

# **To Beat or Not to Beat: Determinants of Domestic Violence in Egypt**

## **Introduction**

Violence against women is considered the most widespread form of human rights violation worldwide. One of the important types of violence against women is the violence perpetrated by men against their female partners (Claudia Garcia-Moreno et al., 2006). Additionally, violence against women is costly given its significant economic burden on the society. Such costs include health care costs, legal costs and decline in productivity. It can also have harmful consequences for children who witness it in terms of their emotional, cognitive, and behavioral development, explained as an intergenerational cycle of violence by the learned behavior theory (Albert Bandura and Richard H. Walters, 1963). According to this theory, it is demonstrated that children who were exposed to violence in their families of origin are more likely to become involved in violent relationships as adults. Therefore, we should consider not only the short-term consequences of the domestic violence, but also its long-lasting effects.

According to a pioneering study by Richard J. Gelles (1976), one possible solution to decrease the risk of abuse is to improve the opportunities of a woman by increasing her bargaining power within the household. Gelles (1976) found a negative relationship between female resources and intimate-partner violence.

In Egypt, where is disparity in access to health, education and employment opportunities between men and women, key indicators of women's wellbeing lag behind. According to the United Nations Human Development Report (EHDR) 2014, Egypt Ranks 130 on the Gender Equality Index among 187 countries, showing an alarming situation that needs more attention. Although some progress had been achieved with a reduction in maternal and child mortality and enhanced quality of

childcare, in addition to improvements in female literacy and access to education, there is more that needs to be done (El Ashmawy 2016) especially in access to economic opportunities, political representation and violence.

According to Egypt Demographic and Health Survey (EDHS) 2014, one-third of Egyptian women have ever experienced some form of spousal violence, with 25 percent saying they were subjected to physical violence, 19 percent to emotional violence, and 4 percent to sexual violence. Surprisingly, half of ever-married women aged between 15-49 in Egypt often justified wife hitting or beating. These findings support that living in patriarchal settings, growing up in a violent household and being socially and economically dependent on the intimate partner does not only result in justifying the beating, but also raises the risk of exposure to domestic violence (Yount and Li Li 2009).

Hence, this paper is an attempt to examine the socio-economic and community factors affecting the likelihood of an Egyptian woman to be victim of domestic physical violence using the most recent EDHS (2014). Despite the importance of the phenomenon and its negative impact on the women's economic empowerment and the country development, as far as the authors know, there is lack of the studies tackling such factors, especially the role played by the norms and the values in such a phenomenon.

The paper is organized as follows; the first section reviews the literature dealing with the determinants of domestic violence. Sections two and three describe the used methodology and data. Section four represents the estimated results finally section five concludes.

## **1. Literature Review**

There are a wide variety of theoretical approaches from different disciplines that attempt to explain the determinants of domestic violence and its risk factors; including psychology (such as aggression theory and social learning theory), bio-behavior (such as the theory of neurochemical mechanisms), criminology, economy and sociology.

Criminology and sociology are the first disciplines to study family violence. Criminologists developed a theory of the relationship between employment and domestic violence referred to as "*reduction of exposure*". According to this theory, increasing employment for men and women will reduce family violence simply by reducing the time spent by partners (Dugan, Nagin and Rosenfeld 2003). Several sociological theories tried to explain the violence of the intimate partner, including feminist theory, resources theory, relative resources theory and sexual resources theory, as well as dependency theory. Although there are important differences between them, these theories share common ideas about the importance of the socio-economic resources and status of women.

Blood Jr and Wolfe (1960) proposed that in a conjugal or intimate relationship; a person with more resources in terms of income, professional status and education might have more power in the conjugal relationship. This notion is known as **resources theory**, which has been the basis of many studies, and many other theories in the field of domestic violence. Levinson (1988) argued that the resources theory implies that societies where the traditional (relative) power of men diminished by increasing women's access to resources, cause imbalances in status of men. These imbalances, in turn, will be the reason for an increase in domestic violence. In other words, men with less resource outside the relationship are more likely to resort to violence to feel dominant. On the other hand, men with sufficient external resources do not need to reassert their power by using violence (Goode 1971).

According to the absolute resources theory (Gelles, 1976), the decline in household resources may lead to a conflict that may result in the practice of violence against women within the household. This view confirms the theory of stress that low income can cause stress that leads to physical or psychological violence (Gelles 1976; Macmillan and Gartner 1999). The pioneering study of the relationship between the income gap and domestic violence was developed by Gelles (1976), who observed that the least resources a woman has, the less she is able to escape an abusive relationship, this means that there is a negative relationship between women's resources and domestic violence.

However, according to the relative resources; domestic violence against women may be higher in couples where the relative resources of a woman exceed those of her partner and violence acts as an instrument to compensate for the relative lack of resources for men (MacMillan and Gartner, 1999). This extension of resources theory does not focus on the absolute resources of women, but rather on the balance of economic and social resources between men and women in a relationship or within a household.

The existing empirical literature showed mixed results according to the studied sample, the geographical context and the methodological approach either at the national or individual level. In Canada, for example, unemployed men with working partners are more likely to use coercion to maintain control (MacMillan and Gartner 1999). While, Friedman et al. (2011) operate a program of random fellowships that indicated that the increase in secondary education of girls in Kenya immediately reduced the acceptance of spousal violence between students. Similarly, Mocan and Cannonier (2012) use policy reform in Sierra Leone in West Africa and find that increasing primary education also reduces women's acceptance of domestic violence.

However, in Bangkok, Thailand, absolute differences in educational attainment and occupational prestige have not been associated with physical violence against women (Hoffman, Demo and Edwards 1994). Moreover, Stith et al. (2004), in their Meta-analysis of 85 studies, they identified education, unemployment and low income as low predictors of physical violence, as opposed to stress as an important determinant of the abuse and victimization of women. While in the United States, during the 1970s, Straus et al. (1980) found a reversed U-shaped relationship between women's education and the risk of their exposure to spousal violence, this means that the most educated and the less educated suffer relatively less violence while the middle classes are relatively the most exposed.

Sociological studies also examined the relationship between the level of domestic violence and the economic, political and legal status of women. The theory of marital dependence states that being economically dependent on a male partner gives less power to negotiate changes in her husband's behavior and therefore increases the risk of abuse of women as this dependence makes them less likely or able to break out of the relationship (Aizer 2010). The woman remains in the relationship as long as her conjugal utility does not fall below her point of threat. There may be more benefits or fewer losses to stay in an abusive relationship that are not available outside the relationship. Children offer an example of conjugal capital in this case since the decision to stay or go out of an abusive relationship affects their well-being. This explains why the effect of children on the level of violence can be positive or negative. If a woman believes that her children are better in a deteriorated family, her children will increase her marital utility in relation to her reservation utility, this will lead to an increase in violence. But if a woman believes that violence has a negative effect on her children, her marital utility falls below her reservation utility (or threat point) and she

is prompted to leave this abusive relationship, in which case violence will decrease (Tauchen, Witte and Long 1991).

Piquero et al. 2006 find that the presence of young children under six may have a negative but negligible effect on the level of violence while the presence of older children has a positive and significant effect. Such results suggest that women perceive that witnessing violence at home can have serious psychological consequences on young children or perhaps women are afraid that their children themselves will be victims of the violence they are subjected to, so they may decide to ask for divorce and leave such violent relationship. While having older children seems to be more problematic because women perceive more benefits or fewer losses to stay in marriage for their children if they are older than six years. This may be due to an increase in their financial needs, or because the mother believes that they are less likely to be beaten or injured.

Thus, the marital dependence theory asserts that women's absolute socio-economic resources are the critical factors of domestic violence, rather than the resources of men, or the resources of men compared to women as suggested by the resources theory and the relative resources theory, respectively. According to this theory, it is necessary to consider both the individual and macroeconomic factors that affect the position of women in society and their exposure to violence.

Finally, the gendered resource theory of Atkinson, Greenstein and Lang (2005) suggests that the effect of relative resources on intimate partner violence is moderated by the interaction between gender imbalances in relationships and gender ideology supported by the male partner. Basically, if male partners believe in an egalitarian relationship and do not perceive the need to be the main breadwinner, then they do not need to use violence to reaffirm their superiority over their female partners who may

possess higher status. Atkinson, Greenstein and Lang (2005) therefore criticize other resources theories since they did not consider the cultural factor and assumed that all men are "traditional". In patriarchal societies, men are more ingenious than women, because they are the breadwinners. Therefore, they are considered superior. Violence in these societies still exists, calling into question or denying the above-mentioned theories.

On the other hand, structural theories that situate the social problem of domestic violence in the real world and treat violence as part of the social structure, show that domestic violence is a "stress response" to family problems or circumstances. For example, unemployment and the loss of the social status of men were considered factors of domestic violence.

Economic literature about domestic violence is recent and not so extensive. Tauchen, Witte and Long (1991) were the first to model family violence in an economic setting. In their model, husbands maximize their utility by choosing the amount of violence and income with the help of their wives, according to the utility of their wives. Thus, an increase in men's income allows them to exert more violence, whereas an increase in the income of the women obliges their partners to reduce the violence in order to ensure their reservation utility.

There are two other socioeconomic theories in the literature predicting that, if women's financial independence increases, violence against them will increase. The first theory considers domestic violence as one of two sides of an approach of influence based on reward and punishment (Molm 1989). Accordingly, individuals have two sources of power: transfer of resources (being rewarded) and violence (being punished). A husband's ability to influence his wife's behavior by using this transfer of resources diminishes when his income diminishes relative to her own, he is hence more likely to

alternate his behavior and use punishment in the form of violence. In this way, an increase in the income of women compared to men can lead to an increase in violence against them.

The second theory shows that the use of violence by male partners is based on the sociological theory of the male reaction or the “*male backlash*” (Macmillan and Gartner 1999). The practice of violence is thus the result of an imbalance in access to resources within a household. Male partners may consider an improvement in women's external opportunities as a threat they must address in order to assert their dominance in the relationship. On the other hand, according to the extractive theory, a man can exert violence on his wife, to extract a transfer or a monetary gain. In any case, and more generally, it can be predicted that resources increase the risk of violence for women if the initial bargaining power of women is low (Tauchen, Witte and Long 1991).

However, these theories, which predict an increase in women's wages resulting in an increase in violence, do not consider the rational individual constraint women face in abusive relationships. Indeed, as incomes rise, it is more likely that women will divorce if transfers decline and abuses continue or worsen.

Cultural and social context play an important role in domestic violence in patriarchal societies as Egypt. Norms and values reinforce women's dependence on marriage and force them to justify and accept violence. First, children play a central role in women's identity and support for old age (Yount and Li 2009). Therefore, a loss of a child as a result of a divorce can threaten her social and economic security. Having children in Menya, has been positively associated with physical domestic violence, even though children improve identity. The laws regulating divorce in Egypt grant custody of the children to the husband, this might discourage her divorce and increase her tolerance for abuse (El-Zanaty et al. 1996). Second, women who live with their parents-in-law



can reduce a woman's power and increase her risk of domestic violence because marital parents share authority over the household and hence her actions (Yount 2005). Moreover, women in arranged marriages or married at younger ages may have less conjugal power and thus more risk of exposure to domestic violence (El-Zanaty et al 1996; Yount 2005).

Several surveys and opinion polls concerning violence against women had been conducted in Egypt. A study conducted by the Social Research Center (SRC) of the American University of Cairo (AUC) called the “*Empowerment Survey*”, collected a wide variety of indicators of women's empowerment from a sample of 2,400 women in Cairo, Sharkeyah and Menya in 2008. The SRC analysis consists of developing a conceptual framework for the empowerment of women in the Egyptian context, based on direct and indirect indicators of empowerment. Direct indicators include involvement in the marital process and mobility restrictions, as well as women's attitudes towards sexual roles and violence. Indirect indicators include age at first marriage, level of education, participation in organizations and other indicators. According to this analysis, respondents who were married for the first time at younger ages (before age 20) reported higher levels of exposure to violence. A high percentage of divorced respondents also reported that spousal abuse and / or mistreatment were the main reasons for their marriage breakdown (El-Sheneity and Al-Sharmani 2008).

Measures of women's autonomy (one dimension of empowerment) include whether a woman is able to buy things for herself or seek medical advice by herself, appear to be significantly related to the probability of domestic violence. The higher levels of these forms of autonomy are associated with a decrease in the likelihood of being a victim of domestic violence. However, empowerment's indicators such as participation in elections, attitudes towards gender relations, the existence of a bank account and other

broader measures of women's autonomy - did not appear to be significantly related to the likelihood of a woman's exposure to domestic violence (El-Sheneity and Al-Sharmani 2008).

The National Council for Women (NCW) conducted an "opinion poll" in November 2012, that targeted a sample of 13,500 married and unmarried women aged 15-50 in all 27 governorates of Egypt. The survey found that about one-third of the participants had experienced domestic violence at least once in their lifetime. While in a previous study commissioned by NCW in 2009 in a USAID-funded project to combat violence against women, a sample survey of 4,408 married men, women and children and unmarried women aged 15-49 in the 27 governorates, it was found that more than 60 per cent of married women surveyed reported that children experienced some form of violence during marital life, while about 28 percent experienced physical violence. Almost 80 percent of married male respondents admitted to having inflicted violence on their wives, while 28 percent admitted that they were physically abusive. In the previous year, 50 percent of the surveyed women reported experiencing some form of violence, while 16 percent were physically abused. More than 17 percent of respondents also reported being forced into sex by their spouses.

Therefore, we can conclude that poor women, with more children and fewer resources than their spouses, who are married early and live with her parents in law will be more likely to be the victims of abuse in Egypt. Moreover, values and norms play an important role in accepting such violence in Egypt, given the patriarchal society and the important role given to the men (father/ brother/husband) in the household.

## **2. Methodology**

Our empirical analysis focuses on the physical violence. Following the different theories presented in the literature, mainly the resources theory and the relative

resources theory; a logit model will be estimated to measure the impact of a woman's resources and her relative resources compared to her husband on the likelihood of being victim of domestic violence. Moreover, the characteristics of the community where the woman lives is included in our model to capture the social context. Hence, our logit model can be written as follows:

$$P(\text{violence} = 1/X) = \Phi(X'\beta)$$

Where the dependent variable is the probability of reporting any type of domestic physical violence. The regressors X include the respondent's age, education, and employment status. Both employment and education of the respondents are indicators of her economic situation, as higher education generally lead to higher.

Following the relative resources theory, couples with disparities in status such as in education or employment are more likely to have violence than couples with more similar levels of status (Dawn D. Matthews, 2004). Therefore, the age gap between the respondent and her husband and the education gap between them, will be included in the model, as well as the husband's employment status. Other regressors include household's wealth level, given that poverty has a strong and coherent correlation with domestic violence (Matthews, 2004), in addition to the number of children under five years old.

As women's autonomy and bargaining power may play an important role in the likelihood of being victim to violence (Kay Lehman Schlozman, Sidney Verba and Henry E. Brady, 1999), the model includes a variable capturing the decision power of the woman within her household; who has the say concerning large purchases in the household.

Finally, for the characteristics of the community; the model includes the unemployment rate for men and women, the rate of women who accept that a husband can beat his

wife for any reason, the rate of women who had experienced any sexual violence by husband/partner and the rate of women who accept circumcision at the governorate level.

### **3. Data**

The proposed model is estimated using individual level survey data from the Egypt Demographic and Health Survey (EDHS) 2014. The EDHS is a nationally representative sample of 21,762 ever-married women aged 15-49. The survey covers the socio-demographic characteristics, such as the respondents' age, education, religion and occupation, as well as her husband's characteristics. The survey includes as well the household's wealth and the place of residence, in addition to variables covering health status, health costs and the attitudes and behavior with respect to female circumcision and violence (El Zanaty and Way 2009).

Our analysis focuses on the module of the different forms of marital violence including physical, sexual and emotional violence. In the used module, women were asked questions on whether they have experienced physical intimate partner violence (slapping, hitting, getting beaten up, use of a weapon, threatened with a weapon). An arbitrarily chosen subset of 6,693 de facto women aged 15 to 49 completed the module on domestic violence. This represented 97 percent of the women selected to be interviewed on domestic violence. For women currently married, the questions concerned the present husband of the woman, while for widowed women, divorced or separated, the questions concerned the most recent husband.

According to the EDHS (2014), almost one-third of Egyptian women have been assaulted by their husbands. Overall, 29 percent of women reported that they experienced at least one episode of violence, including the different types, during their lives (Figure 1). Physical violence is the most common form; 24 percent of married

women have been subject at least once to some form of physical violence by their current or recent husband. The most common forms of physical abuse included being slapped, pushed or shaken, having objects thrown by the husband, having her arm twisted, being hit with a fist or an object, being suffocated or burned, as well as being threatened or attacked with a certain type of weapon.

Otherwise, sexual violence was less frequent with only 4 percent of women reported that their husbands used physical force or threatened to induce them to sleep with them when they did not want to. In addition, 18 percent of women had experienced some form of emotional or psychological violence perpetrated by their husbands (Figure 1)

**Figure 1: Prevalence of spousal violence by type of domestic violence**

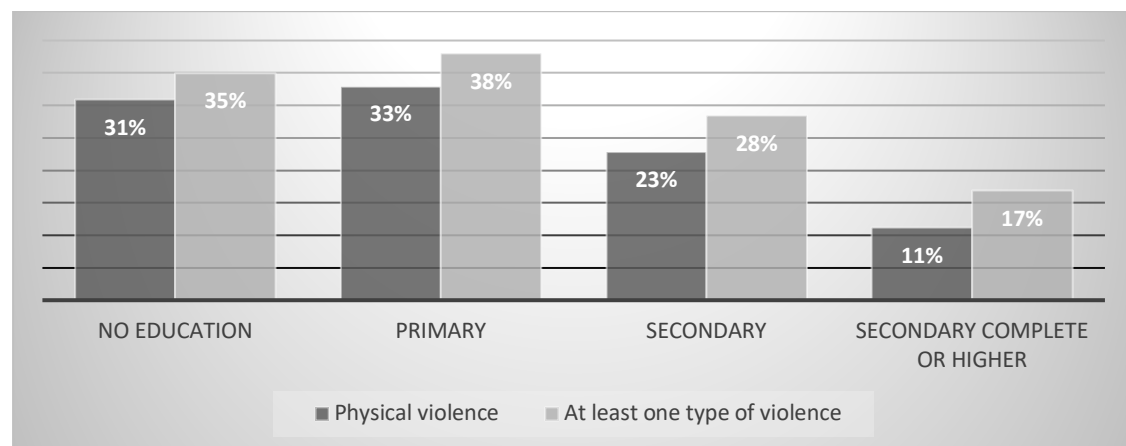


**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

And although spousal violence may occur to all women, certain characteristics of women and their husbands can strengthen the subordinate position of women in the family and, therefore, put some women at greater risk of violence. For instance, figures 2 and 3 show that the likelihood that a woman has experienced some forms of violence perpetrated by her current (or most recent) partner generally decreases with her level of education as well as with the education of her husband. Women who have never attended school or who have only few years of schooling are the most likely to be

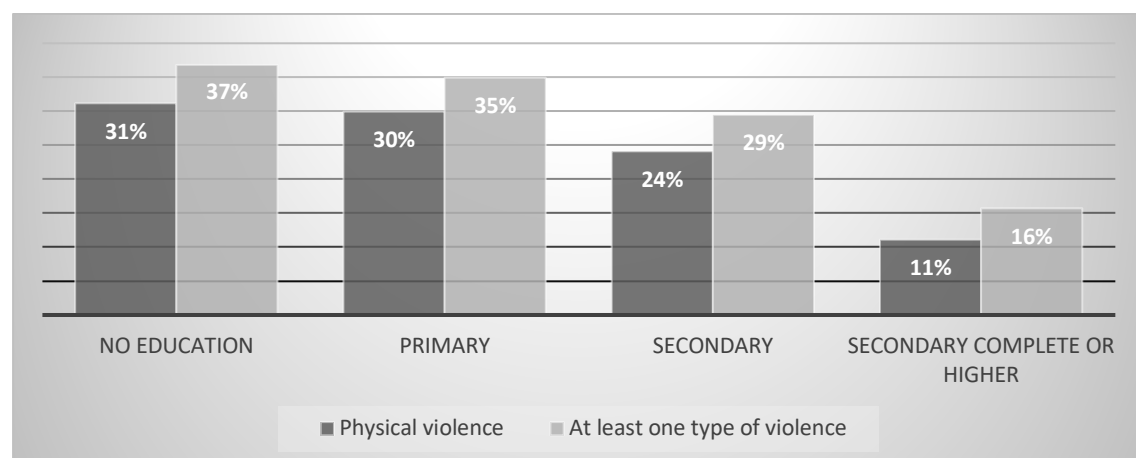
victims of domestic violence. For instance, the percentage of women, with no education, who have been victims of physical violence is almost three times the percentage of women, with secondary or higher education, who have been victim of violence (Figure 2). Similarly, husbands who have never attended school or who have few years of schooling are the most likely to be aggressors (Figure 3). However, about one-fifth of women who have completed secondary or higher education, or whose husbands have completed secondary or higher education, have experienced at least one type of domestic violence in their lives.

**Figure 2: Prevalence of domestic violence by women's level of education**



**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

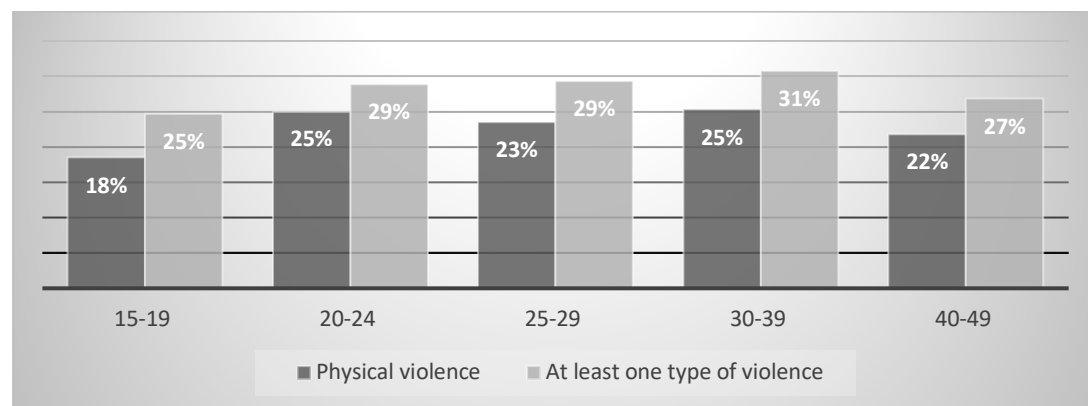
**Figure 3: Prevalence of spousal violence by husbands' education level**



**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

While figure 4 shows that the proportion of women victims of various forms of violence perpetrated by their current or recent husband does not generally vary in a consistent way with age.

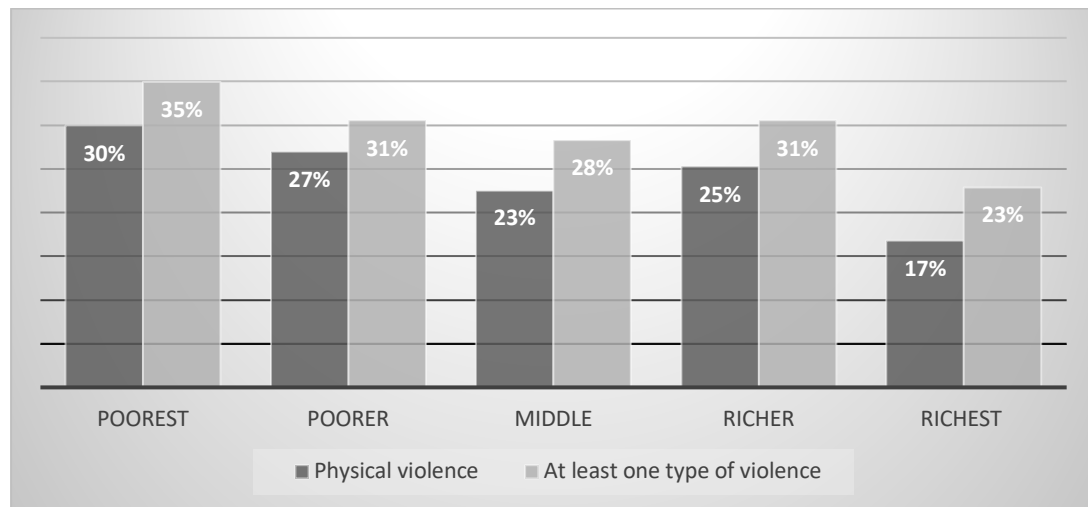
**Figure 4: Prevalence of spousal violence by age groups**



**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

The household's wealth decreases the likelihood of being victim of violence. The percentage of women being physically abused, among the poorest quintile, is almost the double of those in the fifth quintile (the richest). This can be explained by the fact that poor households often live in stressful and overcrowded environments, this may increase the stress faced by the household, especially by the husband, the main breadwinner. Yet women in the fifth wealth quintile are also likely to have experienced at least one form of domestic violence with 23 percent, compared with 35 percent for women in poorer households (Figure 5).

**Figure 5: Prevalence of spousal violence by household wealth quintile**

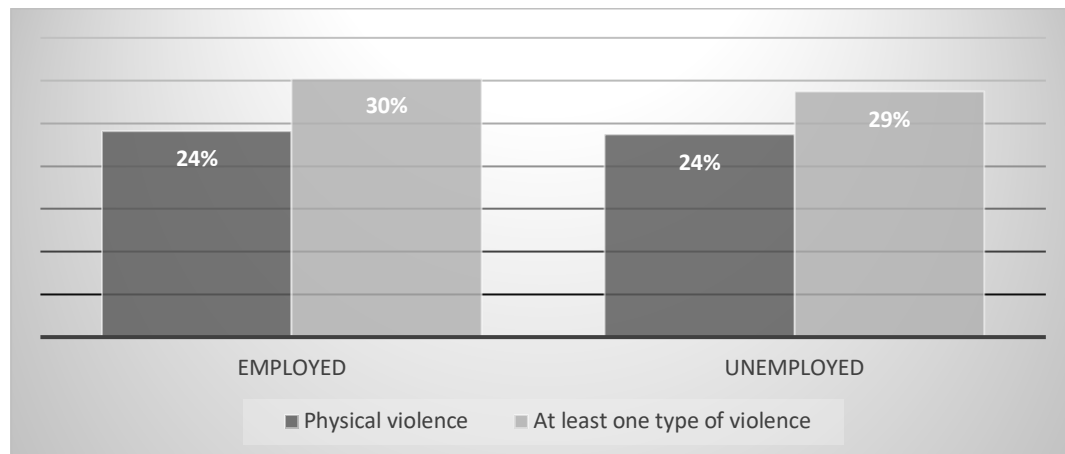


**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

For women's employment status, the data shows that the prevalence of physical violence is almost unaffected by the employment status of women. (Figure 6). While for the husband's employment status, surprisingly, working husbands are more likely to be aggressors than men who are unemployed; 29 percent of women married to an employed husband have experienced at least one type of violence during their lives, compared to only 23 percent of those married to unemployed husbands (Figure 7). For husband's marital control issues; figure 8 shows that only 2 percent of surveyed women declare that their husbands accuse them of unfaithfulness, while 75 percent of them report that their husbands are jealous when they talk with other men. Overall, only 20 percent of the respondents report none of the types of control behaviors (Figure 9).

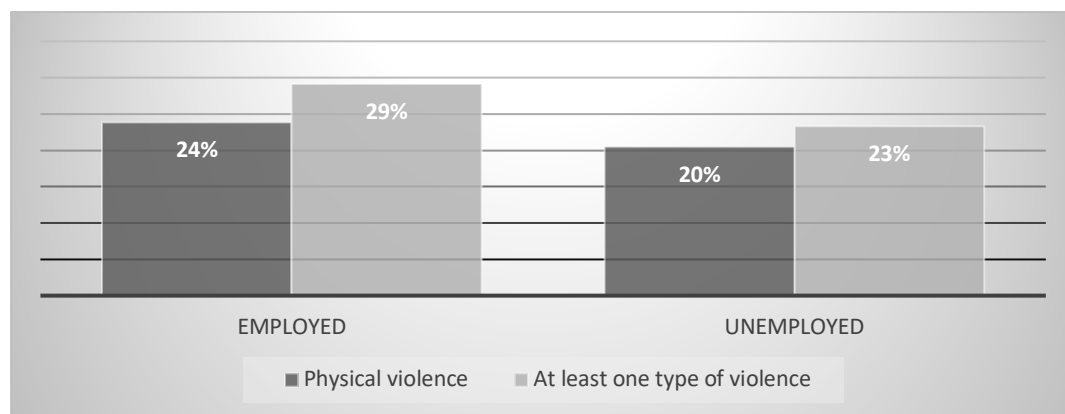


**Figure 6: Prevalence of domestic violence by women's work status**



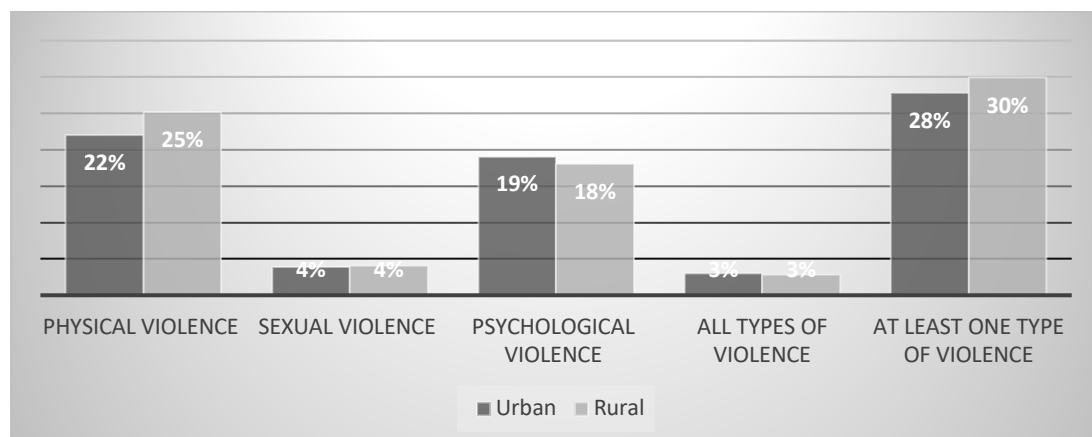
**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

**Figure 7: Prevalence of domestic violence per husbands' work status**



**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

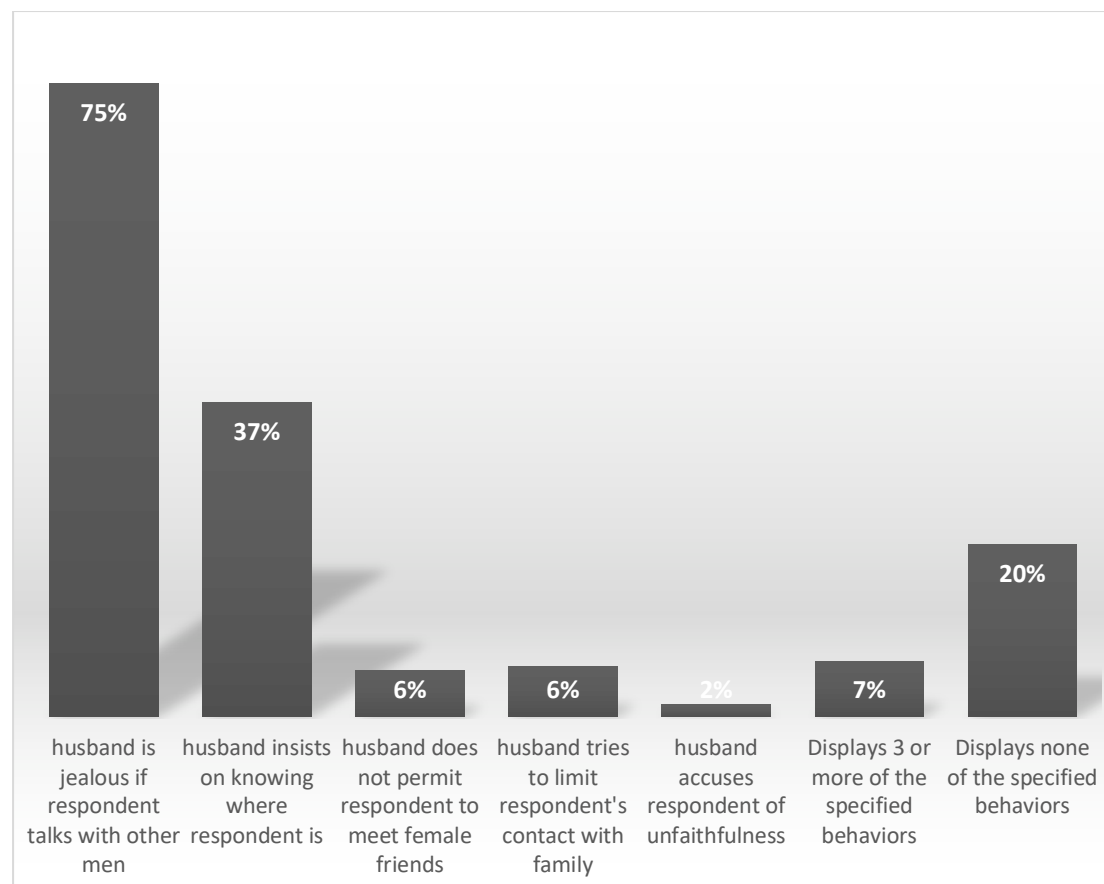
**Figure 8: Prevalence of spousal violence per place of residence**



**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

The likelihood of being victim of violence may be affected by the regional context where women live. Figure 9 shows that women in rural areas were slightly more likely to report spousal violence at least once in their lives (30 percent) than women living in urban areas (28 per cent). For the various forms of spousal violence, rural women were more likely to report physical violence than women in urban areas, while women in urban areas were slightly more likely to report psychological violence.

**Figure 9: Percentage of women who declare martial control of husband**



**Source:** Calculated by the authors using Egypt Demographic and Health Survey 2014.

Finally, for the community variables, table 1 shows that in all governorates more than 70 percent of surveyed women are unemployed, compared to very low unemployment rate among the male respondents (less than 5 percent). The ratio of surveyed women accepting that a man beat his wife varies between governorates; Qena has the highest

rate with 75 percent while Suez has the lowest rate with 6 percent (Table 1). Similarly, the ratio of surveyed women accepting Female Genital Mutilation (FGM) varies between the governorates. While 88 percent of women accept FGM in Luxor, we have only 4 percent in Matrouh. Finally, the ratio of sexual violence is less than 10 percent in all governorates (Table 1).

**Table 1: Governorates Characteristics (%)**

<b>Governorate</b>	<b>Rate of unemployed among surveyed women</b>	<b>Rate of unemployed among surveyed men</b>	<b>Rate of women who justify wife beating</b>	<b>Rate of sexual violence</b>	<b>Rate of women that accept circumcision</b>
<b>Cairo</b>	82	2	13	3	42
<b>Alexandria</b>	85	2	15	5	32
<b>Port said</b>	80	4	11	6	29
<b>Suez</b>	83	2	6	2	36
<b>Damietta</b>	86	1	14	3	15
<b>Dakahlia</b>	84	3	36	3	49
<b>Sharkia</b>	79	3	36	3	75
<b>Kalyubia</b>	78	4	37	7	68
<b>Kafr el-sheikh</b>	80	1	10	1	59
<b>Gharbia</b>	79	2	34	4	51
<b>Menoufia</b>	83	5	24	1	63
<b>Behera</b>	90	3	34	4	40
<b>Ismailia</b>	73	3	28	5	51
<b>Giza</b>	86	4	18	6	55
<b>Beni suef</b>	82	3	38	1	73
<b>Fayoum</b>	80	2	49	5	67
<b>Menya</b>	88	3	59	3	68
<b>Assuit</b>	87	2	67	7	65
<b>Souhag</b>	86	4	59	7	65
<b>Qena</b>	92	2	75	5	88
<b>Aswan</b>	92	2	29	6	81
<b>Luxor</b>	90	3	50	5	88
<b>Red sea</b>	77	2	13	3	46
<b>New valley</b>	75	0	33	1	79
<b>Matrouh</b>	93	3	36	4	4

#### 4. Estimated Results

The results of the estimation of the logit model and the marginal effects are presented in [Table 2](#). As explained in the methodology, our model focuses on the likelihood of being victim of physical violence. The results show that age has a nonlinear impact on the domestic violence; when the age increases by one year, the probability of being physically abused increases by 1.3 percent till the age of 32 years, then when the age increases by one year, physical violence decreases by 0.02 percent.

Concerning education; we found that the change from no education to primary education increases the likelihood of physical violence by 0.2 percent, while the change from no education to secondary education decreases the likelihood of physical abuse by 6.6 percent. Such results are consistent with the theory of negative relationship between the level of education and domestic violence of Cools and Kotsdam (2013).

Female employment has a positive impact and significantly different from zero on domestic violence, this means that being an employed woman increases the likelihood of being physically abused compared to non-employed woman. These results are consistent with the male backlash and exchange theories that an improvement in the status of women increases the risk of being the victim of violence as a form of punishment or assertion of the husband's dominance.

For the husband's characteristics, we found that the change from no education to primary education increases the probability of physical violence by 1.1 percent, while the change from no education to secondary education and higher decreases the probability of physical violence by 0.04 percent and 8.8 percent, respectively. Moreover, the coefficient of husband's employment is positive and, consequently, when husbands are employed, physical violence will be greater than that of unemployment

by 7.1 percent. This result is consistent with the theory of gender-specific unemployment rates, which provides that only in the case of unemployment, the husband has the incentives to mask his violent predisposition.

Observing the disparities in the status of a couple, we found that the results are consistent with the theory of Matthews (2004) which states that violence increases in unrelated status couples. The coefficients of the employment gap, the education gap and the age gap are all positive, but only the age gap is significant.

To examine the role of women's autonomy and bargaining power in the likelihood of being abused, three variables are used. The first variable is the number of children under the age of five. We found that when the number of children increases by one child, the probability of physical violence increases by 1.4 percent. Second, we control for the husband's marital control behavior; we found that women whose husbands show any control behavior, will be at higher risk being victim of physical violence compared to women whose partners show no control. Third, one observes who usually decides what to do with the money earned by the husband and the fourth variable is about who generally makes decisions about major purchases. When women take the spending decision, physical abuse will be 1.5 percent higher than that in case women do not. But, the probability of physical violence will be lower by 3 percent in case they make the decision of the major purchases. These results can be explained by the stress theory that low income can cause stress leading to repetitive conflicts within the household and subsequent physical or psychological violence against women, which is not the case for expenditure on large household purchases; either because such decisions are taken jointly by the couple or because these expenses are not repeated frequently and do not lead to a high level of stress.

Similarly, the negative relationship between wealth and violence confirms the stress theory. Being in the fifth quintile decreases the likelihood of being victim of violence by 5.8 percent, compared to being in the first quintile.

Concerning the characteristics of the community where a woman lives; we found that living in rural areas have a negative but not significant impact on the likelihood of violence. While for the female and male unemployment rate at the governorate level, for a 1 percent increase, physical violence is found to decrease by 23.4 percent and 10.8 percent, respectively, which is in line with our previous findings concerning individual employment.

Finally, the results show that women living in governorates where the rate of women accepting violence is higher are more likely to be victims of violence. Similarly, we found that physical violence increases in governorates with higher rate of sexual violence. Whereas, the female acceptance ratio of FGM by governorate shows a negative relationship with physical violence; when the FGM rate increases by 1 percent physical violence will decrease by 11.9 percent. The latter result can be explained by the idea of obedience; if she lives in a community where important part of women accept social tradition such as the FGM, this means that she is already tame, so she accepts and respects the norms and traditions, and there will be no need of violence.

**Table 2 : Logit Model Estimated Results**

VARIABLES	(1) Logit Model	(2) Marginal Effects
Physical violence		
Age	0.0800** (0.0314)	0.0132** (0.00517)
Age <sup>2</sup>	-0.00125*** (0.000470)	-0.000206*** (7.74e-05)
Woman's education (Reference: Illiterate)		
Primary education for women	0.0128 (0.118)	0.00211 (0.0194)
Secondary education for women	-0.400*** (0.107)	-0.0659*** (0.0176)
Higher education for women	-1.145*** (0.202)	-0.189*** (0.0331)
Work status of women	0.308*** (0.0958)	0.0507*** (0.0158)
Husband's education (Reference: Illiterate)		
Primary education for husbands	0.0642 (0.109)	0.0106 (0.0180)
Secondary education for husbands	-0.00238 (0.119)	-0.000392 (0.0197)
Higher education for husbands	-0.533*** (0.186)	-0.0878*** (0.0307)
Work status of husbands	0.429* (0.230)	0.0707* (0.0379)
Work status gap	0.648 (0.536)	0.107 (0.0883)
Education gap	0.123 (0.126)	0.0203 (0.0207)
Age gap	0.372*** (0.144)	0.0613*** (0.0236)
Number of children less than 5 years old	0.0854** (0.0374)	0.0141** (0.00615)
Martial control issues	0.412*** (0.0848)	0.0680*** (0.0139)
Expenditures decision	0.0884*** (0.0311)	0.0146*** (0.00512)
Large household purchases decision	-0.176** (0.0724)	-0.0291** (0.0119)
Wealth Quintiles (Reference: First Quintile)		
Second Quintile	-0.0897 (0.0993)	-0.0148 (0.0164)
Third Quintile	-0.113 (0.104)	-0.0186 (0.0172)
Fourth Quintile	0.0231 (0.121)	0.00381 (0.0199)

Fifth Quintile	-0.353** (0.150)	-0.0582** (0.0247)
Place of residence	-0.0628 (0.0992)	-0.0103 (0.0164)
Women's unemployment ratio per governorate	-1.418** (0.703)	-0.234** (0.116)
Men's unemployment ratio per governorate	-0.657 (3.543)	-0.108 (0.584)
Feminine justification of wife beating by governorate	0.575** (0.257)	0.0948** (0.0423)
Sexual violence ratio by governorate	10.56*** (2.057)	1.740*** (0.337)
Feminine justification of FGM by governorate	-0.724*** (0.201)	-0.119*** (0.0331)
Constant	-1.848** (0.865)	
Observations	6,287	6,287

Standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 5. Conclusion

This research was an attempt to present the various socio-economic theories explaining the main determinants of domestic violence in Egypt. Our empirical results support the existence of a predominantly significant relationship between the different socioeconomic characteristics of the Egyptian women, their husbands, the community where she lives and domestic violence against women.

According to our findings being young, uneducated and working to earn one's own income puts women in a risk of violence. Moreover, a working husband with minimum level of education is more likely to be an aggressor. Additionally, the greater the marital dependence of a woman, the greater the risk of violence. But if she is autonomous, uncontrolled and has the power to take decisions, this risk of violence decreases significantly.



Concerning the wealth, the results show a positive relationship between poverty and domestic violence. In another measure, one examines the characteristics of the community where the woman lives and the results are mixed but always significant. There is an increased risk of victimization in governorates where the justification for "beating" exists and the rate of sexual violence is high. On the other hand, the risk of spousal violence decreases in areas where unemployment and the acceptance of FGM predominate. This confirms with the lack of need for violence against docile women who presents no threat to the status of the husband's breadwinner.

Therefore, two important findings were concluded from our research. First, education and employment at the individual and community levels are important determinants of domestic violence. Hence, more effort is required to increase the enrollment rate of women and men. Young generation need to be well educated and informed about gender issues and roles in order to prepare them for healthy marital relationships. Moreover, empowering women and combat all forms of discrimination against women, including discrimination in the labor market and in incomes, are highly required as an insufficiently independent woman is always at risk of becoming a victim of violence.

Second, given the important role of norms and values in women's dependence on marriage and their acceptance of violence, raising awareness of the men and women of the health and financial costs related to such violence is urgently needed.

Finally, given the importance of the legal framework, it is highly recommended to conduct a review of laws and regulations on violence against women, criminalize this type of violence and enhance law enforcement.

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