such, conflict is common within these friendships. Reports of conflict among the dyad members are also moderately related to each other ($r = .41, p < .001$), indicating some similarities in the way people perceive conflict with one another. The actor's conflict is positively related to higher levels of perceived peer deviance ($r = .13, p < .001$), self-reported peer deviance ($r = .10, p < .001$), and the actor's self-reported deviance (the dependent variable; $r = .13, p < .001$).

Multivariate results

Results from the first series of APIM mixed models, reported in Table 2, regress the actor's self-reported deviance variety index onto level one conflict variables, perceived peer deviance, and actor and friend controls while grouping around the dyad at level two. Model 1, which is the main effects model, demonstrates that neither the actor's nor friend's conflict shares a significant relationship with the actor's deviance. Higher amounts of perceived peer deviance, however, are significantly related to deviant behavior. Several control variables also reach statistical significance. Among the actor controls, lower levels of friendship

¹Using this version of Stata, multiple imputations are currently unsupported in the mixed effects negative binomial package. However, models were imputed using this package with a "force" option for multiple imputation (20 draws, Markov-Chain Monte Carlo). The forced imputation did not produce estimates that were in line with results from listwise models. To provide the most valid results, we report models using listwise deletion in this paper.

closeness are related to higher amounts of deviant involvement. Male actors and actors who report being of Latino/a descent are more likely to have offended. Interestingly, findings from the friend controls demonstrate that actors who have female friends are more likely to have offended. And while no significant effects are observed at level two, the model reaches high levels of statistical significance.

Model 2 reports results from a similar equation with the addition of an interaction term capturing the joint contribution of the actor's conflict and the peer's deviance on the actor's self-reported deviance. With covariates showing similar results to those in Model 1, this interaction term reaches statistical significance. The negative direction of the interaction suggests that when the actor perceives conflict within the relationship, the relationship between perceived peer deviance and self-reported deviance is significantly reduced.

The last model in Table 2, Model 3, replaces this interaction in favor of a term capturing the joint contribution of the friend's self-reported conflict and the actor's perception of the peer's deviance. Again, high levels of friend-reported conflict interact with peer deviance in a way that significantly reduces the relationship between the peer's deviance and the actor's self-reported deviant behavior.

A similar set of results to those in Table 2 are reported in Table 3. The key difference is that the models in Table 3 remove the perceptual peer deviance measure in favor of a measure of peer deviance which is self-reported. In Model 1, the actor's conflict reaches levels of statistical significance. Specifically, actors who estimate that they share more conflict with the friend commit significantly higher amounts of deviant behavior than those who report little conflict. This effect, however, is not replicated with the friend's conflict. The friend's self-reported deviant behavior is also significant in a positive direction, meaning actors who have deviant friends tend to be more deviant themselves. Controls from the actor portion of the model demonstrate that actors who report lower levels of closeness to the friend and are male, white, and of Latino/a descent are more likely to commit criminal behavior. Unlike the prior series of models, however, no friend controls reach statistical significance. Although no detectable differences in behavior are found at level two, Model 1 reaches high levels of statistical significance.

Model 2 in Table 3 adds an interaction between the actor's perceived conflict with the friend and the friend's self-reported deviance. Like in the prior models, this interaction reaches statistical significance, and the direction suggests that the relationship between the actor's behavior and the deviance of friends is weaker among actors who perceive high levels of conflict with the friend. However, this interaction is not replicated using the friend's conflict and the friend's self-reported deviance (Model 3).

Discussion and conclusions

Using data from a large sample of friendship pairs, the goal of the current study was to explore (1) the extent to which conflict within the friendship related to an individual's self-reported deviance and (2) to examine how conflict moderated the peer deviance–crime relationship. The first hypothesis, which premised that both the actor's and friend's conflict

estimates would relate to higher amounts of actor deviance, is partially supported. Results of bivariate analyses demonstrated a strong link between conflict and deviance whereby friendships marked by higher levels of conflict were also characterized by high levels of deviance. Yet, the multivariate models produced mixed results. Using the perceptual measure of peer deviance, the actor's conflict with the friend did not relate to the actor's offending. However, the actor conflict–crime relationship was positive and significant when using measures of peer deviance gathered directly from the friends themselves. Regardless of the type of peer deviance measure, the friend's conflict failed to reach significance in any models. Given the mixed findings, hypothesis one is partially supported. Despite this, the results replicate prior research concluding that higher amounts of conflict exist in deviant friendships (e.g., Boman et al. 2013; Giordano et al. 2010).

Beyond replication, however, these findings go one step further by suggesting that the primary means through which conflict relates to crime is through the actor's – but not the peer's – estimate of conflict within the friendship. In this way, the results paint a very ego-centric viewpoint on how conflict directly relates to behavior. Focusing on the social learning perspective, Akers (2009) emphasizes how a person's perception of a peer's deviance should carry the primary influence for his/her behavior. The reasoning behind Akers' argument lies in the observation that there is little reason to expect that any person has a truly objective view of how his/her friend is actually behaving (see Warr and Stafford 1991). In a similar mindset, it is not clear why an actor would hold knowledge of the exact level of conflict the friend estimates within the friendship. Instead, it is likely that s/he only knows the extent of conflict that s/he estimates exists within the friendship. As such, the finding that the actor's own estimates of conflict within the friendship carry the substantively meaningful importance for deviant and criminal behavior supports learning theory's emphasis on how ego-based factors should relate to behavior.

Drawing on DCSS theory, the second hypothesis premised that higher levels of actor conflict would increase the extent to which peer deviance related to behavior. This hypothesis was not supported, as high amounts of actor conflict actually reduced the extent to which both indirect and direct measures of peer deviance related to crime. In a similar mindset, the third and final hypothesis premised that the friend's conflict would also amplify the magnitude of the peer deviance–crime relationship. While this effect was only significant when using the indirect measure of peer deviance (and in the opposite direction), the overall finding seems apparent: Conflict within the friendship reduces the strength of the relationship between peer deviance and the actor's deviance. Overall, the results for hypothesis two and three are not supported and, in fact, findings run counter to the expectation of DCSS theory.

The complicated set of findings lead us back to the agreement – and tension – between DCSS and differential association theories. At its core, DCSS suggests that conflict should relate to increased levels of deviance at the main effect level. Results of bivariate and, to a lesser extent, multivariate analyses support this viewpoint, meaning that DCSS receives empirical support.

While there is reason to lend credence to DCSS theory, there is a competing set of findings which challenge its contentions. As a means of coercion, conflict should amplify the effect

of peer deviance on crime. While these interactions were significant, they demonstrated that higher levels of conflict actually dull the effect of peer deviance on crime. Instead of supporting the contentions of DCSS, this finding actually supports differential association theory (Sutherland 1947). Although Sutherland never explicitly specified the exact ways through which the modalities of association should impact criminal behavior, it is clear that they were provided as a means of understanding why some differential associations would be more meaningful for criminal involvement than others. While friendship conflict could potentially fit into the modality of intensity, it could also be argued to be a proxy indicator of frequency, duration, and priority. In addition to raising a series of interesting future research questions about which modality conflict is most closely tapping, what is clear is that conflict within a friendship should reduce the extent to which a peer's behavior – either deviant or not – is transmitted to an actor. Although differential association theory has received a tremendous amount of replicated support (see Pratt et al. 2010), these interactions offer support to the theory in a way which more closely meshes with the “newer” line of research which seeks to determine how, when, and why friends matter rather than if friends matter. Our study suggests that while peer behavior is influential for crime, the effect may be largely dependent on forces which can amplify, or – more precisely in the case of this study – reduce the peer deviance effect. Given the considerable importance of the peer deviance construct to criminologists, having the knowledge of when peers matter the most is considerably important. We urge other scholars to continue to develop research in this arena, as prior work investigating moderation effects of the peer deviance–crime relationship (e.g., Meldrum, Young, and Weerman 2009) have proven quite valuable.

Extending into the compatible portion of the theoretical traditions of DCSS and differential association, conflict appears to carry a dual meaning for crime and deviance. In short, conflict is related to higher amounts of deviance as a main effect while simultaneously reducing the magnitude of the peer deviance effect. This indicates that conflict may be a form of coercion which also may protect from crime. Inherent in this extraordinarily contradictory statement lies the complexity that is emblematic of recent research investigating the means through which peers influence criminal behavior (e.g., McGloin and Thomas 2016). With a strong foundation that suggests that peers are considerably important for crime and deviance, it increasingly appears that the means through which peers relate to crime are numerous and intricate (e.g., McGloin and Nguyen 2012). While this introduces serious complications for policy recommendations, it reflects a very real complexity that is inherent in science that attempts to explain social behavior (e.g., see Gallupe and Baron 2014; McGloin and Shermer 2009). Continuing to refine a new knowledge base on one of the most established empirical findings in criminology – the peer deviance effect – is extremely important, especially considering that main effects may carry completely distinct effects to crime that are not echoed in moderation effects.

Despite some valuable findings, there are limitations to the current study that warrant discussion. First and foremost, this sample represents a cross-section of college students attending only one university in the United States. While college students engage in crime regularly (e.g., Wiecko 2010), the types of crimes they commit can be very different from those in more high-risk samples. Accordingly, results from this study should be further validated (Peterson and Merunka 2014). In the process of replicating the findings, it would

also be useful for researchers to extend the dyadic design of this study and employ research using data from social networks. While it is certainly a strength of this study, the use of friendship dyads is also inherently limiting because most people have more than one friend as well as more than one best friend (Weerman and Smeenk 2005). As such, the current research has captured only a limited portion of each actor's social network. Finally, we have only investigated how conflict within the friendship dyad relates to crime. As Colvin and colleagues (2002) emphasize, conflict can exist in many different walks of life, and conflict in one domain may predicate conflict in other domains. As such, the measure of conflict within a friendship may represent only a small piece of a higher-order conceptualization of conflict that the actor may experience within the larger context of his or her social relationships.

The meta-analysis by Pratt and colleagues (2010) serves as a clear indication that the most common way that "peers" are accounted for in criminological research is through the inclusion of a peer delinquency variable. In addition to main effects, the current study serves as a testament that peer- and friendship-relevant variables can change our understanding of how the peer deviance-crime relationship operates. Moving toward using a larger number of friendship-based measures in analyses would also carry the benefit of more effectively capturing elements of a variety of established theoretical traditions. Not only would this better satisfy the historical understanding that the best theoretical approach to crime comes from an integrated perspective (Wolfgang and Ferracuti 1967), it would allow for the formation of more carefully crafted policies and practices which are designed to encourage nondeviant and noncriminal social behavior.

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Table 1.Descriptive statistics of dyadic sample ($N = 1,748$ persons nested within 874 dyads).

	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>
Dependent variables				
Self-reported deviance	4.862	3.648	0	24
Focal independent variables				
Friendship conflict ^a	9.347	3.503	4	20
Perceived peer deviance	3.805	3.400	0	24
Peer self-reported deviance	4.862	3.648	0	24
Control variables				
Friendship closeness ^a	19.928	3.835	5	25
Male (coded "1") ^a	0.336	0.472	0	1
Age ^a	19.339	1.433	18	42
Non-white (coded "1") ^a	0.369	0.483	0	1
Latino/a (coded "1") ^a	0.186	0.389	0	1

^aReflects descriptives for both the actor's and friend's characteristics (see Kenny, Kashy, and Cook 2006).

Table 2.

Two-level mixed-effects negative binomial models regressing the actor's self-reported deviance onto measures of conflict, perceptual peer deviance, and controls ($N = 1,748$ within 874 dyads).

	Model 1		Model 2		Model 3	
	b	SE	b	SE	b	SE
Level 1: individual-level						
Focal independent variables						
Actor's conflict with friend	0.006	0.005	0.009	0.005 *	0.006	0.005
Friend's conflict with actor	0.001	0.005	0.001	0.005	-0.002	0.005
Actor's perception of friend's deviance	0.114	0.004 ***	0.117	0.004 ***	0.115	0.004 ***
Actor's conflict x perceptual friend deviance	–	–	-0.004	0.001 ***	–	–
Friend's conflict x perceptual friend deviance	–	–	–	–	-0.002	0.001 *
Control variables – actor effects						
Closeness to friend	-0.011	0.005 *	-0.011	0.004 *	-0.011	0.005 *
Male	0.183	0.035 ***	0.185	0.035 ***	0.185	0.035 ***
Age	0.017	0.013	0.016	0.013	0.016	0.013
Non-white	-0.084	0.036	-0.089	0.036 *	-0.086	0.036 *
Latino/a	0.089	0.040 *	0.091	0.040 *	0.088	0.040 *
Control variables – friend effects						
Closeness to actor	-0.003	0.005	-0.002	0.004	-0.002	0.005
Male	-0.096	0.036 **	-0.097	0.036 **	-0.095	0.036 **
Age	-0.006	0.012	-0.008	0.012	-0.007	0.012
Non-white	-0.057	0.036	-0.052	0.036	-0.058	0.036
Latino/a	0.013	0.040	0.018	0.040	0.015	0.040
Level 2: friendship-level						
σ^2	0.000	0.000	0.000	0.000	0.000	0.000
Model statistics						
Wald χ^2	984.70 ***		1021.04 ***	994.58 ***		
Constant	1.190	0.265 ***	1.277	.265 ***	1.253	0.267 ***
Logged dispersion	-2.013	0.095 ***	-2.045	.098 ***	-2.018	.095 ***

*
p .05

**
p .01

p .001.

Table 3.

Two-level mixed-effects negative binomial models regressing the actor's self-reported deviance onto measures of conflict, the friend's self-reported deviance, and controls ($N = 1,748$ within 874 dyads).

	Model 1		Model 2		Model 3	
	b	SE	b	SE	b	SE
Level 1: individual-level						
Focal independent variables						
Actor's conflict with friend	0.016	0.005**	0.016	0.005**	0.016	0.005**
Friend's conflict with actor	0.004	0.005	0.004	0.005	0.004	0.005
Friend's self-reported deviance	0.051	0.005***	0.053	0.005***	0.052	0.005***
Actor's conflict $\times$ Friend's reported deviance	–	–	–0.003	0.001*	–	–
Friend's conflict $\times$ Friend's reported deviance	–	–	–	–	–0.002	0.001
Control variables – actor effects						
Closeness to friend	–0.015	0.005**	–0.014	0.005**	–0.014	0.005**
Male	0.274	0.042***	0.273	0.041***	0.272	0.041***
Age	0.009	0.016	0.008	0.016	0.008	0.016
Non-white	–0.156	0.042***	–0.157	0.042***	–0.156	0.042***
Latino/a	0.132	0.048**	0.132	0.048**	0.131	0.048**
Control variables – friend effects						
Closeness to actor	–0.003	0.005	–0.003	0.005	–0.002	0.005
Male	–0.069	0.043	–0.067	0.043	–0.066	0.043
Age	0.017	0.015	0.016	0.015	0.016	0.015
Non-white	–0.060	0.042	–0.060	0.042	–0.059	0.042
Latino/a	–0.008	0.048	–0.006	0.048	–0.006	0.048
Level 2: friendship-level						
σ^2	0.000	0.000	0.000	0.000	0.000	0.000
Model statistics						
Wald χ^2	293.19***		298.37***		296.27***	
Constant	1.408	0.314***	1.433	0.314***	1.434	0.314***
Logged dispersion	–1.241	0.064***	–1.245	0.064***	–1.244	0.064***

*
p .05

**
p .01

p .001.