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A Combined Model of Ecological Systems Theory and Social Learning Theory to Understand the Acquisition of Intimate Partner Violence

Xiaomin Sheng

University of Huddersfield, the UK Xiaomin.sheng@hud.ac.uk

ABSTRACT: Intimate partner violence (IPV for short), like other aggressive and abusive behaviors, is acquired from observing, interacting with, and engaging in a social environment. Once this violent behavior is learned, it will persistently resort as a way to resolve interpersonal issues during the life trajectories of an individual. Therefore, in order to prevent IPV from being acquired from the risky social environment, it is necessary to look at the trigger factors that can lead an individual into perpetuating or accepting IPV within the context he or she is growing up. To do so, Bronfenbrenner's ecological systems theory (EST) will provide an examination of how an individual's complex inter-relationships within the five layers' environmental systems (miro-, meso-, exo-, macro-, and chronosystems) can result in his or her tendency to form IPV behaviors. Similar to Bronfenbrenner's EST, Aker's social learning theory (SLT) also argues that an individual's interactions with others provide the context in which the IPV learning process occurs. While different from Bronfenbrenner's EST, Aker's SLT exposes an individual's cognitive learning process that either favor or against an observed behavior and whether or not to imitate it. Therefore, this paper attempts to combine Bronfenbrenner's EST and Aker's SLT to provide a theoretical model from which the knowledge in the field of IPV is constructed and to establish a theoretical explanation of an individual's IPV behaviors acquisition.

KEY WORDS: Intimate partner violence, ecological theory, social learning theory, theoretical framework

1. Introduction

Intimate partner violence (IPV for short), like other aggressive and abusive behaviors, is acquired from observing, interacting with, and engaging in the social environment (Burton 2007; Simons, Lin, & Gordon 1998; Ward 2007). Once this violent behavior is learned, it will persistently resort as a way to resolve interpersonal issues during the life trajectories of an individual (Simons et al. 1998). Besides, all aggressive and violent behaviors are commonly correlated, involving in one form of abusive acts associate with individuals' participation in other violence-related activities (Simons et al., 1998). Individuals who witness or are involved in IPV activities not only increase their likelihood of being IPV victims or perpetrators but also their involvement in bullying or becoming bullying victims (Bauer et al., 2006). Therefore, in order to promote awareness and mitigate the risk of IPV being acquired from the risky social environment, it is necessary to look at the trigger factors that can lead an individual into IPV victimization or perpetration within the context he or she is growing up. Bronfenbrenner's EST provides an examination of how an individual's complex inter-relationships within the five layers' environmental systems can result in his or her tendency to form IPV behaviors (Hong & Espelage 2012; Lee 2011; Pittenger, Huit, & Hansen 2016). Similar to Bronfenbrenner's EST, Aker's SLT also argues that an individual's interactions with others provide the context in which the IPV learning process occurs. While different from Bronfenbrenner's EST, Aker's SLT exposes an individual's cognitive learning process that either favor or against an observed behavior and whether or not to imitate it. When an observed behavior is rewarded over punished, the individual is more inclined to model it. On the contrary, if an observed behavior is punished instead of being rewarded, the individual tends to be more against it (Akers & Jennings 2015; Cochran, Maskaly, Jones, & Sellers 2017).

Combining Bronfenbrenner's EST and Aker's SLT, this paper attempts to provide the theoretical foundation from which the knowledge in the field of IPV is constructed in this study. Additionally, to establish an explanation of an individual's IPV behaviors acquisition using Bronfenbrenner's EST by five layers and Aker's SLT through four dimensions. Finally, to unify both theories into a coherent analysis. It is believed that such integration will provide the theoretical scaffold to the critical propositions of IPV behavior learning and illustrate the learning process regarding IPV abuse.

2. Bronfenbrenner's EST

The EST was articulated to understand the lifelong course of human development by Bronfenbrenner as an approach to fully account for all impacts the entire ecological systems have on human growth (Bronfenbrenner 1979b, 1994). Unlike previous theories of human development, which account individual and environment separately for development, Bronfenbrenner proposed that the external influences on the environment even that with which an individual is not able to interact directly, can have just as great effects on individuals' life trajectory (Bronfenbrenner 1994; Pittenger et al. 2016). To investigating all influences the environment both immediate and more remote may have on the developing individual (Bronfenbrenner 1979b, 1994), Bronfenbrenner's theory build up the systematic paradigms which provide a framework for researchers to conduct investigations across diverse disciplines (Bronfenbrenner 1994).

Since the outset of the ecological systems theory in the 1970s, it has been applied to explain the complexities in many situations. For example, Bronfenbrenner's model has been widely disseminated to explore the influence that external environments have on the function of families, childhood development and child maltreatment (Belsky 1980, 1993; Bronfenbrenner 1979a, 1986, 2011; Cicchetti, Toth, & Maughan 2000; Eamon 2001; Grzywacz & Marks 2000; Spencer 2008); many studies have also employed the ecological approach in the context of bullying and aggression (Craig & Pepler 1998; Espelage 2014; Hong & Espelage 2012; Lee 2011; Swearer & Doll 2001). There are a substantial number of studies have discussed about adolescent development through an ecological perspective (Feldman & Matjasko 2005; Leonard 2011; Lerner & Galambos 1998) and some are relevant to adolescents' problematic behaviors such as drug use and shooting (Brooks-Gunn, Duncan, Klebanov, & Sealand 1993; Duerden & Witt 2010; Espelage 2014; Hong, Cho, & Lee 2010; Lerner, Almerigi, Theokas, & Lerner 2005; Liddle 1999). However, a number of studies have adopted ecological perceptions to understand IPV based behaviors such as sexual abuse (Kotchick, Shaffer, Miller, & Forehand 2001; Miller 2014; Pittenger et al. 2016; Small & Luster 1994), but when it comes to the field of IPV education among young people, the number is scarce.

Although this research does not focus on identifying IPV victims and perpetrators, on passing the IPV-related knowledge among young people, it is beneficial to gain a thorough understanding of what accounts for the IPV behaviors. To fully explore IPV phenomenon, Bronfenbrenner's EST can further enhance our understanding of how the influences of the entire ecological system, along with the individuals' functions within it, can lead to the risk of being IPV victims and perpetrators.

For the purpose of substantiating the IPV phenomenon, IPV should be considered from an ecological perspective, as it enables researchers to examine the multiple interconnections between and within ecological layers that impact the students at the risk of being IPV victims or perpetrators. IPV behaviors acquisition can be better understood when it is considered from the interrelated five layers of ecological frameworks as microsystems, mesosytems, exosystems, macrosystems and chronosystems (Bronfenbrenner 1979b, 1994). The following part examines the multiple causes of IPV victims and perpetrators in the complex social environment within Bronfenbrenner's model.

2.1. Microsystems

Microsystems represent the surroundings with which the developing individual immediately and directly interact, generally in face to face settings, which are made up of structures such as family, peer group and school (Bronfenbrenner 1979b, 1994; Miller 2014). This section presents a microsystem level analysis of the risk factors that can lead an individual in learning IPV behaviors.

2.1.1. Individual's characteristics

At the individual level, an individual's characteristics such as age, gender and self-regulation are examined in this study as predictors of IPV, with the choice of each now justified in turn. As for age, a substantial number of studies indicate that adolescents, especially the age range from 16 to 24 are regarded as the riskiest life stage for suffering IPV (Cornelius & Resseguie, 2007; Cui, Ueno, Gordon, & Fincham 2013; Humphrey & White 2000; Smith, White, & Holland, 2003; Ybarra & Thompson, 2018). As for gender, the majority of studies focus on girls' victimizations and boys' perpetrations (Amar & Gennaro, 2005; Humphrey & White 2000; Shen, Chiu, & Gao 2012; Smith et al. 2003; WHO 2012, 2013), while a few studies indicate that girls who have obtained the belief of female chauvinism can also resort to IPV against boys (Cui et al. 2013). As for self-regulation, an individual's sexual experience frequency, use of substances, and psychological functioning are significant risk factors brought by self-regulatory failure in IPV (Connolly, Pepler, Craig, & Taradash 2000; Devries et al. 2014; Fineran & Bolen 2006). Self-regulatory failure in IPV can be aroused by personal traits and genetic potentials such as hedonistic tendency, aggressive or volatile personality, and depression or suicide susceptibility (Darling 2007a; Espelage 2014; Lee 2011; Spencer, Dupree, & Hartmann 1997).

2.1.2. Family, peer group and school

In the context of the family-based relationship, it is widely disseminated literature on IPV that adolescents whose parents are violent against each other and who suffer maltreatment from parents are more likely to go through violence in their own intimate relationships (Arriaga & Foshee 2004; Moylan et al. 2010). On the other hand, adolescents who have experience dating violence tend to increase the odds of domestic violence when they have a marital relationship (Cui et al. 2013; Humphrey & White 2000; Smith et al. 2003). Moreover, parental monitoring is proposed in a few studies as a positive protective predictor to avoid IPV victimizations and perpetrations for youth development. In other words, parents' supervision is a key element for IPV prevention (Darling 2007a; Espelage 2014). Compared with the impact of family relationships, much less literature has focused on the effects of friends'

IPV in shaping peers' dating violence (Arriaga & Foshee 2004). Young people who have friends with a history of IPV are more likely to get involved in IPV activities, the influence of friends' IPV behaviors can be more powerful than the impact from domestic violence (Arriaga & Foshee 2004). Similar to peers' IPV, additional studies are needed to examine school as an influential factor in predicting IPV attitudes and behaviors. The school environment is related to IPV prevention in the aspect that a negative school environment may increase the occurrence of IPV victims and perpetrators. Moreover, a negative school environment may decrease students' connectedness with the school which may account for more students' involvement in unhealthy behaviors as IPV and may cause students' failure in academic life (Holt, Finkelhor, & Kantor 2007; Silverman, Raj, Mucci, & Hathaway 2001).

2.2. Mesosystems

Mesosystems encompass interactions taking place between two or more previously mentioned microsystems, with which the developing individual interacts directly (Bronfenbrenner 1979b, 1994). Studies indicate that schools' engagement is regarded as one of the best approaches to value students' relationships and discourage any kind of violence (WHO 2012). To get schools involved in IPV prevention, IPV-related curriculum into school can be developed in such a way to promote awareness of IPV and in an attempt to mitigate the risk of IPV(Cornelius & Resseguie 2007). For example, students who obtain the knowledge of IPV from school can affect their attitude and behavior to deal with IPV in peer group, family and future relationships. In IPV-related literature, most school-based prevention programs have been put into practice in the US such as the Dating Violence Prevention Programs (DVIP) and the Safe Date Project (Barter 2009; Cornelius & Resseguie 2007; Foshee et al. 2004).

2.3. Exosystems

Exosystems consist of interactions taking place between two or more systems, at least one with which the developing individual has no direct connections (Bronfenbrenner 1994; Miller 2014), for example, parents' relationship with children's school or children's relationship with parents' workplace

(Bronfenbrenner 1994). This section presents an exosystematic level analysis of how the effects of policy have on the school's curriculum, which can indirectly impact students' IPV attitude and behavior. In English schools, IPV education suits best into the curriculum of Personal, Social, Healthy and Economic (PSHE) education. PSHE starts to include sex and relationship education (SRE) due to the report of Social Exclusion Unit in 1999 that indicates the UK has the highest rate of teenage pregnancy among countries in Europe (DfEE, 2000). The SRE guidance (2000) focuses on lower the rate of teenage pregnancy, but it neglects the situation that most teenage mothers are from the disadvantaged background and their vulnerabilities can increase their risk of suffering IPV according to the research report of the NSPCC on teenage mothers (Barter, McCarry, Berridge, & Evans 2009; Wood & Barter 2015). While this starts to change since 2018, the Department for Education (DfE) has published the draft of Relationship Education, SRE and Health Education Guidance (2019) for consolation to replace the SRE guidance (2000). In the draft version of Relationship Education, SRE and Health Education Guidance (2019), general forms of IPV, cyber or sext violence, healthy and safe relationships have been added and advised to be taught in all schools including maintained, non-maintained or independent schools (DfE 2018). Therefore, it is expected that the UK students will receive education regarding IPV from a compulsory curriculum.

2.4. Macrosystems

Macrosystems present the cultural factors that permeate micro-, mesoand exosystems, with reference to the developing individual's knowledge, worldview and custom (Bronfenbrenner 1994). At the macrosystems level, social norms and beliefs related to gender inequality and stereotypes are the deep-rooted factors of an individual's IPV behavior learning (Heise 2011; Parkes, Heslop, Ross, Westerveld, & Unterhalter 2016). Since social norms and beliefs are shared expectations of a particular group of people regarding how individuals should behave, therefore, if the country holds the beliefs such as male honour, female obedience and tolerance of violence as a way to resolve conflicts, individuals from the group are more likely to suffer IPV (Heise 2011). According to the WHO multi-country study mentioned in Heise (2011, p. 13), women who had the attitudes supportive of wife-beating had increased odds of IPV in 13 out of 15 countries. In addition, over 35 population-based studies from Asia, Africa, Latin America, and the Middle East have demonstrated that attitude condoning partner violence on the part of both women and men are highly predictive of IPV perpetration.

2.5. Chronosystems

Chronosystems refer to the dimension of time that comprises the consistency or change relate to an individuals' development covering lifelong course (Bronfenbrenner 1994). Studies indicate that individuals who have experienced IPV can result in negative outcomes in later life such as posttraumatic disorder, lower self-esteem, increased sexual experience and academic failures (Amar & Gennaro 2005). Moreover, engaging in the initial IPV perpetration and victimisation at an early stage of life are more likely to get involved with IPV issues again in adulthood. IPV in adolescents have close associations with IPV in a married relationship, which can lead to domestic violence at home such as parent-child violence, children's violent tendency (Cornelius & Resseguie 2007; Cui et al. 2013; Humphrey & White 2000; Ybarra & Thompson 2018).

By using Bronfenbrenner's EST, this research systematically analysed the causes of IPV victims and perpetrators in conjunction with environmental factors from the immediate environment system to more remote systems.

Bronfenbrenner's EST provides us with a systematic analysis of how various factors from the five layers' ecological environment shape the developing individual within it, however, there is a limitation of Bronfenbrenner's theory in explaining how the developing individual at the center reacts and responds to the shaping environment (Bronfenbrenner, 1994; Darling, 2007b). As Darling (2007b, 204) suggested that "different environments will have different affordances and will be responded to in different ways by different individuals...". Therefore, in order to complementary Bronfenbrenner EST, Akers' SLT as one of the most influential theory on crime and deviance, adopted by this study to gain a better understanding of how the developing individuals' cognitive system react to the environment in shaping their IPV behaviors.

3. Aker's SLT

Aker's SLT, one of the predominant theories of analyzing deviant behavior learning, has been applied successfully to a wide range of studies (Cochran et al. 2017). In a substantial number of studies, Aker's four core theoretical constructs as differential associations, definitions, imitations and differential reinforcements have been fully operationalized and examined (Akers 1973; Akers & Jennings 2015; Akers & Jensen 2006; Akers, Krohn, Lanza-Kaduce, & Radosevich 1979; Akers & Lee 1996; Bell & Naugle 2008). This research is trying to obtain a conceptual understanding of IPV with the support of Aker's model, the following section discusses the acquisition of IPV behaviors through these four elements as differential associations, definitions, differential reinforcements and imitations.

3.1. Differential association

Similar to the ecological perspective, Aker's social learning theory agrees that deviant behavior e.g. IPV behavior, is learned from differential IPV-related associations. According to Aker's theory, these differential associations are supposed to provide the contexts in which the process of IPV behaviors learning happens (Akers 1973, 2017; Akers & Jennings 2015; Bell & Naugle 2008). These associations are differential in the priority, frequency, duration and intensity. Here, priority means in which life stage IPV occurs; frequency can be understood as how often the violence abuse happens; duration is defined as how long the harassment lasts; and intensity relates to the extent of intimacy between the perpetrator and the victim (Cochran et al. 2017). To some extent, the concept of differential associations proposed in Aker's theory is in accordance with Bronfenbrenner's theory. In Aker's social learning theory, differential associations can refer to families, schools, neighbors, churches, legal boards or social media (Akers & Jennings 2015), which covers five layers in Bronfenbrenner's model. However, Bronfenbrenner is in the field of developmental psychology whereas Aker is in the field of criminology. This means that Bronfenbrenner's associations in his ecological perceptions focus on individuals' relationships within communities and the wider society whereas Aker's associations in his social learning theory emphasizes the impacts society has on learning criminal and deviant behavior. In this research, both concepts are employed to conceptualize the process of IPV acquisition.

3.2. Definitions

Aker indicates that based on these differential associations, an individual usually forms a definition towards a behavior or a situation as approval, disapproval and in between (Akers & Jennings 2015). These definitions consist of SLT concerning an individual's own value, attitude and orientation attached to deviant behaviors as well as conforming behaviors (Akers & Jennings 2015; Cochran et al. 2017). In other words, the more an individual's definition is favorable to deviant behavior, the more likely he or she is to conform that act (Cochran et al. 2017). In addition, natural moral stance and weakly held moral convictions are also proposed as factors to trigger criminal behaviors (Sellers, Cochran, & Branch 2005). Applying this principle to explore IPV, it is likely that intimate partners perform a violent act when he or she considers it as approved, weakly approved, weakly disapproved or neutral. Therefore, altering the individual's definitions towards IPV, from approved, weakly approved, weakly disapproved or neutral to mostly disapproved or disapproved, can be used as a measure to promote the awareness of IPV (Akers & Jennings 2015; Cochran et al. 2017; Sellers et al. 2005).

3.3. Differential reinforcements

Apart from definitions, Aker also proposes that these differential associations are the primary sources for differential reinforcements (Akers & Jennings 2015; Cochran et al. 2017). Differential reinforcements refer to the net balance of observed, participated, or predicted costs and rewards relating to a particular behavior (Akers & Jensen 2006; Cochran et al. 2017; Sellers et al., 2005). In other words, a behavior is more likely to be strengthened when it is observed, participated, or predicted with positive reinforcement over negative reinforcement; while the behavior is more likely to be weakened when it receives more positive punishment than negative punishment (Cochran et al. 2017). Adopting this concept to IPV, the intimate partners who are more inclined to be violent against or towards their partners are those who believe the consequences of IPV behaviors are more reward than cost. Such rewards might be the way of solving a contradiction or the feeling of having dominant power over another person. Thus, to discourage positive reinforcements and encourage positive punishments in IPV, knowledge about the potential costs of being an IPV perpetrator and risks of being IPV victims should be transmitted to students.

3.4. Imitations

As for imitation, this element refers to an individual's engagement in modelling a behavior which is observed from another (Akers & Jennings 2015; Sellers et al. 2005). The individual observes the consequences of behaviors from an admired role model, extract the general strategies and tactics of the behaviors in an attempt to receive similar rewards (Akers & Jennings 2015). Imitation plays an important part in establishing a novel pattern of behavior (Cochran et al. 2017). Therefore, when an individual observes violence against someone and the act is not punished, the individual may imitate that certain behavior. So, to prevent imitation from IPV behaviors, conflict resolutions and positive examples should be given to students as to mitigate the risk of modelling IPV behaviors.

In summary, Aker's SLT proposes that deviant behavior is primarily learned from a pattern of priority, frequency, duration and intensity interactions (differential associations) where the judgements as positive, negative or neutral towards the rightness of that deviant behavior are formed (definitions). When that deviant behavior is observed, participated or predicted to be rewarded or punished (differential reinforcements), it can alter the attitude (definitions) towards certain behaviors and be served as a role model to be followed (imitations). In addition, the deviant behavior as a product of differential associations, imitations, definitions and different reinforcements also can become differential associations for others (Akers 2017; Akers & Jennings 2015; Akers & Jensen 2006; Cochran et al. 2017; Sellers et al. 2005).

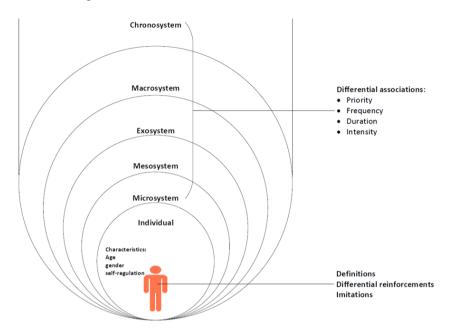
4. A Combine EST with SLT

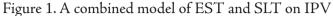
As discussed above, Bronfenbrenner's EST posits multi-layered ecological systems with which the developing individual at the center interacts

directly or indirectly. Within this model, various direct and indirect influential factors on the acquisition of deviant behaviors can be considered comprehensively. However, not all the influential factors in the systems have the same strength on one's behavior learning, the strength may reduce from immediate environment system e.g., microsystems to more remote systems e.g., exosystems and macrosystems. For example, peers, families and schools in microsystems have stronger effects on one's behavior learning than communities, legal system and safeguarding board in the exosystems. Similar to Bronfenbrenner's EST, Aker's SLT also proposes the intensity of differential associations relating to the extent of intimacy between the perpetrator and the victim. Besides intensity, Aker's SLT provides an analysis of differential associations through three other aspects as priority, frequency and duration, which can work as a complementary to further explore the effects an observed behavior has on an individual's IPV learning.

Moreover, to know the process of IPV behaviors acquisition, this research has to consider the joint effects of an individual's stimulusresponse mechanism with the complex environment. Therefore, to acquire a comprehensive understanding of IPV learning, Aker's SLT as the dominant theoretical perspectives in crime and deviant behavior is helpful here (Ennett et al. 2008).

Aker's SLT is dominant in the field of criminology and Bronfenbrenner's EST is prominent in the area of developmental psychology, but overlapping concepts exist between the two theories. Although Bronfenbrenner's theory focuses more on a systematic analysis of the environment, Aker's theory put more emphasis on an individuals' cognitive systematic process of deviant behavior learning, both of the theories associated with the impact of society on an individual. Bronfenbrenner's model provides an analysis of individuals' characteristics e.g., age and gender, impact their reactions to the entire social ecological systems. On the other hand, Aker's four elements can complementary Bronfenbrenner's EST as they can explain how the developing individual at the center responds to the outside shaping environment (see Figure 1).





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