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A Test of Wikström's Situational Action Theory Using Self-Report Data on Intimate Partner Violence

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A Test of Wikström's Situational Action Theory
Using Self-Report Data on Intimate Partner Violence

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
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ABSTRACT

Wikström's Situational Action Theory (SAT) proposes a general theory of crime causation that addresses two sets of interactions between individuals and their situation/environment. These interactions predict whether or not individuals choose a criminal action. The current study utilized self-report data on intimate partner violence collected at a large urban university in Florida (n=1124) to test this process by examining both direct and interactive effects proposed by the theory. Specifically, this study examines the direct effects of moral propensity, temptations/provocations, self-control and perpetual deterrence on intimate partner violence as well as the various interactions among them as derived from the theory. This study is the first complete test of SAT to date.

INTRODUCTION

Many theories have been utilized in an attempt to explain intimate partner violence (IPV) including, but not limited to intergenerational transmission of violence theory, social learning theory, and self-control theory. Although, all of these theories contribute unique aspects to the study of IPV, none of them focus on the situational aspects of the behavior itself. That is to say, that when investigating the causes of IPV these theories often overlook important components of the problem by narrowly focusing on the intrapersonal aspects as opposed to a combination of both intrapersonal (individual factors) and interpersonal aspects (situational factors). Although individual level factors are paramount in the study of IPV, they are not sufficient in fully understanding the causes. Unfortunately, this is not an issue that is confined to IPV but is pervasive in the study of violence in general (Collins, 2008). One issue with this myopic examination of violence is the lack of a within-person variation in crime causation (Wikström, 2006; Willits, 2015). This means that explanations as to why people differ in their violence perpetration regardless of similar individual factors are not being stressed in the research literature. Of particular significance, is that these errors in the examination of violence can lead to psychological assessments and therapeutic approaches that are not meeting the comprehensive needs of offenders. Attempts to explain IPV or any other violent behavior for that matter are futile if the problem is only explicated from one angle. Comprehensive evaluations of violence must then include these situational aspects as well as the individual ones, any evaluation lacking one or the other will not suffice in the explanation of violence. Therefore, if research is to be

effective in explaining violent behavior in general and IPV in particular it has to look at the behavior from every angle.

Theories inclusive of both situational and individual level factors attempting to explain violent behavior is necessary for comprehensively studying violence. A newly formed theory that has incorporated these two important ideals is Situational Action Theory (SAT; Wikström, 2004; Wikström, 2006). This theory is one that is primed for application to IPV as it examines the combination of factors that has been missing in previous research. This theory integrates individual factors with situational factors to describe the process by which offenders choose crime. This interaction between individual factors and characteristics of the situation initiates and guides a perception-choice-action process which determines an individual's actions (including acts of crime and deviance). Considering the dearth of appropriate explanations for IPV that consider all angles, SAT is an ideal theory to apply in the theorization of IPV. In order to fill this gap in the literature, I apply SAT to IPV using self-report data on partner violence.

Situational Action Theory

In social science, human agency is the ability of individuals to act according to their own choices. That is, an action is the expression of agency and can be considered as the chosen action of an individual. As crime is one choice available among a host of action alternatives, crime is the result of a chosen action. According to SAT, perceptions are how one interprets their surroundings, based on their past experiences. Perceptions are dependent on both individual (Morality) and environmental (Temptations/Provocations) factors (Wikström, 2004). These two factors interact in the moment to determine what action alternatives a person perceives as available in a given situation. When applied to crime, this means that the individual either sees crime as a situationally available option or not.

Temptation, defined by Wikström (2004), is “a perceived option to satisfy a particular desire (need, want) in an unlawful way” and provocation is “a perceived attack on the person’s property, security or self-respect...that may instigate an unlawful response” (Wikström, 2004, p.20). The perception-choice-action process is initiated via temptations/provocations. An individual is provoked or tempted in some way to commit an act of crime or deviance. Once temptations/provocations have been set in motion, one’s level of morality will determine whether or not crime is perceived as an action alternative. Morality is defined by Wikström (2004) as “an evaluative function of an event in the world based on values about what is right or wrong to do” (Wikström, 2004, p.15). Once an individual has been provoked (or tempted) to involve themselves in a criminal act, their morality decides the action alternative that they will ultimately choose. SAT is unique in this emphasis it places on the causal efficacy of morality. This concept receives the most attention in SAT because an individual with high levels of morality will not perceive crime/deviance as an action alternative thus rendering the next process, choice, irrelevant. Conversely, should one’s morals be ineffective in overcoming temptation or provocations then a criminal action is a situationally available action alternative and the process of choice is activated.

The choice part of this process is the decision to act made through the processing of additional situational information and is only activated if an action (crime) is perceived to be situationally available (Wikström, 2004). Choice, like perception, is made up of two components, self-control (an individual factor) and deterrence (a situational factor). Self-Control is defined as “the extent to which the individual is able to make choices in accordance with his or her morality when faced with temptations or provocations” (Wikström, 2004, p.16). Individuals with high-levels of self-control, are more likely to refrain from committing a crime even though

crime has been perceived as an action alternative (Wikström, 2010). Deterrence is a perceived risk of intervention and associated risk of sanctions if acting unlawfully in pursuing a temptation or responding to provocation (Wikström, 2007). This component of choice is dependent on the perceived presence of environmental controls; the greater the controls the more likely one will refrain from crime. After the choice process has been activated, self-control and deterrence interact to determine whether or not the individual takes part in or refrains from committing crime/deviance.

The current body of literature as it relates to Wikström's Situational Action Theory includes tests of direct and two-way interactions. Many of these studies have found empirical evidence in support of the theory (Hirtenlehner, Pauwels, & Mesko, 2013; Svensson & Pauwels, 2008; Svensson and Oberwittler, 2010; Svensson, Pauwels, & Weerman, 2010; Wikström & Svensson, 2008; Wikström, 2009; Wikström & Svensson, 2010;). Other studies, however have found that the key propositions do not hold exactly as Wikström would suggest (Bruinsma, Pauwels, Weerman, & Bernasco, 2015; Cochran, 2015; Gallupe & Baron, 2014; Pauwels, Weerman, Bruinsma & Bernasco, 2011;). Based on these mixed results, it is clear that further testing is needed.

The present study uses self-reported data on intimate partner violence (IPV) to examine the extent to which the components of SAT and their interactions predict the perpetration of intimate partner violence. IPV can be viewed as a situationally motivated crime, which allows it to be ideal for testing the claims of SAT. Further, the prevalence and private nature of IPV makes it an important crime to study as findings could have beneficial impacts on policy implications.

LITERATURE REVIEW

A moral action is “any action that is guided by moral rules about what is right or wrong to do;” all acts of crime, according to Situational Action Theory (SAT), are considered to be moral actions, breaches of moral rules (Wikström, 2010, p. 217). This does not imply however that all breaches of moral rules are crimes, some are violations of less formal moral rules. However, as violations of either laws or social norms these breaches all share similar situational moral processes, in which a person’s morality and the moral context of the situation in which they operate play a causal role in explaining their choice of action. SAT examines crime (or any moral action) by asking why people choose to break the moral rules attached to the act. This is a unique interpretation of crime meant to overcome the analytical issue of properly defining crime which, as Wikström argues is a major issue within criminological theories. He claims that without properly defining crime, it is difficult to understand and identify the causes (Wikström, 2010). According to Wikström the risk factors addressed in previous theories are only indicators of crime and some are even causally irrelevant. Identifying crime as a moral action means that the theory addressing the action needs to explain it as such, identifying why people are moved to breach or comply with moral rules, as opposed to explaining why they participate in the deviant behavior itself. Defining crime as a moral action allows for attention on these factors that may indeed impact the crime.

SAT explains acts of crime as initiated by a situational process that involves the interaction of crime propensity and criminogenic exposure. Criminal propensity varies across persons and is based on two key factors: personal morality and self-control. The criminogenic

exposure of a setting also varies and is based on the degree to which it promotes crime. This exposure is based on the level of temptations/provocations for immoral action within the situation and the degree of guardianship and perceived risks and costs within the situation. This interaction between personal and environmental factors leads to a situational process referred to as the perception (perception of action alternatives) choice process (Wikström, 2010).

People choose to participate in acts of crime when they see such breaches as viable action alternatives (from among all possible actions in a given situation) and they, in turn choose to act on them. Before an individual chooses to engage in an act of crime, they evaluate their available action alternatives. This process of evaluating action alternatives is the perception process, where an individual responds to situationally present temptations and provocations based on their level of personal morality. If an individual with a high level of morality is presented with action alternatives, that include an act of crime as an available alternative, it is likely that this person will not even register the deviant behavior as a choice among the other alternatives. Conversely, those without such moral prohibitions are more likely to consider and perhaps choose a criminal action from among the various action alternatives available. Therefore, people with high levels of morality are not likely to participate in crime despite high temptations/provocations, therefore these temptations/provocations must be extremely high for these individuals to choose crime, on the other hand, those individuals with low levels of morality are more likely to succumb to temptations/provocations and to choose crime regardless of the level of temptations and provocations (Wikstrom, 2010).

Temptations are present when a person sees crime as a means of obtaining something desired, considered anything from possessions to safety, or fulfilling a commitment.

Provocations are when other individuals interfere with courses of action. Temptations and

provocations are necessary motivations but they are not considered sufficient in crime causation, meaning that these factors must interact with additional factors within the situational process (Wikström, 2010).

The second part of the perception-choice process is the choice process. This process is only significant if the individual has seen crime as a situationally available action alternative. It is affected by an individual's level of self-control and the perceived deterrence of the situation. People with low self-control will likely choose crime, despite the levels of the perceived deterrence, on the other hand, people with high levels of self-control are unlikely to participate in crime regardless of the levels of perceived deterrence. The choice process can take on two different forms, one when an individual chooses to participate in a crime out of habit and the other when they participate after deliberation. "Habitual action involves automatically applying experienced based moral rules of conduct to a setting and its circumstances, while deliberation involves taking moral rules of conduct into consideration when actively choosing between action alternatives" (Wikström, 2010, p. 223). While most actions fall into either habit or deliberation, there are some that may be the outcome of both (Wikström, 2010).

It is important to note again that if an individual does not see committing crime as an available action alternative then the process of choice is no longer relevant. However, when they do see crime as an action alternative they will choose to commit the crime (or not commit the crime) based on habit, deliberation, or some combination of both. Controls which consist of self-control and situational specific perceptions of risk and guardianship, come into play when an individual must choose between situationally available actions when at least one includes a breach of a rule of conduct (Wikström, 2010).

Criminal behavior is a choice that is made based on an individual's level of self-control and morality (crime propensity) as well as the situational elements of temptations/provocations and the perceptual deterrence of the setting (criminogenic exposure). The individual chooses to engage in the law violating action because they perceive it as an available behavioral alternative. See Figure 1 for a visual interpretation of the theory. This figure shows the perception choice action paradigm of Wikström's SAT and how the elements derive from both interpersonal variables as well as situational ones. The top half of the figure displays the individual variables (self-control and morality) as they interact to create criminal propensity and the bottom half displays the situational variables (temptations/provocations and perceptual deterrence) as they interact to create criminogenic exposure. Morality and temptations/provocations interact to identify an individual's perceptions of action alternatives, while self-control and perceptual deterrence interact to initiate the choice process from among those action alternatives which then leads to action.

Blumstein, Cohen, & Nagin, 1978) each are largely found to be directly associated with criminal/deviant behavior.

Additionally, some scholars have examined the relationships among some of these constructs. Such as the relationship between low self-control and deterrence (Piquero & Tibbetts, 1996; Wright, Caspi, Moffitt, & Paternoster, 2004), low self-control and temptations/provocations (referred to here as opportunity; Gottfredson & Hirschi, 2003; Hay & Forrest, 2008), and self-control and morality (Schoepfer & Piquero, 2006; Tittle, Antonaccio, Botchkovar, & Kranidioti, 2010).

Given that SAT is still in its infancy the available literature specifically testing the theory is meager. This being said, the research testing the theory has found that there is a significant interaction effect between morality and self-control (criminal propensity) on offending (Svensson et al., 2010; Wikström & Svensson, 2010). Svensson and colleagues (2010) found a significant interaction effect studying morality and self-control in three independent samples of youths. Wikström and Svensson (2010) also found evidence of an interaction effect. Looking at a cross-sectional study they found that individuals with high levels of morality commit less self-reported offending regardless of their levels of self-control. Bruinsma and colleagues (2015) found similar results with a cross-sectional study of the relationship between morality and self-control in offending, however they found that these results don't hold when examining the cross-lagged effects. Furthermore, these cross-lagged results showed that morality is not as strong of a predictor on later offending, but self-control remains stable. This is at odds with SAT as it is proposed that morality is the strongest predictor of crime (Wikström, Oberwittler, Treiber, & Hardie, 2012). Numerous studies have however found significant support for the theory's notion that lack of morality is a stronger predictor of crime than self-control in cross-sectional studies

(Antonaccio & Tittle, 2008; Gallupe & Baron, 2014; Hirtenlehner, Pauwels, Mesko, 2015; Wikström & Svensson, 2010).

In addition to examinations of the interactions between morality and self-control, some studies have examined other interactions among the elements of Wikström's SAT. In a study of self-reported violent behavior in English and Swedish youths, Wikström and Svensson (2008) found a significant interaction between criminal propensity (measured as morality only, specifically shaming) and lifestyle (temptations/provocations). In two independent samples from different countries, Svensson and colleagues (2010) similarly found that the interaction between an individual's propensity to offend (morality and self-control) and lifestyle risk was a significant predictor of offending (Svensson, Pauwels, & Weerman, 2010). These findings suggest that an individual's lifestyle risk is conditional on their propensity. Schils and Pauwels (2014), tested SAT against political violence and found that the effect of exposure (temptations/provocations) to violent extremist settings is dependent on the effect of individual violent extremist propensity (moral propensity) and that these effects were reproduced within subgroups by immigrant background and gender. Cochran (2016) found that moral prohibitions condition the effect of temptations/provocations in a sample of self-reported academic dishonesty, however he found no support for the interaction between self-control and deterrence.

Although the research on perceptual deterrence has often shown the direct relationship between perceived sanction threats and crime, these effects are rather modest in strength (Pratt, Cullen, Blevins, Daigle, & Madensen, 2006), Wikström argues that the theoretical importance of deterrence is not through its direct effect but rather the effect it has through its influence on the action choices of an individual (Wikström, Tseloni & Karlis, 2011). In other words, it is not that perceptual deterrence has a direct effect but rather that it interacts with the other variables to

produce action. Extant research has looked at the relationship between morality and deterrence and has found mixed results. Pauwels and colleagues (2011), although not specifically testing the theory, found some support for an interaction effect between morality and deterrence for self-reported assault and self-reported vandalism. This interaction, however, was positive which is contrary to what Wikström (2004) has proposed and for self-reported burglary they found no interaction effect between morality and deterrence. When looking at the interaction effect between morality and deterrence, Gallupe and Baron (2014) found that there was not a significant interaction effect when examining soft and hard drug use. These findings were again replicated by Piquero, Bouffard, Piquero and Craig (2016) in their study of incarcerated felons, finding that deterrence works best for individuals who also report high levels of morality. However, a study in 2015 by Svensson found a strong interaction effect between morality and deterrence in self-report surveys. Cochran (2015), replicating this study, found that there was no interaction effect between deterrence and morality when examining academic dishonesty. Hardie and Hirtenlehner (2016) in their study on adolescent shoplifters, supporting the notion that deterrence is significant among individuals with low moral values, concluded that, “the main reason many people do not engage in acts of crime is that they do not see crime as an action alternative, regardless of the costs and benefits associated with the act, and that various types of controls become relevant when crime is not morally filtered” (p. 327).

There has also been rather weak support for the notion that the effect of perceptual deterrence is strongest among individuals with low levels of morality. Pauwels and colleagues (2011) found that with regards to self-reported crime, the relationship between perceived sanctions and offending was not dependent on one’s level of morality. Additionally, using non-general sample of street youths, Gallupe and Baron (2014) found that there was no interaction

effect between deterrence and self-control. These findings were again replicated with a sample of incarcerated offenders, finding that those with higher morality are more affected by deterrence when considering future drunk driving.

Another study found that self-control and peer delinquency (temptations/provocations) were significantly related to offending in three different countries (Hirtenlehner et al., 2015). Another study found that there was an interaction between criminal propensity (defined here as the level of temptation to commit a crime) and perceptual deterrence perception for four different self-reported acts of crime (shoplifting, theft from cars and assault and vandalism) Although, the results were stronger for shoplifting and theft from cars (Wikström, Tseloni, & Karlis, 2011).

The support for this theory has clearly been mixed, indicating a strong need for further research examining all the various direct and interactive effects of the four component parts of SAT on other forms of criminal/deviant behavior. The current study examines both the direct effects of the components in SAT as well as their many 2-way, 3-way, and 4-way interactions as proposed by the theory. That is, this study examines the direct effects of moral propensity, temptations/provocations, self-control and perpetual deterrence on intimate partner violence as well as the various interactions among them as derived from the theory.

Intimate partner violence

The Center for Disease Control (CDC) defines intimate partner violence (IPV) as “physical violence, sexual violence, stalking and psychological aggression (including coercive acts) by a current or former intimate partner” (CDC, 2016). IPV is a pervasive crime that has an impact on both men and women. According to the National Crime Victimization Survey (NCVS) nearly one in three women and one in ten men who are victims of some type of intimate partner abuse experience negative effects (NCVS, 2014). In 2006, the World Health Organization

conducted a study of women in ten different countries, finding that 25 to 54 percent of women are affected by IPV in their adult lifetime (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006).

The seriousness of these issues evidences the importance of not only the study of IPV but the validity of theories applied to it. The appropriate applicability of theory to the perpetration of IPV can lead to prevention efforts. Previous theories have been developed or applied to provide an understanding of IPV. Intergenerational transmission of violence (IGT) theory postulates that an individual who grows up in a home where violence is an appropriate response to conflict will in turn respond to conflict with violence (Stith et al., 2000). Another theory similar to IGT is Social Learning Theory which examines an individual's acquisition of IPV behaviors via the modeling of their parents or guardians (Akers & Sellers, 2009; Cochran, Sellers, Wiesbrock & Palacios, 2011; Fox, Nobles, & Akers, 2011; Lewis & Fremouw, 2001; Mihalic & Elliott, 1997; Sellers, Cochran, & Branch, 2005; Wareham, Boots, & Chavez, 2009). Self-control theory predicts that an individual with a lack of self-control will perpetrate intimate partner violence (Baron, Forde, & Kay, 2007; Finkel & Campbell, 2001; Holtfreter, Reisig, & Pratt, 2008; Schreck, Stewart, & Fisher, 2006; Sellers, 1999). Although these theories offer important insights into the nature of IPV, namely the offenders motivation, they omit a key element of IPV (i.e., its situational nature).

As with other interpersonal forms of violence, intimate partner violence is situational in nature, occurring between a victim and an offender. Research has indicated that the outcomes of violent situations are determined by the events occurring during the situation. In other words, violence is seen as a situationally determined act between at least two individuals situated in time and place (Felson, 1983; Luckenbill, 1977). SAT is a theory that focuses on the interaction

between the individual and their environment, as IPV is a crime that is perpetrated by people in the context of an environment, it lends itself to be utilized in the testing of SAT. In order to explain IPV as one that is situational in nature, an in-depth look at a situated transaction is necessary.

Luckenbill (1977), examines situated transactions, which are interpersonal interactions in which each participant has a role (defined by the situation) that is shaped by other participants, meaning that the behavior of one individual is influenced by the other, this then contributes to the outcome. He looks at how these transactions lead to homicide and found that the initial move in the transaction involved an event in which the victim acted in a way that was deemed offensive to the perpetrator. The following escalation in the situation involved verbal or physical retaliation on the part of the offender. The verbal response in some cases led to physical action by the “victim”. Therefore, by the next stage both participants were “committed to battle,” which is either due to the physical altercation started by the “victim” or the offender (p. 184). The final stage in Luckenbill’s (1977) study revealed the offender terminating the action in some manner, the majority of which was leaving the scene.

In many ways IPV can be seen as similar to the situated violence as defined by Luckenbill (1977) and reexamined by Felson and Steadman (1983). IPV by definition is an interpersonal interaction between two people who are involved in an intimate relationship (CDC, 2016), lending itself to being a situated transaction. As Luckenbill (1977) discusses the initial event as one in which the perpetrator interprets some act on the part of the victim as offensive, research on the motivations for IPV have found many different events that may act as the stimulus for an offender to perpetrate a violent event (Dobash & Dobash, 1984; Lloyd & Emery, 2000; Luckenbill, 1977). These motivations are the initial events discussed by Luckenbill (1977)

that lead to a physical reaction on the part of the offender. Also, discussed by Luckenbill (1977) is the possibility of mutual physical action on the part of the victim, this type of reciprocal violence occurs in some types of IPV (situational couple violence and mutual violent control; see Johnson, 2006).

In a further study on situated action by Felson and Steadman (1983) they discuss the idea of retaliation as a situational component to crime. They explain that retaliation can be due to a face-saving action or one in which the victim is attempting to defend themselves from an attack. Regarding IPV, research has indicated that retaliation is one of the most common self-reported reasons for IPV (Ross, 2011). IPV however, diverges slightly from the final scenario discussed by Luckenbill (1977), in that often times there is no finalization to an IPV event as it is often continuous within the relationship (Dobash & Dobash, 1984; Luckenbill, 1977). Intimate partner violence, like other acts of violence, is an action that can be situationally motivated by an event deemed offensive to the offender, causing verbal confrontations and possibly leading the victim to attempt to avoid the physical attack (often to no avail) ending ultimately in an abusive situation (Dobash & Dobash, 1984; Felson & Steadman, 1983).

Although there are various types of IPV (as defined by Johnson, 2006), it is necessary to study all types as situational. These aggressive or violent episodes all have an outcome that is determined by the events that occur during the situation. In some circumstances, the choice to commit the action may become habitual for the offender thus rendering it less situational in nature but as all habits are generated by a once deliberate choice (Hare & Secord, 1972), situation still plays a key role.

SAT is a theory of moral action and can be applied to the violation of any moral rule. The approach to defining what constitutes acts of violence within SAT is unique, concerning itself

not with just intentions to bring about physical harm, but with the breaking of moral rules (Treiber & Wikström, 2009). Wikström sees violence as a type of moral action “guided by rules about what is right or wrong to do...” (Treiber & Wikström, 2009, p.78). The only difference between physical violence, and acts such as stealing are the moral rules that regulate them. As such, the theory lends itself to be utilized in explaining both acts of physical violence, such as in IPV, along with any other moral action, such as stealing. All moral actions are governed by moral rules allowing SAT to be applied to all transgressions, Wikström does however accept that violence in many ways is different from other moral actions. He explains that violence occurs when individuals don’t see their actions as wrong in the setting or feel justified in their actions (Wikström & Treiber, 2009), and as research on IPV indicates, many perpetrators do feel justified in their actions (Jewkes, 2002). These individuals have internalized their own moral rules and thus have no moral filter preventing them from perpetrating the crime.

In summary, IPV is a situated transaction among current or past intimates that should be studied as situational. As mentioned, this is the area where previous attempts to theorize about this action have fallen short. Newer theories incorporating situational aspects of crime, such as SAT should be applied to IPV in an effort to fully explain the action.

Many studies have examined the relationship between the various SAT concepts and IPV. For example, the relationship between morality and IPV has been indicated through Intergenerational Transmission Theory, as individuals who experience violence in the home often internalize that type of behavior as morally acceptable (Stith et al., 2000). Moreover, research indicates that perpetrators of IPV have a distorted view of morality (Vecina, 2014; Vecina, Marzana & Paruzel-Czachura, 2015; Vecina & Chacon, 2016). A recent research study

by Vecina (2014) found that men convicted of domestic violence believe themselves to be very moral individuals, who defend their beliefs and deceive themselves when necessary.

Self-Control Theory (Gottfredson & Hirschi, 1990), posits that crime is the result of low self-control that is caused by ineffective parenting in childhood. Intimate partner violence was used to test this theory of crime in a 1999 study by Sellers, finding modest results for the relationship between self-control and intimate partner violence. Further research has also found support that self-control is linked to IPV, while studying dating and gang violence, Chapple & Hope (2003) found that low self-control is associated with the perpetration of both types of violence. In a cross-cultural analysis, Kerley, Xu, and Sirisunyaluck (2008) found that low self-control predicts partner violence in a sample of married women in Thailand.

Temptations/ Provocations have been examined in IPV literature in a number of ways. One of these ways is as triggering events (Byun, 2012; Finneran & Stephenson, 2014; Hatcher et al. 2013; Nemeth, Bonomi, Lee, Ludwin, 2012). These triggering events become cues for victims and perpetrators that an IPV event is forthcoming. Overtime these events become discriminative stimuli, definitions of the situation that are cues identifying the situation as one that is ripe for IPV.

The research examining deterrence and IPV have resulted in mixed support. In 1984, Sherman and Berk began an experiment to determine the most effective police response to spouse assault. In order to do this they randomly assigned cases to one of three options; arrest, counseling (both victim and offender), or having the offender leave for several hours. The results of this research found that arrest resulted in the lowest recidivism rates. However, many studies were conducted that found these results to be inaccurate (Dunford, Huizinga, and Elliott, 1990; Hirschel, Hutchison, Dean, Kelley, and Pesackis, 1990). While some replicative studies found

mixed results (Berk, Campbell, Klap, and Western, 1991, 1992) and one found supportive results (Pate, Hamilton, and Annan, 1991). Furthermore, additional research has indicated that formal sanctions may be mediated by informal sanction and thus work differently (Sherman, Smith, Schmidt, and Rogan, 1991; Sherman and Smith, 1992; Berk et al., 1992). In a 2001 analysis of five of the replication studies, Maxwell, Garner and Fagan found that arrest was associated with recidivism.

Despite the presence of mixed results, it is clear that researchers and theorists believe there is an association between all four of the key components of SAT and IPV. As such, this provides a strong basis for applying SAT to IPV.

This present study is the first complete test of SAT to date. It applies IPV to the theoretical notions in SAT, testing the direct and interactive effects proposed in the theory. Specifically, it examines the direct effects of morality, self-control, temptations/provocations and deterrence, as well as the interactions between morality and self-control, morality and temptations/provocations, temptations/provocations and deterrence, and self-control and deterrence.

METHODOLOGY

Data

The data for this study were gathered through a self-report survey administered to students attending a large urban university in Florida. Students were both graduate and undergraduate students randomly selected from five different colleges (Arts and Sciences, Business Administration, Education, Engineering, and Fine Arts), in the spring semester of 1995, during the first four weeks of classes. The students surveyed were very similar in sociodemographic profiles to the total enrollment population (Cochran et al., 2011; Cochran, 2016; Sellers & Bromley, 1996). While 2,500 students were targeted, approximately 1,474 students responded for a 73% response rate; this was largely due to absenteeism and individuals being enrolled in more than one of the sampled courses. Individuals included in this study were restricted to those who reported being currently involved in an intimate relationship and who reported having at least one previous serious relationship (n= 1124); those who were “currently dating but not going steady,” who had been in the relationship for less than six months, were not sexually active in the relationship or who see their partner less than once or twice a week, were excluded from the study. The primary advantage of these data is that it includes a large array of items associated with IPV as well as direct indicators of nearly all of the key components of Wikström’s SAT. However, these data were not collected with the specific intention of testing Wikström’s theory and may therefore suffer from some measurement problems. Moreover, because the data were collected from a college sample, there may be issues related to their

generalizability. However, this study is less interested in the generalizability of the findings and more with the effectiveness of the concepts theoretical ability to predict IPV.

Dependent Variable

Intimate Partner Violence

The dependent variable was an index consisting of a count of the number of types of IPV perpetration out of nine that the respondent reported using against their current partners; this IPV perpetration index is identical in its features to the variety scales commonly used in criminological research. Variety scales are considered to be the most effective way to measure self-reported criminal/deviant behavior as they limit the influence of less serious offenses (Sweeten, 2012). Thus, his/her counts on the index constitute more serious involvement in IPV. To measure their involvement in IPV, respondents were asked about their current committed or married relations and how many times they have acted violently towards their partner during a conflict. There were a total of nine items asking respondents if they had ever done the following during a disagreement; (1) "Threatened to hit or throw something at them," (2) "Threw something at your partner," (3) "Pushed, grabbed, or shoved your partner," (4) "Slapped your partner," (5) "Kicked, bit, or hit with your fist," (6) "Hit or tried to hit with something," (7) "Beat up your partner," (8) "Threatened your partner with a knife or gun," (9) "Used a knife or gun against your partner." The response categories were: never (=0), once (=1), twice (=2), 3-5 times (=3), 6-10 times (=4), 11-20 times (=5), and 21+ times (=6). The index has a mean of .50, a standard deviation of 1.24 and a range of 0-9. These items were drawn from the physical aggression items in Straus' (1979) Conflicts Tactic Scale (CTS). Although Straus has created a revised scale, this data was collected one year prior to the creation of that scale and so the current study utilized the 1979 Conflicts Tactic Scale. Response distributions on each of these nine items

were highly skewed; therefore each item was dichotomized (0=never, 1=once or more). These nine dichotomized items were then added together to create this IPV index.

In addition to this full IPV variety index, a “serious” IPV perpetration index was also used. This additional scale was used to combat criticisms of the CTS as the CTS2 had yet to be created when these data were gathered. One such criticism is that the etiology of minor forms of violence are quite different than major forms (Gelles, 1991; Holtzworth-Monroe & Stuart, 1994; Johnson, 1995; Straus, 1990). Also, as the CTS is a count of raw acts of IPV, it may indicate a greater number of acts in general or by gender that is due to a higher prevalence of less serious acts (e.g., acts of defense; Dekeseredy & Schwartz, 1998).

Those forms of violence that are less harmful were removed from the original IPV index; the resulting index is a count of the more serious/ harmful forms of IPV. This included six of the previous items: (1) “Slapped your partner,” (2) “Kicked, bit, or hit with your fist,” (3) “Hit or tried to hit with something,” (4) “Beat up your partner,” (5) “Threatened your partner with a knife or gun,” (6) “Used a knife or gun against your partner.” This serious IPV index has a mean of .21, a standard deviation of .66 and a range of 0-6.

Independent Variables

SAT explains acts of crime as beginning with one’s perceptions of action alternatives which, in turn, are a function of a person’s morality and the presence of temptations and provocations. Once a person decides that an act of crime is among the actions available, the choice process begins. The choice process, in turn, is a function of one’s self-control and the degree to which the situation is perceived as a deterrent risk.

Morality

The current study measures morality as whether various acts are held as morally acceptable; this operationalization is consistent with Wikström's concept of morality and is similar to past survey research on the topic (Antonaccio and Tittle, 2009; Wikström and Treiber, 2007). This study employed a morality scale comprised of eleven items addressing the individual's moral prohibitions regarding IPV. The first nine items focus on the individual's moral position in relation to IPV. These questions include (1) "It is against the law for a man to use violence against a women, even if they are in an intimate relationship," (2) "Yelling or swearing is justified in some situations in dating relationships (reverse coded)," (3) "We all have a moral duty to abide by the law," (4) "it is against the law for a woman to use violence against a man, even if they are in an intimate relationship," (5) "physical violence is a part of a normal dating relationship (reverse coded)," (6) " I believe victims provoke physical violence (reverse coded)," (7) "it's OK to break the law if we do not agree with it (reverse coded)," (8) "In dating relationships, physical abuse is never justified," (9) "Laws against the use of physical violence, even in intimate relationship, should be obeyed." Responses to these items are measured on a Likert scale, strongly agree (coded 4), agree (coded 3), disagree (coded 2), and strongly disagree (coded 1). An additional two items were utilized in creating the morality scale, these addressed if the respondent would approve of the following behaviors during a dispute: (1) "Use verbal tactics (swearing, yelling, etc.)," and (2) "Use physical actions (hitting, slapping, etc.)." These items are measured on a similar Likert scale: strongly approve (coded 1), approve (coded 2), disapprove (coded 3), and strongly disapprove (coded 4). These eleven items were entered into a principal component factor analysis yielding a single-factor solution based upon the Keiser rule and scree discontinuity tests; this factor reproduced 29 percent of the variation among these

eleven items. Factor loadings on this factor ranged between .30 and .70. Finally, these eleven items were combined into a weighted additive scale with a Cronbach's alpha of .75.

Temptations/Provocations

The measure of temptations/provocations used in this study has its limitations, as there are no direct measures for this mechanism in these data. It is a common feature of the body of research testing Wikström's theory to use either surrogate measures for these temptations/provocations or to simply not examine them at all. Rather than excluding this key theoretical concept altogether, this study also relied upon a proxy measure of temptations/provocations. The measure of temptations/provocations used in this study is derived from Akers' concept of discriminative stimuli. Discriminative stimuli are the various situational cues present which trigger behaviors that have been reinforced in the past in similar situations. (Burgess & Akers, 1966, p. 136). The situational aspects of IPV, especially if IPV is a repeated experience, can easily become factors that the IPV participants (both victims and offenders) come to understand as highly predictive temptations/provocations for an IPV event. That is, the situational factors associated with IPV may become discriminative stimuli which IPV participants come to understand as cues that IPV is an action alternative available to them. Thus, in the absence of a more direct measure of situational temptations or provocations, or of the situational factors that may serve as discriminative stimuli, this study uses a measure of respondents' past experience with IPV as either a victim or a perpetrator as a proxy or surrogate measure for Wikström's construct of temptations/provocations.

The temptations/provocations index was created from eighteen items. The first nine items asked respondents how many times they had done the following to a past partner (1) "Threatened to hit or throw something at them," (2) "Threw something at your partner," (3) "Pushed,

grabbed, or shoved your partner,” (4) “Slapped your partner,” (5) “Kicked, bit, or hit with your fist,” (6) “Hit or tried to hit with something,” (7) “Beat up your partner,” (8) “Threatened your partner with a knife or gun,” (9) “Used a knife or gun against your partner.” An additional nine questions asked how many times the respondent experienced the previous nine actions as a victim in their past relationships. For all eighteen items the possible responses were, never (coded 0), once (coded 1), twice (coded 2), 3-5 times (coded 3), 6-10 times (coded 4), 11-20 times (coded 5), 21+times (coded 6). These were recoded into dummy variables (0=never, 1=once or more) and all eighteen items were summed to create a count index of the number of types of past partner IPV perpetration or victimization reported by the respondent.

Self-Control

The 24 items from the Grasmick and colleagues (1993) scale are used to operationalize each element of Gottfredson and Hirshi’s (1990) proponents of self-control. This scale examines the cognitive based measures of self-control as they are less prone to tautological reasoning than behavioral aspects and have been used in previous tests of this theory (Antonaccio and Tittle, 2008; Cochran, 2016). The first component of self-control, impulsivity is measured by the following items: (1) “I don’t devote much thought and effort to preparing for the future,” (2) “I often do whatever brings me pleasure here and now even at the cost of some distant goal,” (3) “I’m more concerned with what happens to me in the short run than in the long run,” and (4) “I often act at the spur of the moment without stopping to think,” A preference for simple tasks is measured by the following four items: (1) “I frequently try to avoid projects that I know will be difficult,” (2) “When things get complicated, I tend to quit,” (3) “The things in life that are easiest to do bring me the most pleasure,” and (4) “I dislike really hard tasks that stretch my abilities to the limit.” Risk-taking is measured by the following four items: (1) “Sometimes I’ll

take a risk just for the fun of it,” (2) “I sometimes find it exciting to do things for which I might get in trouble,” (3) “I like to test myself every now and then by doing something a little risky,” and (4) “Excitement and adventure are more important to me than peace and security.”

Physicality is measured by asking respondents: (1) “If I had a choice, I would almost always rather do something physical than something mental,” (2) “I almost always feel better when I am on the move rather than sitting and thinking,” (3) “I like to get out and do things more than I like to read to think about things,” (4) “I seem to have more energy and a greater need for activity than others my age,” and (5) “I try to look out for myself first, even if it means making things difficult for other people.” Self-centeredness is measured by the following items: (1) “I’m not very sympathetic to other people when they are having problems,” (2) “If things upset other people, it’s their problem not mine,” and (3) “I will try to get the things I want even when I know it’s causing problems for other people.” Frustration is measured by the following questions, (1) “Often when I’m angry I feel more like hurting people than talking to them about why I’m angry,” (2) “I lose my temper pretty easily,” (3) “When I’m really angry, other people better stay away from me,” and (4) “When I have a serious disagreement with someone it’s hard for me to talk calmly without getting upset.” These 24 items were presented to respondents with a Likert scale asking respondents if they strongly agree (coded 4), agree (coded 3), disagree (coded 2), or strongly disagree (coded 1). All items were reverse coded in order for lower scores to represent lower self-control; they were then entered into a principal components factor analysis yielding a single factor solution. Based upon the Keiser rule and scree discontinuity test this factor reproduced 23 percent of the variation among the items with factor loadings ranging from .27 to .62. These items were combined into a weighted, additive scale with a Cronbach’s alpha of .85.

Deterrence/Rational Choice

Deterrence is defined by Wikström as “the felt worry about or fear of consequences...when committing an act of crime;” as such, in the current study the indicators of rational choice/deterrence came from a collection of survey items addressing respondent perception of the expected utility of IPV as well as perceived, experienced, or anticipated formal and informal sanctions associated with IPV (Wikström and Treiber, 2009, p.80). The first two items addressed the likelihood of getting caught and the degree of punishment if caught, asking the respondent, “if someone like yourself were to use physical action...against a spouse or partner in a disagreement, how likely is it that you would be reported to the police?” This first item was measured on an ordinal scale from very likely (coded 4), somewhat likely (coded 3), somewhat unlikely (coded 2), and very unlikely (coded 1). The second item was measured on an ordinal scale coded from 0 to 6 asking respondents “if someone like yourself were reported to the police for using physical actions...against a spouse or partner in a disagreement, what do you think is the worst thing that would happen to you?” The ordinal scale response options were nothing (coded 0), arrested (coded 1), have a restraining order against them (coded 2), serve jail time (coded 3), warned and released (coded 4), taken to court (coded 5), probation or a rehab program (coded 6). The next item addresses the outcome of physical action, asking what the result has been or would be after the use of physical action against a partner. The response options for these items were mainly good outcomes (coded 1), about as much good as bad (coded 2), and mainly bad outcomes (coded 3). The next eight items were measured on an ordinal scale that asked the respondent to “indicate the extent to which you believe your mother or stepmother (father or stepfather; best friend, and your current spouse or partner) would approve or disapprove of the following things one partner might do to the other in a disagreement.” (1) “Use verbal tactics

(swearing, yelling, etc.),” and (2) “Use physical actions (hitting, slapping, etc.).” Response option for these two items were strongly approve (coded 1), approve (coded 2), disapprove (coded 3), strongly disapprove (coded 4). The following four items used in the deterrence scale asked the respondent to explain the reaction of a “spouse/partner,” “friends,” “parents,” and “other relatives” if they ever had or were to use physical action against a partner. The responses were recorded with an ordinal scale from approve and encourage it (coded 5), neither approve nor discourage it (coded 4), disapprove but do nothing (coded 3), disapprove and try to stop it (coded 2), disapprove and report to authorities (coded 1). The final item used to measure deterrence was a measure of the expected utility of IPV that was created by subtracting the sum of anticipated costs (created via eight items) from the sum of anticipated rewards (created via eight items). The reward items asked respondents “if you have ever used physical actions against a spouse or partner in a disagreement which of the following things have happened,” or “if you have never used physical actions against a spouse or partner in a disagreement, which of the following thing do you think would happen.” Respondents were to check all that applied, with a check coded 1 and not checked coded 0. (1) “It gave me a satisfying or rewarding feeling,” (2) “It made me feel more masculine or tough,” (3) “It ended the argument,” (4) “It got my partner off my back,” (5) “I felt powerful,” (6) “My friends respected me more,” (7) “I felt more in control,” (8) “My partner respected me more.” The eight items for cost were (1) “It made my relationship even more stressful,” (2) “My friends criticized me,” (3) “I got arrested,” (4) “It made me feel out of control,” (5) “I felt ashamed,” (6) “It made the argument worse,” (7) “My family criticized me,” (8) “I felt guilty.” The sum of the cost index was then subtracted from the rewards index to create a measure of the expected utility of IPV.

Next, all of these items were combined to create a deterrence scale. These sixteen items were first entered into a principal components factor analysis yielding a single-factor solution reproducing 24 percent of the variation among these sixteen items; factor loadings ranged between .15 and .81. Finally, these sixteen items were combined into a weighted additive scale with each item weighted by its factor loading (Cronbach's alpha of .68). Table 1 presents the descriptive statistics for the dependent and independent variables in the study, it reports both standardized and unstandardized univariate statistics.

Table 1: Descriptive Statistics of Variables in the Analyses

	\bar{X} Unstandardized, (standardized)	SD Unstandardized, (standardized)	Min Unstandardized, (standardized)	Max Unstandardized, (standardized)
Full IPV index	0.68	1.41	0	9
Serious IPV index	0.21	0.66	0	6
Morality scale	0.026, (0)	1.561,(1)	-8.246, (-4.44)	0.845, (1.06)
Self-Control Scale	22.715, (0)	3.893, (1)	12.02, (-2.81)	41.20, (4.85)
Temptations/Provocations	0.052, (0)	1.044, (1)	-0.613, (-0.64)	4.767, (4.52)
Deterrence Scale	2.006, (0)	4.326, (1)	-12.294,(-3.40)	11.853, (2.34)

Analytic Plan

Because the dependent variables are counts of the number of different types of IPV perpetration against a respondents' current partner, it constitutes a variable for which an ordinary least squares (OLS) regression approach is inappropriate, as the results produced are biased (Paternoster & Brame, 1997). Moreover, both variables are skewed such that their standard deviations exceed their means, making them overdispersed. Therefore, the analyses are based on a series of negative binominal regression models (Osgood, 2000; Paternoster & Brame, 1997). The modeling process in this study builds incrementally by adding 2-way, 3-way, and 4-way cross-product interaction terms to the base model, which examines the relative effects of the four components of Wikström's SAT (morality, temptations/provocations, self-control, and

perceptual deterrence) on the IPV variety index. These models are then repeated for the reduced form IPV serious index which is restricted to the more serious/injurious forms of IPV. However, because none of the 3-way or 4-way interactions attained significance; these models are not reported herein. To examine whether or not the causal process described by Wikström's SAT is gender invariant, gender-specific models were also examined. Parameter estimates derived from these models were then examined for equality in effect size. To do so, this study used the test for the equality of maximum likelihood coefficient presented by Brame, Paternoster, Mazerolle and Piquero (1998). The negative binomial regressions herein controlled for respondent sex (0=female, 1=male) and the length of the relationship in months.

RESULTS

Table 2 presents the zero-order correlations among the variables of interest. These bivariate results indicate that the correlations between the full IPV index and all four of the components of Wikström’s theory attain statistical significance and are in the direction indicated by the theory. Respondents’ who score high on morality ($r = -.11$), who have high levels of self-control ($r = -.14$), and perceive deterrent risk ($r = -.30$) are less likely to report intimate partner violence. Whereas those who score more highly on the proxy measure for temptations/provocations ($r = .30$) are more likely to report perpetration of IPV. The correlations between the SAT indicators and the serious IPV index attained significance for self-control ($r = -.12$), temptations/provocations ($r = .27$) and deterrence ($r = -.25$) but not morality ($r = -.04$).

Table 2: Zero-Order Correlations

	Full IPV index	Serious IPV index	Morality	Self-Control	Temp/Prov	Deterrence
Full IPV index	----	0.861*	-.108*	-.137*	.295*	-.302*
Serious IPV index		----	-.041	-.116*	.267*	-.249*
Morality			----	.318*	-.043	.152*
Self-Control				----	-.113*	.165*
Temp/Prov					----	-.388*
Deterrence						----

* $p < .05$

Table 3 reports the results from three negative binomial regressions models for which elements of Wikström's SAT are added incrementally. Model 1 examines the direct/relative effects of the four individual elements of Wikström's theory, controlling for the effects of gender (0=female, 1=male) and relationship length in months. Once the control variables are added, the bivariate relationship between morality and the full IPV index no longer attains significance ($b = -.08$). Self-control, temptations/provocations and deterrence do however continue to hold. Persons with high self-control ($b = -.27$) and who perceive deterrent risk ($b = -.40$) are less likely to report IPV perpetration. Those who score high on the temptations/provocations proxy variable ($b = .35$) are more likely to commit IPV. These findings indicate mixed results for SAT as not all items are supportive of the theory, especially the morality scale.

Model 2 examines the perception-choice-action components of SAT by adding cross-product terms representing these processes. Perception was measured as the cross-product of morality and temptations/provocations, while choice is cross-product of self-control and deterrence. Neither of these two cross-product terms attained statistical significance ($b = .06$ and $.08$; respectively) indicating that the perception-choice-action component does not work as Wikström has theorized.

Finally, Model 3 adds cross-product terms representing the SAT concepts of criminal propensity and exposure to criminal opportunity. Criminal propensity is the cross-product of morality and self-control, this variable did not attain statistical significance ($b = -.02$). However, exposure to criminal opportunity, the cross-product of temptations/provocations and deterrence, did attain statistical significance. Exposure to criminal opportunity ($b = .29$) increases the likelihood that an individual will engage in IPV. None of the 3-way and 4-way interactions

among the elemental components of Wikström’s SAT attained statistical significance and thus are not reported herein.

Table 3: Negative Binominal Regression Models- Full IPV Variety Index

	Model 1			Model 2			Model 3		
	b	SE(b)	p	b	SE(b)	p	b	SE(b)	p
Morality	-0.083	0.072	.252	-0.087	0.074	0.241	-0.071	0.082	0.382
Temp/Prov	0.352	0.069	<0.001	0.351	0.069	<0.001	0.564	0.085	<0.001
Self-Control	-0.271	0.076	.0004	-0.285	0.078	<0.001	-0.250	0.075	0.001
Deterrence	-0.400	0.075	<0.001	-0.417	0.079	<0.0001	-0.507	0.080	<0.001
Perception	----	----	----	0.003	0.059	0.960	----	----	----
Choice	----	----	----	-0.061	0.077	0.431	----	----	----
Propensity	----	----	----	----	----	----	-0.016	0.073	0.828
Exposure	----	----	----	----	----	----	0.294	0.065	<0.001
Male	-0.769	0.168	<0.001	-0.778	0.168	<0.001	-0.692	0.168	<0.001
Rel. Length	0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001
Constant	-1.065			-1.057			-1.040		

Table 4 is organized with the same modeling approach as Table 3 but utilizing the serious IPV perpetration index. The findings are largely the same. Model 1 examines the direct/relative effects of the four individual elements of Wikström’s theory, controlling for the effects of gender and relationship length. Morality again did not attain statistical significance (b= .10). However, self-control, deterrence and temptations/provocations did. Persons with high self-control (b= -.36) and who perceive deterrent risk (b= -.53) are less likely to report IPV perpetration. Those who score high on the temptations/provocations proxy variable (b= .36) are more likely to commit IPV. These findings again indicate mixed support for Wikström’s theory.

Model 2 examines the perception-choice-action components. Neither the perception nor the choice cross-product terms attained significance. These results indicate a lack of support for the theory. Finally, Model 3 adds cross-product terms criminal propensity and exposure to criminal opportunity. Similar to Table 3, criminal propensity did not attain statistical significance ($b = .09$) but exposure to criminal opportunity did ($b = .28$).

In summation, the findings reported in Tables 3 and 4 indicate that Wikström's Situational Action Theory doesn't seem to work effectively at explaining IPV, either the full IPV index or the serious IPV index. Only one of the interaction terms attained significance and while the most direct effects of several key theoretical elements of SAT did, morality, the key variable, did not.

Table 4: Negative Binominal Regression Models- Serious IPV Variety Index

	Model 1			Model 2			Model 3		
	b	SE(b)	p	b	SE(b)	p	b	SE(b)	p
Morality	0.100	0.113	0.373	0.081	0.121	0.504	0.182	0.143	0.205
Temp/Prov	0.361	0.089	<0.001	0.357	0.089	<0.001	0.583	0.113	<0.001
Self-Control	-0.359	0.117	.0022	-0.412	0.130	0.002	-0.347	0.117	0.0031
Deterrence	-0.527	0.108	<0.001	-0.558	0.115	<0.001	-0.661	0.116	<0.001
Perception	----	----	----	0.018	0.080	0.821	----	----	----
Choice	----	----	----	-0.108	0.115	0.348	----	----	----
Propensity	----	----	----	----	----	----	0.090	0.119	0.450
Exposure	----	----	----	----	----	----	0.275	0.087	0.002
Male	-1.441	0.305	<0.001	-1.457	0.306	<0.001	-1.353	0.305	<0.001
Rel. Length	.001	<0.001	<0.001	.001	<0.001	<0.001	0.001	<0.001	<0.001
Constant	-2.276			-2.27			-2.33		

Table 5 reports the results of the equality of the maximum likelihood coefficients test. The findings indicate that there were no significant gender differences for the effects of morality ($z = -$

.067), self-control ($z = -.43$), or temptations/provocations ($z = -1.20$) on IPV. However, the effect of deterrence/rational choice on IPV perpetration was not gender invariant ($z = 2.22$), which may be due to the fact that women may tend to be more deterred than men (Richards & Tittle 1981).

Table 5: Gender-Specific Models Testing the Effects of SAT Constructs on IPV

	Males			Females			
	b	SE(b)	P	b	SE(b)	p	Z
Morality	-0.059	0.124	0.636	-0.069	-0.086	0.427	-0.067
Temp/Prov	0.497	0.141	<0.001	0.304	0.078	<0.001	-1.200
Self-Control	-0.223	0.157	0.155	-0.300	0.084	<0.001	-0.430
Deterrence	-0.447	0.139	0.001	-0.387	0.088	<0.001	2.222*
Rel. length	0.001	<0.001	0.005	0.001	<0.001	<0.001	
Constant	-1.763			-1.056			
N=617				N=314			

* $p < .05$

DISCUSSION

The purpose of this study is to test Wikström's Situational Action Theory (Wikström, 2004) against data on college students' perpetration of intimate partner violence. As this is a relatively new theory, the literature testing it is limited and even fewer have tested it against data on violent behavior. Furthermore, of the tests of SAT, none of them are complete; they are partial tests examining only some of the elements of Wikström's Situational Action Theory. Moreover, none of these tests have looked at IPV, nevertheless all four of the theory's key elements have been linked individually to the perpetration of IPV (Byun, 2012; Chapple & Hope, 2003; Sellers, 1999; Stith et al., 2000; Vecina, 2014). Finally, IPV is a behavior that could be appropriately explained by SAT as it is both situational in nature and is associated with all key components of the theory. This paper attempted to provide the most complete test of SAT, examining it among perpetrators of IPV.

Situational Action Theory is one of many recent theoretical developments in the field of criminology. It is largely an integrated theory, which brings in theoretical elements from other theories and presents a unique model of how these elements lead to criminal behavior. Not only does it integrate concepts from other theories it also integrates across levels, individual and situational. At the individual level the theory stresses the role of criminal propensity, a function of personal morality and self-control, and at the situational level it stresses exposure to criminal opportunity which is a function of temptations/provocations and perceptual deterrence/guardianship (Wikström, 2010).

The theory begins with the recognition that criminal behavior is a choice; people choose to engage in criminal behavior or not. The choice is a two-step process, referred to as the perception-choice-action process. The process begins with the individual's perception of action alternatives available in a situation; the perception of action alternatives is a product of people's perception of various situational temptations/provocations and their personal morality. According to Wikström, a person with high levels of morality in a situation with low temptations/provocations is unlikely to see crime/deviance as an available action alternative. However, when morality is low and temptations/provocations are high, a person is much more likely to see crime/deviance as an available option. The second step is the choice among the various action alternatives perceived as available; this choice is a product of self-control and the level of guardianship/deterrence perceived to be situationally present. An individual with strong self-control who perceives deterrent threats to be high is unlikely to engage in crime/deviance. However, when self-control and perceptual deterrence are low, crime/deviance is likely to result (Wikström, 2010).

Summary of Findings

This study uses self-report data of a sample of college students, examining measures of each of the four key elements of Wikström's theory on a variety index of IPV perpetration. The findings of this study show that three of the four indicators of Wikström's theory work as predicted (self-control, temptations/provocations, and perceptual deterrence), but morality, the theory's key variable, does not. Additionally, cross-product terms representing the theoretical constructs of criminal propensity, perception of action alternatives and choice did not work, but criminal exposure did. As only one of the four 2-way interactions worked, none of the 3-way or 4-way interactions were examined.

Implications for SAT

This study is the most complete test of SAT to date, as it is the first to examine all four key theoretical components as well as each of the two-way interactions explicated in the theory; moreover, it is the first test of SAT against IPV. The results herein indicate that this particular theory doesn't work effectively in explaining IPV. While three of the four elements had direct effects, morality, the key SAT variable, was not associated with IPV and only one of the 2-way interactions had a significant effect. However, consistent with the expectations of SAT, IPV is positively associated with temptations/provocations, and respondents' IPV perpetration is found to be inversely associated with their level of self-control and their perceptions of deterrence/guardianship.

Again, the one direct effect that didn't work is the key theoretical variable, morality. This is a significant finding as morality is the instigating variable in the perception-choice-action process. If this variable is not associated with criminal behavior, then the process as theorized doesn't work. The null findings for the effect of morality on IPV perpetration is in contrast to previous research indicating that moral propensity is related to offending (Bachman, Paternoster, & Ward, 1992; Grasmick & Bursik, 1990; Paternoster & Simpson, 1996). Moreover, criminal propensity, the cross product of morality and self-control, is also unrelated to IPV perpetration. The only two-way interaction explicated in the theory that worked as predicted, was criminal exposure, which is the cross-product of temptations/provocations and perceptual deterrence/guardianship. Therefore, exposure to criminal opportunities does work as predicted by the theory.

In sum, these null findings call into question the predictive efficacy of SAT, as the results herein indicate that the perception-choice-action process and criminal propensity don't work as predicted. Previous findings support these results, specifically in regards to the lack of significant effects for the interaction between deterrence and self-control (Cochran, 2016; Gallupe & Baron, 2014), and the support of the interaction between temptation/provocations and deterrence (Wikström, Tseloni & Karlis, 2011), as well as the mixed findings with the interaction between morality and self-control (Bruinsma et al., 2015). Conversely, prior studies examining morality and temptations/provocations have found there to be significant effects on offending in contrast to the findings herein (Svensson, Pauwels, & Weerman, 2010; Wikström & Svensson, 2008).

SAT is premised on a rational choice approach to human behavior; once action alternatives are perceived as available, the individual then makes a choice from among those options. However, it is questionable as to whether or not the type of IPV captured in this study is rational. For example, IPV that is emotional is more likely to be impulsive and therefore less rational. As these data indicate, IPV perpetrators have lower levels of self-control, therefore it may be possible that these behaviors are not rational. However, as these data find that perceptual deterrence was related to perpetration, it is possible that IPV is rational. Research suggest that women perpetrating IPV may perceive fewer consequences such as injury to their partner, revenge from their partner, or police intervention (Becker, 1968; Cornish & Clarke, 1986).

IPV is typically seen as a gender-based issue, one that disproportionately impacts females (Reed, Raj, Miller & Silverman, 2010). For instance, females are more likely to die by the hands of a male partner than any other person and women are more likely to be physical injured by a male partner (Tjaden & Thoennes, 2000). Thus, gender variation among the four key components

were examined. The results herein indicate that SAT as it applied to IPV is not gendered, which supports the idea that the theory is meant to apply to all breaches of moral action, despite perpetrator variation. However, one of the key variables, deterrence is gender variant. When considering this finding, it is clear that the women perpetrating IPV perceive fewer consequences for their actions and therefore are rationalizing the behavior, in other words, they commit IPV after weighing the consequences and perceiving them to be limited.

Implications for IPV

The findings of this study indicate that the individuals who are perpetrating IPV have low levels of self-control, have experienced IPV in the past as either a victim or an offender (temptations/provocations), and perceive low levels of deterrent risk. These findings are prevalent in the extant research on IPV. For instance, self-control has been found to predict IPV (Chapple & Hope, 2008; Kerley, Xu, & Sirisunyaluck, 2008; Sellers, 1999). Additionally, research indicates a relationship between experiencing/witnessing abuse in the home as a child and IPV (Trebilco, 2003), but more in line with the measure used in this study, is research indicating that experiencing dating violence as an adolescent is predictive of perpetration and victimization of IPV (Manchikanti-Gomez, 2011). In regard to perceptual deterrence, research indicates a relationship between various types of deterrence and decreases in the perpetration of IPV (Smithey & Straus, 2004; Williams & Hawkins, 1992).

These findings, however, did not indicate that personal morality was a significant predictor of IPV. This finding is one of particular interest as it is considered the key theoretical variable. It might be that these data are capturing violence that is not impacted by an individual's level of morality. A person might know that perpetrating IPV is morally unacceptable but participate in the behavior regardless. Conversely, this measure of morality has, in prior studies

(Sellers, 1999), also not worked as hypothesized; it could be possible that these results are affected by individuals' desire to appear socially acceptable. In other words, responses may be plagued with social desirability bias as respondents' may have answered based on known socially accepted values.

Additionally, the findings indicate that there is no interactive effect between self-control and morality (criminal propensity). This finding indicates that the effect of self-control is not conditioned or influenced by ones level of morality. These results show that where self-control is high, IPV is likely to occur despite levels of morality. It is possible the concept of criminal propensity is not a cross product of personal morality and self-control but simply dependent on one's self-control. Conversely, the interaction between temptations/provocation and perceptual deterrence (exposure to criminal opportunity), was significant. This indicates that past IPV experience conditions the effect of perceptual deterrence on IPV.

Policy implications

Based on these findings, policy implications should focus on improving an offender's level of self-control, specifically during a conflict. These policies could include offender counseling with a focus on improving an individual's emotional control and conflict resolution. These interventions could also include friends and family members in order to incorporate the influence of informal deterrence into the sessions, as deterrence had a significant effect on IPV. In some cases it might be advantageous to include couples counseling as this type of counseling can produce results not seen with individual interventions, such as revealing strategies of control and operationalization of the offender's rage (Rosenbaum & Maiuro, 1990). However, this type of counseling is not recommended for all IPV cases as it can be dangerous for victims of domestic terrorism (Avis, 1992; Bograd, 1992), but in cases where the violence is less severe, it

can be beneficial (Brown & O’Leary, 1997). Additionally, these prevention efforts should be aimed at individuals who have past experience with IPV and should include both victims and perpetrators as having experience with IPV is significantly related to IPV perpetration.

Intervention services aimed at children who experience abuse should be expanded to include education on healthy relationships and IPV prevention (Gazmararian, Adams, Saltzman, & Johnson, 1993; Maas, Herrenkohl, & Sousa, 2008). Lastly, more programs which produce informal controls such as “Connect” and “Men Stopping Violence” should be developed to encourage norms against IPV (Douglas, Bathrick, and Perry, 2008).

Limitations

It is possible that some of the null findings are due to limitations in the measurements used. These data were secondary data and were not originally collected to test SAT, as such they may suffer from measurement error. Specifically, the proxy measure for temptations/provocations, which has most commonly been measured via proxies in past research (Gottfredson & Hirschi, 2003; Hay & Forrest, 2008). It is unlikely that this measurement limitation accounts for the null findings observed in this research in regards to the direct effect of morality or for the lack of significant effects between morality and self-control and self-control and deterrence. In fact, this measurement led to support of the theory as the interaction between temptations/provocations and deterrence was the only one of significance. This study used the CTS1, which had been criticized because of a lack of separation between less serious and overall IPV (Dekeseredy & Schwartz, 1998). However, the current study combated this criticism by creating two separate IPV indexes. Another limitation in the present study are the small number of items with low factor loadings, specifically in the self-control scale. However, each item included in the scale has strong face validity and would not have improved the alpha reliabilities

of the scale if thrown out, also, to address items with weak loadings, the items comprising each scale were weighted by their respective factor loading prior to summation. Despite these limitations, this is the most complete test of the theory to date. Future research testing SAT should utilize data drawn from a more representative sample and should use more direct measures of temptations/provocations, possibly utilizing vignette type questionnaire, as it is possible with this type of questionnaire to interchange male and female perpetrators and the vary levels of temptations and provocations.

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APPENDICES

Appendix A: Scale and Index Items

Appendix 1A. IPV Items and Count/Variety Scales

	\bar{X}	SD	Min	Max
Items (recoded as 0/1 prevalence measures)				
“In thinking about your current committed relationship or marriage, how many times have you done any of the following things to your partner during a disagreement?”				
1. “Threatened to hit or throw something at them”	0.14	0.35	0	1
2. “Threw something at your partner”	0.12	0.33	0	1
3. “Pushed, grabbed, or shoved your partner”	0.21	0.41	0	1
4. “Slapped your partner”	0.08	0.27	0	1
5. “Kicked, bit, or hit with your fist”	0.57	0.23	0	1
6. “Hit or tried to hit with something”	0.06	0.24	0	1
7. “Beat up your partner”	0.01	0.08	0	1
8. “Threatened your partner with a knife or gun”	0.01	0.08	0	1
9. “Used a knife or gun against your partner”	<.01	0.05	0	1
Full IPV variety scale (items 1-9)	0.68	1.41	0	9
Reduced <i>serious</i> IPV variety scale (items 4-9)	0.21	0.66	0	6

Appendix 1B. Morality Scale and Items

	\bar{X}	SD	Min	Max
Items (recoded as 0/1 prevalence measures)				
1. “It is against the law for a man to use violence against a women, even if they are in an intimate relationship”	0.01	0.98	-0.46	.42
2. “Yelling or swearing is justified in some situations in dating relationships (reverse coded)”	0.02	0.99	-2.07	1.46
3. “We all have a moral duty to abide by the law”	0.02	0.99	-3.61	.80
4. “it is against the law for a woman to use violence against a man, even if they are in an intimate relationship”	0.01	1.00	-4.75	.48
5. “physical violence is a part of a normal dating relationship (reverse coded)”	0.01	0.98	-5.60	.35
6. “ I believe victims provoke physical violence (reverse coded)”	0.03	0.97	-3.94	0.65
7. “it’s OK to break the law if we do not agree with it (reverse coded)”	0.02	0.99	-3.71	0.81
8. “In dating relationships, physical abuse is never justified”	0.02	0.97	-4.37	.40
9. “Laws against the use of physical violence, even in intimate relationship, should be obeyed”	0.02	0.99	-5.60	0.37

“Please indicate the extent to which you personally approve or disapprove of the following things one partner might do to the other in a disagreement”

10. “Use verbal tactics (swearing, yelling, etc.)”	0.03	0.99	-2.84	1.37
11. “Use physical actions (hitting, slapping, etc.)”	0.04	0.92	-9.05	0.23
Morality (Standardized, weighted, additive 11-item scale of the above standardized items)	0	1	-4.44	1.06
Alpha: .75				

Appendix 1C. Temptations/ Provocations Index and Items

	\bar{X}	SD	Min	Max
Items (recoded as 0/1 prevalence measures)				
“In thinking about your current committed relationship or marriage, how many times have you done any of the following things to your partner during a disagreement?”				
1. “Threatened to hit or throw something at them,”	0.17	0.37	0	1
2. “Threw something at your partner,”	0.14	0.35	0	1
3. “Pushed, grabbed, or shoved your partner,”	0.22	0.42	0	1
4. “Slapped your partner,”	0.15	0.35	0	1
5. “Kicked, bit, or hit with your fist,”	0.10	0.30	0	1
6. “Hit or tried to hit with something,”	0.09	0.29	0	1
7. “Beat up your partner,”	0.01	0.11	0	1
8. “Threatened your partner with a knife or gun,”	0.02	0.13	0	1
9. “Used a knife or gun against your partner.”	<.01	0.07		
“In thinking about your current committed relationship or marriage, how many times has your partner done any of the following things to you during a disagreement?”				
10. “Threatened to hit or throw something at them,”	0.21	0.41	0	1
11. “Threw something at your partner,”	0.04	0.20	0	1
12. “Pushed, grabbed, or shoved your partner,”	0.30	0.46	0	1
13. “Slapped your partner,”	0.17	0.37	0	1
14. “Kicked, bit, or hit with your fist,”	0.13	0.33	0	1
15. “Hit or tried to hit with something,”	0.14	0.35	0	1
16. “Beat up your partner,”	0.05	0.22	0	1
17. “Threatened your partner with a knife or gun,”	0.04	0.20	0	1
18. “Used a knife or gun against your partner.”	0.02	0.13	0	1
Temptations/Provocations Index	0	1	-.064	4.52

Appendix 1D. Self-Control Scale and Items

	\bar{X}	SD	Min	Max
Items (recoded as 0/1 prevalence measures)				
1. “I don’t devote much thought and effort to preparing for the future,”	1.57	0.64	1	4
2. “I often do whatever brings me pleasure here and now even at the cost of some distant goal,”	1.87	0.70	1	4

3.	“I’m more concerned with what happens to me in the short run than in the long run,”	1.79	0.65	1	4
4.	“ I often act at the spur of the moment without stopping to think,”	2.21	0.77	1	4
5.	“I frequently try to avoid projects that I know will be difficult,”	2.07	0.68	1	4
6.	“When things get complicated, I tend to quit,”	1.73	0.60	1	4
7.	“the things in life that are easiest to do bring me the most pleasure,”	2.01	0.64	1	4
8.	“I dislike really hard tasks that stretch my abilities to the limit.”	1.88	0.62	1	4
9.	”Sometimes I’ll take a risk just for the fun of it,”	2.57	0.80	1	4
10.	“I sometimes find it exciting to do things for which I might get in trouble,”	2.09	0.79	1	4
11.	“I like to test myself every now and then by doing something a little risky,”	2.40	0.80	1	4
12.	“Excitement and adventure are more important to me than peace and security, ”	1.93	0.70	1	4
13.	“If I had a choice, I would almost always rather do something physical than something mental,”	2.12	0.72	1	4
14.	“ I almost always feel better when I am on the move rather than sitting and thinking,”	2.64	0.73	1	4
15.	“I like to get out and do things more than I like to read to think about things,”	2.67	0.73	1	4
16.	“I seem to have more energy and a greater need for activity than others my age,”	2.42	0.69	1	4
17.	“ I try to look out for myself first, even if it means making things difficult for other people,”	1.97	0.66	1	4
18.	“I’m not very sympathetic to other people when they are having problems,”	1.61	0.66	1	4
19.	“If things upset other people, it’s their problem not mine,”	1.75	0.67	1	4
20.	“I will try to get the things I want even when I know it’s causing problems for other people.”	1.71	0.62	1	4
21.	“Often when I’m angry I feel more like hurting people than talking to them about why I’m angry,”	1.65	0.71	1	4
22.	“I lose my temper pretty easily,”	1.95	0.80	1	4
23.	“When I’m really angry, other people better stay away from me,”	1.96	0.80	1	4
24.	“When I have a serious disagreement with someone it’s hard for me to talk calmly without getting upset.”	2.27	0.81	1	4
Self-Control Scale (Standardized, weighted, additive 24-item scale)		0	1	-4.85	2.81
Alpha:.85					

Appendix 1E. Deterrence Scale and Items

	\bar{X}	SD	Min	Max
Items (recoded as 0/1 prevalence measures)				

1. “If someone like yourself were to use physical actions (such as hitting, slapping, kicking, punching, etc.) against a spouse or partner in a disagreement how likely is it that you would be reported to the police”	-0.03	1.01	-0.10	1.85
2. “If someone like yourself were reported to the police for using physical actions (such as hitting, slapping, kicking, punching, etc.) against a spouse or a partner in a disagreement, what do you think is the worst thing that would happen to you”	<.01	1.00	-1.39	1.62
3. “What has been (do you think would be) the usual result after (if) you have used physical actions against a partner”	-0.02	1.00	-5.33	0.35
“indicate the extent to which you believe your mother or stepmother would approve or disapprove of the following things one partner might do to the other in a disagreement”				
4. “Use verbal tactics (swearing, yelling, etc.),”	0.03	0.99	-2.75	0.97
5. “Use physical actions (hitting, slapping, etc.).”	0.01	1.00	-6.29	0.34
“indicate the extent to which you believe your father or stepfather would approve or disapprove of the following things one partner might do to the other in a disagreement”				
6. “Use verbal tactics (swearing, yelling, etc.),”	0.02	1.00	-2.20	1.15
7. “Use physical actions (hitting, slapping, etc.).”	0.02	1.00	-4.27	0.48
“indicate the extent to which you believe your best friend would approve or disapprove of the following things one partner might do to the other in a disagreement”				
8. “Use verbal tactics (swearing, yelling, etc.),”	0.04	1.00	-2.32	1.20
9. “Use physical actions (hitting, slapping, etc.).”	0.05	0.93	-5.57	0.42
“indicate the extent to which you believe your spouse/partner would approve or disapprove of the following things one partner might do to the other in a disagreement”				
10. “Use verbal tactics (swearing, yelling, etc.),”	<.01	1.18	-3.24	1.29
11. “Use physical actions (hitting, slapping, etc.).”	<.01	1.18	-7.82	0.42
“If you have ever (never) used physical actions against a spouse or partner in a disagreement: What has been (do you think would be) the reaction of each of the following after you have used physical actions against your partner”				
12. Spouse/Partner	-0.03	1.00	-3.90	1.52
13. Friends	-0.04	1.01	-3.22	1.82
14. Parents	-0.04	1.02	-3.68	1.74
15. Other relatives	-0.03	1.01	-3.36	1.84
16. Rewards-Cost (variable is the sum of anticipated rewards minus the sum of anticipated cost)	-4.19	2.60	-8	7
Deterrence (Standardized, weighted, additive 16-item scale)	0	1	-3.40	2.34

Alpha:.68