## **ORIGINAL ARTICLE**

# Predictability of Physical and Psychological Violence by Early Adverse Childhood Experiences

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Abstract Early Adverse Childhood experiences (ACEs) in families of origin can take the form of witnessing it and/or being its victim, both of which can lead to the occurrence of domestic violence. Given such close linkage, the purpose of the present study was to determine the predictive abilities of ACEs regarding specific types of physical and psychological violence. To do so, 50 couples from those referred to five different family courts in Tehran to seek divorce due to domestic violence, were randomly selected and administered an author's-made questionnaire assessing different types of physical and psychological violence and the participant's history of abuse by their parents. Our findings showed that witnessing domestic violence in childhood can predict different types of physical and psychological violence, but mostly could account for "hitting" of the physical type and "cursing" of the psychological type. Similarly, being the victim of domestic violence mostly accounted for predict "strangling" of the physical type and "cursing" of the psychological type. Such results are discussed in the context of the existing literature and underscore ACEs importance in terms of their predictive ability of various types of physical and psychological violence.

**Keywords** Witnessing · Victimization · Physical · Psychological · Domestic violence · Adverse early childhood experience

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#### Introduction

Research on intimate partner violence has shown that violence not only affects the couples themselves, but also can impact other members of the family, namely the children. For example, Edelson et al. (2003) reported that the problems of those children who witness domestic violence can be grouped into behavioral and emotional, such as aggression, hostility, anxiety, social withdrawal, and depression; cognitive functioning and attitudes, such as lower verbal and quantitative skills, and developing attitudes in support of domestic violence; and longer-term problems such as low self-esteem among women and trauma-related symptoms. Also, Lorber and O'Leary (2004) reported that a number of factors, such as aggressive personality traits and witnessing interparental conflicts, while growing up, are associated with committing aggressive behaviors later on in life against his/her spouse. Similarly, O'Leary et al. (1994) showed that impulsive personality trait, problem drinking, general aggression, witnessing interparental aggression, and experiencing abuse during childhood are all predictors of resorting to violent behaviors against one's spouse. Furthermore, several other studies have shown that witnessing abuse during childhood can adversely affect children's emotional and social functioning, like lack of emotional support and affection and poor parental supervision both of which are closely associated with subsequent violent behaviors and aggression (Abrahams & Jewkes 2005; Capaldi et al. 2003; Diamond & Muller 2004; Edleson et al. 2003; Ellsberg et al. 1999; Hindin and Gultiano 2006; Hotaling & Sugarman 1986; Lorber & O'Leary 2004; Stiles 2002).

Additionally, children who are exposed to domestic violence are more likely to exhibit behavioral and physical health problems including depression, anxiety, and vio-



lence towards peers. They are also more likely to attempt suicide, abuse drugs and alcohol, run away from home, engage in teenage prostitution, and commit sexual assault crimes (Strauss et al. 1990). Therefore, the results of these studies clearly point to the fact that family-of-origin violence can, indeed, be a good predictor of use of or victimization of violence in marital relationship later on in life.

Not only witnessing violence, but also being the victim of domestic violence can equally (perhaps even more) impact children's mental health condition and paralyze their lives later on in life. For example, Hughes and Vargo (1989) have characterized witnessing and becoming the victim of domestic violence, both, as a "double whammy" for children. Specifically, their results showed that those children who witnessed and were the victim of violence, compared to those children who only witnessed domestic violence, exhibited the most behavior problems, respectively (see also McClosky et al. 1995;). Furthermore, Silvern et al. (1995) reported that the extent of problems experienced as children is greatly dependent on witnessing interparental violence (i.e., the more they witness interparental violence, the more problems they will experience as a child). Additionally, the results of a study by Dong et al. (2004) revealed that adverse childhood experiences, collectively known as "ACEs", are significantly interrelated with one another. Specifically, the authors divided ACEs into 10 categories, one of which was childhood abuse. They concluded that in case a person experiences one of the ACEs, the probability of experiencing another ACE was far greater than those reporting no ACEs (see also, Nyamathi et al. 2001). In other words, becoming the victim of abuse during childhood renders the person susceptible to experiencing other forms of abuse; namely, physical, emotional as well as mental health illnesses; thus, confirming the comorbidity of childhood victimization of domestic violence with psychiatric conditions.

As can be seen, the health burden of domestic violence can greatly affect the lives of children and can indeed act as an impediment of their development. This can be of particularly great importance given the fact that children, particularly young children, who experience repeated assaults and violations, may have more difficulty learning to respect the integrity and rights of others since they have not experienced this kind of respect. As such, these children, when grown up, inadvertently tend to develop the belief that it might be a normal behavior to conduct toward his/her partner in times of troubles and, in fact, never have had the opportunity to learn to resolve his/her differences through peaceful and nonviolent means.

Given the importance of the issue of being exposed to domestic violence while growing up and its harmful consequences later on in life, the purpose of the present study is to assess the level of predictability of different types of domestic violence (physical or psychological), based on the variables of "witnessing" and "being the victim" of domestic violence. As such the following questions are examined: (1) Can "being the victim" of domestic violence predict perpetrating different types of physical violence? (2) Can "being the victim" of domestic violence predict perpetrating different types of psychological violence? (3) Can witnessing domestic violence predict perpetrating different types of physical violence? (4) Can witnessing domestic violence? (4) Can witnessing domestic violence?

#### Methods

#### **Participants**

Fifty couples, from those referred to five different family courts in Tehran to seek divorce due to domestic violence, were randomly selected. The age rang of the 27% of the participants was between 19 and 25; 46% was between 26 and 36; 23% was between 37 and 47 and 4% was between 49 and 58. In terms of the level of education, 71% had less than high school diploma, 26% between diploma and Bachelor's, and 3% were above Master's level. All couples were informed of the purpose of the study and were told that they were free to discontinue their participation at any time during the study, should they decide to do so. Also, they were told that their information would be kept confidential.

### Procedure

The author-made questionnaire used in this study was constructed based on a comprehensive literature review and consisted of 27 scales which, in addition to demographic information, included assessment of factors causing disagreements between couples, physical and psychological violence, reactions exhibited towards violence, men's beliefs regarding violence towards their spouses, history of abuse by their parents during their childhood, types of violence perpetrated by their parents in times of troubles, and their level of religious devotion. From the aforementioned scales, the participants' responses to three scales (44 items); namely, physical (24 items) and psychological (15 items) violence as well as the history of abuse by their parents (5 items) were assessed based on a 4-item Likerttype scale with anchors of 4=Happened a lot" and 1= Happened little". All participants answered these questions in strict confidentiality and away from his/her respective spouse. The validity of this questionnaire was assessed by co-administering it with the Conflict Tactic Scale (Straus



1979) in a group of 50 couples and the obtained correlation between the two tests was +0.87, which is an indicative of high validity of the self-constructed questionnaire. Consistency of the self-constructed questionnaire measured by Cronbach's Alpha was +0.81. (Pournaghash-Tehrani 2007).

#### Results

Simple linear regression analysis was used in this study to analyze the data. This type of analysis can determine the ability of each variable; specifically, "witnessing domestic violence" and "victimization of domestic violence", to predict different types of physical (24 types; e.g., Pulling hair, pushing, shoving, hitting, kicking, strangling, biting, throwing objects, etc.) and psychological (15 types; e.g., controlling telephone calls, locking up in the house, cursing, public humiliation, private humiliation, cessation of verbal communication, reprisal, Denial of making choices). It is essential to note that only those types of violence that could be significantly predicted by "witnessing domestic violence" and "victimization of domestic violence" were reported.

As shown in Table 1, the variable of "witnessing domestic violence" could explain the occurrence of certain types of physical violence; namely, hitting, strangling, threatening to use knife and pulling hair. Specifically, hitting, strangling, pulling hair, and threatening to use knife were 40%, 20%, 11%, and 5% explained by the variable "witnessing violence", respectively. As such, witnessing violence, among all kinds of physical violence, could mostly account for the "hitting" type.

As shown in Table 2, the variable of "victimization of domestic violence" could explain the occurrence of certain types of physical violence; namely, strangling, pulling hair, and threatening to use knife. Specifically, strangling, pulling hair, and threatening to use knife 32%, 10%, and 3% were explained by the variable "victimization of domestic violence", respectively. As such, victimization of domestic violence, among all kinds of physical violence, could mostly account for the "strangling" type.

**Table 1** Simple linear regression analysis for predicting different types of physical violence based on witnessing violence

Dependent variable	$R^2$	F	Beta	t	sig
Hiting	0.40	15.56	2.5	10.3**	0.00
Strangling	0.20	13.82	1.75	8.4*	0.00
pulling Hair	0.11	11.45	0.56	2.6**	0.00
Threatening to use knife	0.05	12.23	0.42	2.1**	0.00

<sup>\*</sup> P < 0.05; \*\* P < 0.01

**Table 2** Simple linear regression analysis for predicting different types of physical violence based on victimization of domestic violence

Dependent variable	$R^2$	F	Beta	t	sig
Strangling	0.32	11.5	1.4	6.1**	0.00
Pulling Hair	0.10	10.76	0.55	3.54**	0.00
Threatening to use knife	0.03	9.3	0.43	2.56**	0.00

<sup>\*</sup> P < 0.05; \*\* P < 0.01

As presented in Table 3, the variable of "witnessing domestic violence" could explain the occurrence of certain types of psychological violence; namely, cursing, cessation of verbal communication, cessation of marital intercourse, and reprisal. Specifically, cursing, cessation of verbal communication, cessation of marital intercourse, and reprisal were 32%, 10%, 7%, and 5% explained by the variable "witnessing violence", respectively. As such, witnessing violence, among all kinds of psychological violence, could mostly account for the "cursing" type.

As shown in Table 4, the variable of "victimization of domestic violence" could explain the occurrence of certain types of psychological violence; namely, cursing, cessation of verbal communication, cessation of marital intercourse, and reprisal. Specifically, cursing, cessation of verbal communication, cessation of marital intercourse and reprisal were 44%, 32%, 20%, and 17% explained by the variable "witnessing violence", respectively. As such, witnessing violence, among all kinds of psychological violence, could mostly account for the "cursing" type.

## Discussion

Our results showed that witnessing domestic violence in childhood can predict physical violence such as "hitting" and psychological violence such as "cursing". By the same token, being the victim of domestic violence could mostly predict physical violence such as "strangling" and psychological violence such as "cursing". Given the close link between early experiences of violence (both witnessing and victimization of domestic violence) and spousal abuse, the present study was the first of its kind to examine such linkage in an Iranian sample of couples who were referred to family courts to seek divorce due to domestic violence. Specifically, the present study delineated the predictability of the occurrence of specific types of violence (physical and psychological) by witnessing and being the victim of domestic violence.

As discussed previously, the link between adverse childhood's experiences (ACEs) can greatly affect children's emotional and behavioral functioning later on in life. Such ACEs can be either in the form of witnessing or



Table 3 Simple linear regression analysis for predicting different types of psychological violence based on witnessing violence

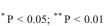
Dependent variable	$R^2$	F	Beta	t	sig
Cursing	0.32	11.5	0.7	5.27**	0.00
Cessation of verbal communication	0.10	10.2	0.25	4.3**	0.00
Cessation of marital intercourse	0.07	9.1	0.30	3.6**	0.00
Reprisal	0.05	8.3	0.26	2.9**	0.00

becoming the victim of interparental violence. For example, a review by Hotaling and Sugarman (1986) revealed that the results of at least 14 out of 16 studies point out a significant relationship between early childhood witnessing of parental violence and husband to wife violence. This was not limited to only witnessing. The results of 13 studies showed that being the victim of domestic violence also increases the probability of husband to wife violence, according to the results of the same study. Furthermore, Schafer et al. (2004) have shown that intimate partner violence can result from early exposure to violence. Additionally, Jin et al. (2007) indicated that early exposure to violence as well as positive attitude towards marital violence are both significantly related to marital violence (see also Dutton and Hart 1992; Rosenbaum and O'Leary 1981).

Taken together, our results are consistent with the reports in the literature with regard to the linkage between early childhood experience of violence and its perpetration later on in life towards the spouse. Our results were particularly unique, in that, they revealed what type of early exposure to violence (i.e., witnessing it or being its victim, could predict specifically what type(s) of physical and psychological violence could mostly occur). Although one should be cautious not to generalize these findings to all populations of batterers, these data provide some evidence as to what specific types of violence is more probable to take place because of adverse childhood experiences.

One way to explain our results could be based on the social learning theory (Bandura 1979). That is, those individuals exposed to violence in their families of origin, through the process of observational learning, are more likely, than unexposed ones, to commit and endorse spousal violence later on in life, towards their spouse. In other words, such individuals, inadvertently, assume that committing violence towards their spouses is the "normal" way of dealing with their spouse, particularly in times of troubles. They assume that the only way to resolve

Table 4 Simple linear regression analysis for predicting different types of psychological violence based on victimization of domestic violence



problems is to resort to violence and, in effect, become desensitized to the adverse consequences (emotional and behavioral) of violent behaviors.

Over the past three decades, much research has been devoted to finding the root causes of spousal violence, and the most comprehensive and conventionally accepted finding in the research is that intimate partner violence is passed on from one generation to another. Specifically, those children exposed to violence, either through experiencing child abuse or witnessing interparental abuse in their families of origin, compared to children who have never experienced violence in their families of origin are more likely to resort to violence in their families later on in life as adults (Egeland 1993).

Although this intergenerational transmission of intimate partner violence may not completely occur, published reports clearly indicate that the experience of violence in the family of origin is one of the strongest predictors for violence in adult relationships. For example, some early reports show that people experiencing severe forms of family violence in the form of physical violence during their childhood are more likely to resort to violent behaviors in their adult intimate relationships, than those people who did not experience physical violence in their childhood (Carroll 1977). Furthermore, an individual's level of victimization during childhood in his/her family of origin is significantly correlated with his/her level of committing violent behaviors later on as an adult in intimate partner relationship (Langhinrichsen-Rohling et al. 1995).

These studies examine only the early experience of child abuse on later spousal abuse. However, when determining the probability of committing spousal abuse later on in life, a large body of evidence suggest that in doing so, one must take into account, both the experience of and witnessing of violence in the family of origin given that both of the aforementioned types of violence mostly co occur in the families where experiencing violence is common (Steinmetz 1977). Results of this research clearly indicate

Dependent variable	$R^2$	F	Beta	t	sig
Cursing	0.44	12.5	0.10	6.30**	0.00
Cessation of verbal communication	0.32	11.5	0.85	5.2**	0.00
Cessation of marital intercourse	0.20	10.2	0.45	4.8**	0.00
Reprisal	0.17	5.6	0.37	4.16**	0.00



that those individuals who experience and witness violence during their childhood are more likely to commit violent behaviors in their marriage, compared to those who have not experienced either (Bernard & Bernard 1983). Such pattern is reported to occur over three generations (Steinmetz 1977). Furthermore, early experience of abuse and witnessing it tend to sway people to resort to the same type of abuse that they had witnessed being used in their homes as children. As such, people who witnessed their parents bite each other are more likely to bite their partners than slap them (Bernard & Bernard 1983).

Generally speaking, witnessing and experiencing violence in the family of origin for both males and females, greatly increases the risk of committing violent behaviors toward a spouse. For example, in terms of violence perpetrated by couples towards one another, early experience of violence in the form of witnessing it, alone, can increase the probability of perpetrating intimate partner violence. By the same token, experiencing child abuse, alone, increases the probability of perpetrating violence by one and half times. However, when the two aforementioned types of experiencing violence are combined, the probability of perpetrating violence increases dramatically. For example, Kalmuss (1984) reported that only 1% to 2% of intimate partner violence occurs in those individuals who experienced neither types of violence. This figure for those who experienced child abuse only was 3% to 4%, for those who only witnessed interparental abuse 6% to 8%; and for those who both experienced and witnessed family-of-origin violence was 12% to 17%, respectively. Therefore, Kalmuss concluded that the existence of witnessing and experiencing of violence during childhood are both essential elements to adequately model severe intimate partner violence. Such conclusions have been supported by other studies (e.g., Choice et al. 1995; Stith & Farley 1993; Straus 1992, 1994), including one meta-analysis (Stith et al. 2000), that showed people who witnessed and/or experienced hostile behaviors in their families as children were significantly more likely to commit violence toward their spouse than those who lived in non-violent families. In summary, it can be concluded that the occurrence of early experience of violence in the family of origin can, indeed, be a strong predictor of intimate partner violence later on in marriage.

This conclusion was supported by our findings in that witnessing domestic violence in childhood did predict physical violence such as "hitting" and psychological violence such as "cursing". By the same token, victimization of domestic violence could mostly predict the physical violence such as "strangling" and psychological violence such as "cursing". However, what differentiates our findings form other studies was that we were able to specifically delineate which types of physical or psychological types of violence could be predicted by either types of

early childhood experience, such as experiencing or witnessing violence in the family of origin. Our findings are of particular importance in that they could contribute to further understanding of the predictive abilities of early adverse childhood experiences with regard to specific types of physical and psychological factors, and therefore, can be of value to family councilors and psychologists involved in the field of domestic violence prevention programs. As mentioned earlier, our results are only preliminary; one need to be cautious in terms of generalizing them to other populations given the complex nature of different cultures and ways of life which greatly impact the outcome of such studies.

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