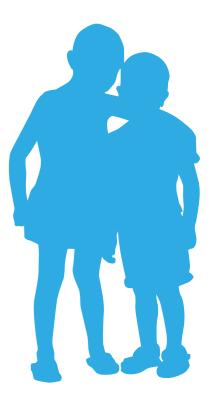






Contents

1.	Executive Summary	. 1	
2.	Introduction	. 2	,
3.	Literature Review	. 3	
4.	Data Sources and Methodology	. 6	j
5.	Results	. 9)
6.	Discussion of Results	19)
7.	Recommendations	21	
8.	References	22	,





1. Executive Summary

The disciplinary practices adopted to control children's behaviour represent an important part in forming their characters in the future. Disciplinary practices can be divided into two types: violent and non-violent. Non-violent disciplinary practices are the effective practices in disciplining a child, while the violent disciplinary practices have proved their total ineffectiveness. However, most children in Egypt (93%) are exposed to violent disciplining methods. Through the EDHS 2014 sample, this paper primarily aims to examine the demographic and socio-economic determinants for the use of violent disciplinary practices by the parents or caregivers to discipline children in Egypt. To examine these determinants, a multinomial logistic regression model is used and the disciplinary practices are divided into six non-overlapping¹ types as follows: the child (1) never received any disciplining methods, (2) has been subject to non-violent disciplining methods non-violent disciplining methods only, (3) has been subject to violent disciplining methods only, (4) has been subject to non-violent and psychological disciplines only, (5) has been subject to non-violent, psychological and mild physical disciplines only, and (6) has been subject to non-violent, psychological and severe physical disciplines. The study has concluded that the most common determinants for the use of violent disciplinary practices by the parents are: child's sex, child's and mother's age, educational level of the child, father and mother, the child's engagement in household chores, wealth index and crowdedness in the house. The analysis proved the insignificance of some variables including: sex of the household head, mother's working status, number of adults in the household, relation to the household head, the mother's and father's presence.

Keywords:

Disciplinary practices, child's discipline, psychological violence and physical violence.

¹ The non-overlap between the variables of the dependent variable means that each child is classified into only one category of the dependent variable.



2. Introduction

The family is the natural environment for the growth and well-being of all its members and particularly children – since families have the greatest potential of affording children the necessary protection and meeting the needs of their physical and emotional well-being (UN, 1989). A child means every human being below the age of eighteen years under the law applicable to the child as stipulated in Article (1) of the Convention on the Rights of the Child 1989.

The disciplinary practices adopted to control children's behaviour represent an important part in forming their characters in the future. Child disciplining is defined as the education and care given to children to prepare them for acquiring skills, self-control, self-directedness and caring for others (Howard, 1996). The disciplinary practices adopted by caregivers to discipline children can be divided into two main types, the first of which are non-violent practices including directing the child to the proper or preferred behaviour through guidance, the caregivers' display of such behaviour, encouraging the child to follow such behaviour through motivation and offering moral and material incentives. There are many strategies to apply these practices, including most importantly: a positive educational environment that supports the parents-child relationship, the proactive strategy that relies upon systematic teaching and promoting the desired behaviour through the parents' adoption of such behaviour so that the child imitates them, and the reactive strategy that depends on reducing or eliminating the unwanted behaviours in order to keep the child safe, like depriving the child of the benefits, preventing them from going out, highlighting the fault in their behaviour, or – at young age – providing the child other options to do instead. All these strategies need to work together to enhance the child's behaviour (Howard, 1996; McKee et al. 2007).

The second type of disciplinary practices are the violent practices that involve any form of violence and may significantly influence the psychological health of children on the short and long term. The WHO (1996) defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation". Violence against children is defined in Article 19 of the Convention on the Rights of the Child as the physical and mental abuse, negligent treatment, maltreatment or exploitation, including sexual exploitation. Many studies address the inefficiency of violent disciplinary practices compared to the non-violent ones in child's disciplining. Although violent disciplinary practices appear to be efficient in the instant prevention of the unwanted behaviour, their effectiveness declines and sometimes they become inefficient when frequently used (McCord, 1996; Chang, 2007).

Violent disciplinary practices against children are a violation of their rights owing to the resulting mental and health impacts on the short and long terms. Such practices are not related to a specific country, race, religion or culture; however, they occur in all countries regardless of the culture, religion and race to which the population belong. Violent disciplinary practices can be divided into: physical, psychological and sexual violence, and negligence (Elian, 2007; UNICEF, 2010). They are practiced in five contexts: home and family, schools and educational institutions, childcare and judicial institutions, workplace, and local community.

In this study, we focus on the violent disciplinary practices against children within families, including physical and psychological violence. The concept of the parents' adoption of disciplinary practices against their children has evolved over time, as well as their acceptance of the proper practices. Using physical violence against children has been internationally accepted, up until the UN Convention on the Rights of the Child was concluded in 1989 and prohibited a number of countries from using physical punishment against children (Ellsberg, 2015). Article 19 of the Convention stipulates the protection of children from all forms of violence "Children have the right to be protected from being hurt and mistreated, physically or mentally. Governments should ensure that children are properly cared for and protect them from violence, abuse and neglect by their parents, or anyone else who looks after them (UN, 1989).

Physical violence is any form of intentional behaviour that causes harm or injury to the child's body, like beating, burning, choking, confinement, strapping, or indirectly like not providing medicines for the child or not giving them sufficient food. On the other hand, psychological abuse is any behaviour that causes any kind of psychological harm or suffering for the child like mocking, negligence, threatening, intimidation, mistreatment, using abusive language or favouring siblings (Maaousha and Boutabal, 2013).

3. Literature Review

The use of physical and psychological punishment causes a set of negative impacts on the child, including mental development problems, damaging the child-parent relationship and increasing child's hostility (Ellsberg, 2015). As a result of these impacts, some countries have prohibited parents from using violent disciplinary practices, the physical in particular (De Zoysa, 2010). The international community officially pledged to afford all children in all places and at all times the fundamental right of protection against violence. Nevertheless, violence not only occurs against millions of children worldwide, but also causes long-term impacts on their life. Violence hinders the child's growth, ability to learn and school performance and leads to lowered self-esteem. Moreover, violence has high-risk economic costs incurred by the society, which minimize the human capacity and harm social development.

Although it is logical that the family should be the setting where the child is protected and the principal guarantor that protects the child's rights, the reality within the family is contrary to the expectations. It has been proved that a child is much more likely to suffer violence at home and a child is more vulnerable to abuse by caregivers and other family members when compared to other potential sources of violence. Violence against children within the family include all forms of mistreatment as defined by the WHO, either physical or emotional abuse, sexual abuse, negligence or exploitation that leads to actual or potential harm to the child's health, growth or dignity (UNICEF, 2010).

A great attention has been given internationally to children's rights and protection since the conclusion of the Convention on the Rights of the Child in 1989, as the first international agreement that sets the principles of the child's rights. SDG Goal 5 focuses on achieving gender equality and the empowerment of all women and girls, particularly Target 5.2 on the elimination of all forms of violence against all women and girls. Goal 16 stipulates promoting peaceful and inclusive societies for sustainable development, providing access to justice for all and building effective, accountable and inclusive institutions at all levels. Target 16.2 calls for ending abuse, exploitation, trafficking and all forms of violence against and torture of children, where Indicator 16.2.1 includes measuring the proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month. Egypt has been one of the countries that signed the Convention on the Rights of the Child in 1991 and since then it has been committed to implement and comply with the provisions thereof. Egypt has also adopted the SDGs, including the goals devoted to the protection of the child's rights. This is evident through the local sustainable goals that are part of the social dimension of Egypt's Strategy and Vision 2030².

In Egypt until 2005, there was very limited evidence available on violent and non-violent disciplinary practices against children at homes and in schools, as in many low and middle-income countries. That was the case until a special module for measuring violent and non-violent practices against children was integrated into the Egyptian Household Survey Questionnaire 2009 and EDHS 2005 & 2014.

In its concluding comments on Egypt's third and fourth reports on the implementation of the Convention on the Rights of the Child (UNICEF Egypt, 2014), the Committee on the Rights of the Child warned against the high levels of physical punishment imposed on children in Egypt, either at school or home. The Committee also expressed concern over the lack of legislation on domestic abuse and recommended the creation of a system for child protection that has the support of the public and provides training for social workers in administrative divisions to receive reports on violence and how to deal with and follow-up on these cases. Egypt's Child Law No. 126 of 2008 stipulates that child protection committees shall be formed in governorates to detect, conduct research on and refer the cases of children subject to abuse, violence and exploitation, in addition to dealing with the perpetrators of violence. Although this has been clearly stipulated in the Law, the enforcement still needs human and financial investment (UNICEF Egypt, 2014).

According to the Global Status Report on Violence Prevention prepared by UNDP, UNODC and WHO in 2014, Egypt has a national action plan for responding to children maltreatment, however the action programmes are not recurrent and operate on a small scale. Although Egypt's laws support the compensation of children victims, they are inefficiently

² http://sdsegypt2030.com, last visited on 30 August 2018.

enforced. The report indicates that a huge proportion of parents in many countries not only accept physical punishment for their children, but also practice such method. For example, 45% of parents in South Korea beat, kick or severely assault their children. In Ethiopia, a large proportion (more than 65%) of school children have marks on their bodies as a result of beating by their parents. Furthermore, the report shows that violence still prevails, where 1 of each 4 children is subject to physical abuse, with only 38 out of 133 countries included in the report raise parents' awareness of child abuse prevention. The report also provides the prevalence rates of the forms of violence against children, either in high or low-income countries, and estimates the number of children subject to domestic violence each year worldwide as 133-275 million children (United Nations, 2006).

EDHS 2014, which is the latest survey of the survey series conducted on behalf of the Egyptian Ministry of Health and Population and USAID implemented in the field by El-Zanaty and Associates, claims that 93% of children aged 1-14 years have been disciplined within the month prior to the interview using violent methods, including psychological and physical practices. According to the type of violent practices, the survey revealed that 91% of children are subject to various forms of psychological violence as part of the disciplinary methods, while only 78% of them are subject to physical punishment. Around 1 in every 8 children has reported that he/she has been severely beaten several times, whereas a small proportion of children (4%) have reportedly been subject to non-violent disciplinary practices only.

A number of studies have addressed the phenomenon of domestic violence against children and some of them highlighted the reality of disciplinary practices against children at home (National Council for Childhood and Motherhood, UNICEF Egypt, 2015). On the other hand, the study by Abdel Aziz, 2011 aimed to identify the level of mothers' use of both types of violence (physical/ psychological) against their children. Some studies addressed the primary methods used by parents to discipline their children, including by Regalado and Inkelas, 2004; Barkin et al., 2007; Halpenny, 2010; De Zoysa, 2011, which attempted to determine the incidence of four disciplining methods including grace period, shouting, elimination of benefits and beating by parents of children aged 2-11 years, as well as the correlates of each method. Also, some studies addressed the phenomenon of violence not only within the family, but also within the neighbourhood and school (Elian, 2007; Supreme Council for Family Affairs, 2013) which displayed violence from the perspective of three main parties: family, child and school. Elian, 2007 tackled sexual violence by the parents against their children.

A number of studies found out that the psychological methods, including threatening, shouting and deprivation are the most commonly used by caregivers, followed by physical violence including beating and other acts that cause physical abuse (Supreme Council for Family Affairs, 2013; De Zoysa, 2010; National Council for Childhood and Motherhood, UNICEF Egypt, 2015; Elian, 2007). On the contrary, other studies that focused on some developed foreign countries concluded that the non-violent disciplining methods are the most commonly used by the parents against their children (Regalado and Inkelas, 2004; Halpenny, 2010; Barkin et al., 2007).

The applied studies suggested that the social, demographic and economic determinants of the family greatly influence the child's exposure to violent disciplinary practices by the family like the family's living standard, mother's marital status, parents' age and working status, parents' exposure in childhood to forms of violent punishment, child's age, mother's and father's educational level, sex of caregivers, mother's race, the presence of one adult in the family, parents' evaluation of the efficiency of disciplinary practices. These determinants can be classified into the child's characteristics including child's sex, age and health status (Elian, 2007; Barkin et.al, 2007; Halpenny, 2010; World report on violence and health, 2002; Regalado and Inkelas, 2004). The characteristics of the family include the sex of caregivers, family's economic conditions, family's size, parents' age, parents' race, parents' emotions, parents' education and working status (Supreme Council for Family Affairs, 2013; De Zoysa, 2010; World report on violence and health, 2002; Regalado and Inkelas, 2004), and parents' exposure to physical punishment in childhood (Barkin et al., 2007; Halpenny, 2010).

Some studies have agreed that the mother is the main source of violence against children. Thus, the mother's characteristics affect the violent disciplinary practices against children, including the mother's age, working status, educational level and marital status (Abdel Aziz, 2011; Regalado and Inkelas, 2004).

Accordingly, it was felt necessary to study the demographic and socioeconomic determinants of using any form of violent disciplinary practices by the parents or caregivers to discipline children. For the purpose the data of EDHS 2014 was used by building a statistical model appropriate for the nature of the variables being examined.

This research highlights the correlates using violent disciplinary practices to discipline children by answering the following research questions:

- What are the forms of disciplinary practices on children?
- Do the forms of disciplinary practices imposed on the child differ according to the child's characteristics, parents' characteristics or other family characteristics?



Data Sources and Methodology

This study applied secondary data analysis, using EDHS 2014 as a source of data. EDHS 2014 is the tenth survey in the series of demographic and health surveys conducted in Egypt. The sample for the survey is drawn using multistage sampling and is representative of the Egyptian population, based on a sample of 28,175 households. A special module on child discipline was applied in EDHS 2014. One child in the age group 1-14 years was randomly selected in the household. The respondent to the household questionnaire, usually the household head, was asked a series of questions about disciplinary practices the respondent or other household members may have used with the selected child during the month before the interview to correct behaviour problems or encourage right behaviour. The module may underestimate use of various forms of discipline as the respondent to the household questionnaire may not be present at or aware of all the times a child had been disciplined during the month. This is the most important study limitation, in addition to that, the short reference period (one month) during which the disciplinary practices used by caregivers to discipline children have been surveyed, is another limitation.

The study examines the impact of some of the family's social (child's education, child's engagement in household chores, relation to the household head and parents' education), economic (parents' working status and wealth index) and demographic determinants (child's sex, child's age, sex of household head, family structure, place of residence, crowdedness) on the type of disciplinary practices used to discipline children in Egypt using the multinomial logistic regression model. Such technique is generally used to identify the factors that impact the dependent variable, when we have a large number of independent variables that may be related to the variable being examined. We should identify the determinants (variables) that have a significant relation with the study variable, showing that the determinants are responsible for a greater impact on the study variable, and exclude all the other variables. The multinomial logistic regression model has been used as it is the most appropriate statistical model for the data of this study, since the dependent variable is a nominal variable with more than 2 categories. The following equation represents the mathematical form of the multinomial logistic regression model:

$$\Pr(Y = j) = \frac{e^{\beta_{ji}.X_i}}{1 + \sum_{j=1}^{K-1} e^{\beta_{ji}.X_i}}$$

Where:

Y: dependent variable:

X_i: independent variables;

 $\beta_{::}$ logistic regression coefficients for the category j and independent variable i;

J: 1, 2,, (k-1);

K: categories of the dependent variable.

The multinomial logistic regression model is a non-linear regression model where the independent variables are inserted together to estimate the log odds that are used to calculate the probabilities of shifting from the various categories of the dependent variable to its reference category. There are many measures that indicate the quality and predictability of the model, including the likelihood ratio test that analyses the hypothesis that all the logistic regression coefficients of independent variables equal zero and Pseudo R² values that express the ability of the independent variables to interpret the discrepancies in the dependent variable.

Researchers have faced difficulty in forming a nominal dependent variable that has mutually exclusive and exhaustive aspects, which can differentiate between the various forms of disciplinary practices through the original variables contained in the survey data. Researchers tried to overcome this by forming the dependent variable as follows:

Most children are subject to more than one type of disciplinary practices, where the violent and non-violent forms of disciplining methods – that are usually used to guide and discipline the child – overlap. After classifying the forms of

disciplining methods, it was found that 14.3% of children are subject to one type of punishment, where 4% have never received any disciplining methods during the reference period, 4.7% have been subject to non-violent disciplining methods only and 5.6% have been subject to violent disciplining methods only. On the other hand, 85.7% of children have been subject to more than one form of disciplining methods, which is an intermix of non-violent and violent forms of methods. Therefore, researchers thought that it is necessary to separate the overlapping types of disciplinary practices, which led to the formation of a variable that has 11 non-overlapping aspects that express all forms of disciplinary practices imposed on children by caregivers.

Table 1: Distribution of child disciplinary practices by parents/caregivers, Egypt 2014

Disciplining methods:	Number	Proportion
Never received any disciplining methods	631	4.0
Non-violent only	733	4.7
Psychological only	203	1.3
Non-violent combined with Psychological	2,436	15.5
Mild physical only	25	0.2
Non-violent combined with Mild physical	209	1.3
Psychological combined with Mild physical	273	1.7
Non-violent combined with Psychological and Mild physical	5,182	33.1
Severe physical only	10	0.1
Non-violent combined with Severe physical	63	0.4
Psychological combined with Severe physical	370	2.4
Non-violent combined with Psychological and Severe physical	5,535	35.3
Total	15,670	100.0

Source: Prepared by researchers using the data of EDHS 2014.

The above relative distribution represents the dependent variable until being analysed – through the 11 non-ordinals aspect – using multinomial regression model and building 10 sub-models. However, it was difficult to apply this, comment on and summarize its outcomes. Since the focus was to examine the determinants of the child's exposure to any form of psychological or mild or severe physical punishment, some categories have been integrated together so that the dependent variable is "the type of disciplinary practices" that has 6 categories only as follows:

Category 1: Never received any disciplining methods;

Category 2: Non-violent disciplining methods only (the reference category of the dependent variable;

Category 3: Violent form of punishment only;

Category 4: Non-violent disciplining methods combined with Psychological punishment;

Category 5: Non-violent disciplining methods combined with Psychological and Mild Physical punishment;

Category 6: Non-violent disciplining methods combined with Psychological and Severe Physical punishment.

As such, the dependent variable can reflect the difference between the mild and severe physical punishment, the physical punishment and the psychological punishment, and the non-violent and violent disciplinary practices in general. It is worth mentioning that when the researchers separated the overlapping and found mutually exclusive combinations, two categories were found to be the most interesting: children who are subject to any form of violent punishment only without receiving any non-violent disciplining methods from parents or caregivers and the children who have never been subject to any form of disciplinary practices. Although the data available did not allow the detection of the reasons that led to the non-exposure of this group of children to any form of punishment but this may be attributed to the short reference period as the data focused on the disciplinary practices used only within the month prior to the survey. Another reason could be due to not applying any disciplinary practices on younger children (1-2 years old) in particular. This could also be a reporting bias in that the respondents were not truthful about the use of any disciplinary practices with children. On the other hand, this may be interpreted as negligence which is one of the violent and inefficient disciplinary practices. Table 2 below shows that the proportion of children who have never been subject to punishment for aged 1-2 years was 38.2% and it was 17.4% for children aged 13-14 years.

Table 2: Prevalence of child disciplinary practices by age of child, Egypt 2014

Age of child	(1-2)	(3-4)	(5-6)	(7-8)	(9-10)	(11-12)	(13-14)	Total
Disciplining method				%				
Never received any disciplining methods	38.2	13.2	8.1	6.5	7.0	9.7	17.4	631
Non-violent only	22.2	10.9	10.2	8.5	7.9	15.3	25.0	733
Psychological only	36.0	6.9	6.4	6.4	8.9	13.3	22.2	203
Non-violent combined with Psychological	17.0	10.8	11.4	9.4	11.4	17.2	22.7	2,436
Mild physical only	64.0	8.0	8.0	0.0	12.0	0.0	8.0	25
Non-violent combined with Mild physical	37.8	15.3	13.9	8.1	10.5	7.2	7.2	209
Psychological combined with Mild physical	35.5	19.0	11.4	9.2	5.1	11.0	8.8	273
Non-violent combined with Psychological and Mild physical	24.4	19.5	16.5	11.6	10.1	9.7	8.2	5,182
Severe physical only	40.0	40.0	10.0	10.0	0.0	0.0	0.0	10
Non-violent combined with Severe physical	25.4	19.0	15.9	15.9	7.9	9.5	6.3	63
Psychological combined with Severe physical	27.0	14.6	13.0	11.4	11.6	13.0	9.5	370
Non-violent combined with Psychological and Severe physical	16.8	19.6	17.3	12.7	13.4	11.3	9.0	5,535
Total	21.7	17.2	15.0	11.1	11.2	11.8	12.1	15,670

Source: Prepared by researchers using the data of EDHS 2014.

The model examined the following hypotheses:

- The less the family's living standard, the more violent disciplinary practices to discipline a child;
- The more the parents' educational level, the less violent disciplinary practices to discipline a child;
- Violent disciplinary practices to discipline a child are less practiced in urban areas than rural areas;
- The less crowdedness, the less violent disciplinary practices to discipline a child;
- Violent disciplinary practices to discipline a child are less used against children attending school than children not attending school;
- · Violent disciplinary practices to discipline a child are less used against females than males;
- · Violent disciplinary practices are more used against working children than non-working children;
- The older the child's age, the less violent disciplinary practices to discipline a child.

5. Results

In this section of the research paper, we describe through descriptive analysis, the relation between the demographic and socioeconomic characteristics of the children, parents and families and the type of disciplinary practices used. The statistical significance of the relationship between the dependent variable and each of the independent variables was calculated by the incidence of the disciplinary practices distributed by the levels of independents variables in crosstabulation and applying Chi-square test. In addition to the descriptive analysis, a multinomial logistic regression model was created to measure the impact of each independent variable included in the "type of disciplinary practices" model, with controlling the impact of other independent variables.

Relationship between the type of disciplinary practices and child's characteristics

Table 3 shows a relationship that has statistical significance between the type of disciplinary practices and the child's sex, age, education, relationship to the household head, and engagement in household chores at significance level of 0.01.

Table 3: Prevalence of child disciplinary practices by background characteristics of children, Egypt 2014

Disciplining method	Never received any disciplining methods	Non- violent disciplining methods only	Violent punish- ment only	Non-violent disciplining methods combined with Psy- chological punishment	Non-violent disciplining methods combined with Psychological and Mild physical punishment	Non-violent disciplining methods combined with Psychological and Severe physical punishment	Total
Child's sex**							
Male	3.8	4.5	5.9	14.6	33.4	37.9	8,215
Female	4.3	4.9	5.4	16.6	35.5	33.3	7,455
Child's age group	**						
1-2	7.1	4.8	8.5	12.2	39.5	27.5	3,396
3-4	3.1	3.0	4.7	9.8	38.8	40.7	2,693
5-6	2.2	3.2	4.0	11.8	37.6	41.2	2,347
7-8	2.4	3.6	4.6	13.1	35.4	40.9	1,744
9-10	2.5	3.3	4.5	15.8	31.1	42.7	1,750
11-12	3.3	6.1	5.7	22.7	28.1	34.1	1,847
13-14	5.8	9.7	5.6	29.3	23.2	26.5	1,893
Child's education	**						
Pre-primary	4.8	3.8	6.3	11.2	38.6	35.3	8,021
Primary	2.6	4.1	5.0	16.5	31.9	40.0	5,575
Preparatory/ Secondary	4.9	9.6	4.7	30.1	24.8	25.9	2,070
Child's relation to	head of house	hold**					
Not son/ daughter	5.7	4.5	6.6	13.7	35.9	33.7	1,517
Son/Daughter	3.9	4.7	5.5	15.7	34.2	35.9	14,135
Child's engageme	ent in househol	d chores**					
Never engaged in any HH chore	5.0	5.0	5.9	14.2	36.3	33.6	11,156
Engaged in one HH chore at least	1.5	3.9	5.0	18.8	29.8	41.0	4,514

^{**:} Significance level 0.01

Source: Prepared by researchers using the data of EDHS 2014.

Table 3 shows that the largest ratio of males 37.9% have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment. While 35.5% of females have been subject to non-violent disciplining methods combined with psychological punishment and mild physical punishment. It also shows that non-violent disciplining methods combined with psychological punishment and mild physical punishment are the most common among the age group 1-2 years. While non-violent disciplining methods combined with psychological punishment and severe physical punishment are the most common among the age group 3-12 years. The non-violent disciplining methods combined with psychological punishment were the most common among older children aged 13-14 years which indicates that the severe physical punishment becomes less with the child's age above 10 years.

With respect to the educational level, a large proportion of children in pre-primary 38.6% have been subject to non-violent disciplining methods combined with psychological punishment and mild physical punishment, while 40% of children in the primary stage have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment. On the other hand, the large proportion of children in the preparatory or secondary stage 30.1% have been subject to non-violent disciplining methods combined with psychological punishment. Such a result comes in line with the incidence of the types of disciplinary practices according to the age groups. Moreover, the results demonstrated that if the child is the son/daughter of the household head, the non-violent disciplining methods combined with psychological punishment and severe physical punishment are the most common to discipline the child, whereas if the child is not the son/daughter of the household head, the non-violent disciplining methods combined with psychological punishment are the more common.

It is also interesting that the children's engagement in household chores does not provide them protection from severe physical punishment. The child is considered engaged in household chores if he/she spent any time in the week preceding the survey in any type of work or help inside home. This study assumes that children's involvement in household chores would protect them from being exposed to violent disciplinary practices as they are being helpful to their families.

The results show that non-violent disciplining methods combined with psychological punishment and severe physical punishment are the most common for the children who are engaged in household chores, while the non-violent disciplining methods combined with psychological punishment and mild physical punishment are the most common for the children who are not engaged in household chores.

Relationship between the type of disciplinary practices and characteristics of the child's family

Table 4 exhibits the incidence of the types of disciplinary practices by the characteristics of the child's family. There is a relation of statistical significance between the type of disciplinary action and the family's structure, sex of the household head, crowdedness, wealth index and place of residence at significance level of 0.01.

Table 4: Prevalence of child disciplinary practices by background characteristics of household, Egypt 2014

Disciplining method	Never received any disciplining methods	Non- violent disciplining methods only	Violent punishment only	Non-violent disciplining methods combined with Psy- chological punishment	Non-violent disciplining methods combined with Psychological and Mild physical punishment	Non-violent disciplining methods combined with Psychological and Severe physical punishment	Total
Family structure**							
Father and mother live in HH	4.3	6.0	5.6	18.8	30.6	34.5	5,818
Another structure	3.8	3.9	5.5	13.6	36.6	36.5	9,852
Sex of the househousehousehousehousehousehousehouse	old head**						
Male	3.9	4.5	5.6	15.3	34.7	36.0	14,715
Female	6.2	7.5	5.4	20.0	30.1	30.9	925
Crowdedness**							
Low to Average (Two persons or less per room)	4.1	5.3	5.3	17.5	36.5	31.2	8,692

Disciplining method	Never received any disciplining methods	Non- violent disciplining methods only	Violent punishment only	Non-violent disciplining methods combined with Psy- chological punishment	Non-violent disciplining methods combined with Psychological and Mild physical punishment	Non-violent disciplining methods combined with Psychological and Severe physical punishment	Total
High (more than two persons per room)	3.9	4.2	5.9	14	32.7	39.3	6,977
Wealth index**							
Poorest	4.5	4.8	8.8	12.1	28.4	41.4	2,712
Poor	3.4	4.5	6.4	11.7	30.0	44.1	2,843
Medium	3.0	3.9	6.2	13.7	35.8	37.5	2,947
Rich	3.4	4.3	4.4	17.0	36.1	34.8	3,315
Richest	5.5	5.7	3.5	20.9	39.4	25.0	3,853
Place of residence	**						
Urban Gov.	7.7	4.4	4.5	18.3	38.6	26.5	2,672
Lower Egypt	5.6	10.0	12.0	35.5	64.4	72.6	6,061
Urban	2.4	6.2	4.3	21.2	32.4	33.6	1,835
Rural	3.2	3.8	7.7	14.3	32.0	39.0	4,226
Upper Egypt	6.8	11.3	9.6	26.5	68.7	77.1	5,935
Urban	3.5	6.2	3.5	14.9	36.2	35.8	1,908
Rural	3.3	5.1	6.1	11.6	32.5	41.3	4,027
Frontier Gov.	4.6	1.7	4.5	19.8	41.4	28.0	1,002

^{**:} Significance level 0.01

Source: Prepared by researchers using the data of EDHS 2014.

Table 4 reveals that the presence of the father and mother in the household increases the incidence of non-violent disciplining methods only compared to any other family structure by 6% and 3.9% respectively.

The table also shows that a large proportion of children in the male-headed households have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment (36%), while the category "Never received any disciplining methods" recorded the least proportion of 3.9%. For the female-headed households, the non-violent disciplining methods combined with psychological punishment and severe physical punishment are more common (30.9%), while "Violent punishment only" recorded the least proportion of 5.4%.

With respect to crowdedness, this variable has been created by dividing the number of family members by the number of rooms, and then divided into: low to average crowdedness (two persons or less per room) and high crowdedness (more than two persons per room). Table 4 suggests that the children living in families with low to average crowdedness have been subject to the largest proportion of non-violent disciplining methods combined with psychological punishment and mild physical punishment (36.5%), followed by non-violent disciplining methods combined with psychological punishment and severe physical punishment (31.2%), with the least proportion for "Never received any disciplining methods" category (4.1%). The children living in families with high crowdedness (more than two persons per room) have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment (39.9%), followed by non-violent disciplining methods combined with psychological punishment and mild physical punishment (32.7%), with the lease proportion for the category "Never received any disciplining methods" of 3.9%. Accordingly, the severe physical punishment increases with overcrowding in the house.

The table also indicates that 41.4% of children in the poorest families have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment; never received any disciplining methods. A similar situation is seen for the other living standards (wealth quintiles), where the richest families recorded the largest

proportion of non-violent disciplining methods combined with psychological punishment and severe physical punishment (39.4%), while the least proportion was for the children who have been subject to violent punishment only (3.5%). We can notice that the incidence of the "non-violent disciplining methods combined with psychological punishment and severe physical punishment" – which is the most violent – remarkably declines with the family's higher economic level.

It is evident from Table 4 that in the urban governorates the "non-violent disciplining methods combined with psychological punishment and mild physical punishment" is the highest at 38.6%, while the "non-violent disciplining methods only" is the least at 4.4%. The incidence of the types of disciplinary practices are similar for the families in Upper and Lower Egypt, where the "non-violent disciplining methods combined with psychological punishment and severe physical punishment" is the most common at 72.6% and 77.1% in Lower Egypt and Upper Egypt respectively. "Never received any disciplining methods" account for very low proportions at 5.6% and 6.8% in Lower Egypt and Upper Egypt, respectively.

Relationship between the type of disciplinary practices and parents' characteristics

Table 5 shows the incidence of the disciplinary practices by the parents' characteristics. It also emphasizes that there is a relation of statistical significance between the types of disciplinary practices and the father's and mother's education, mother's working status, mother's age at significance level of 0.01.

Table 5: Prevalence of child disciplinary practices by background characteristics of parents, Egypt 2014

Disciplining method	Never received any disciplining methods	Non- violent disciplining methods only	Violent punishment only	Non-violent disciplining methods combined with Psychological punishment	Non-violent disciplining methods combined with Psychological and Mild physical punishment	Non-violent disciplining methods combined with Psychological and Severe physical punishment	Total
Father's educati	ion**						
Never enrolled in school	4.3	3.8	7.4	12.5	29.6	42.3	2,286
Primary	2.7	3.7	6.5	12.3	30.4	44.3	2,059
Secondary	4.2	3.9	5.6	13.9	35.8	36.5	8,014
Higher	4.0	6.2	3.4	22.4	40.2	23.8	2,483
Mother's educat	tion**						
Never enrolled in school	4.1	4.2	7.9	12.5	29.8	41.5	3,124
Primary	3.1	4.6	7.0	13.2	28.6	43.5	1,429
Secondary	3.9	3.7	5.0	14.1	36.2	37.1	8,034
Higher	4.7	6.2	4.0	22.1	41.0	22.1	2,258
Mother's working	ng status**						
Not working	4.1	4.1	5.7	14.2	34.7	37.2	12,472
Working	3.4	5.3	5.1	18.9	35.4	31.8	2,352
Mother's age gr	oup**						
15-19	6.5	2.9	8.0	12.3	47.1	23.2	139
20-24	6.1	3.8	8.5	9.0	36.6	36.1	1,708
25-29	3.8	3.6	5.7	10.4	38.1	38.5	3,801
30-34	3.3	3.3	4.9	14.5	35.2	38.8	3,608
35-39	3.5	4.4	4.7	17.8	33.6	36.0	2,634
40-44	3.9	6.3	5.3	21.5	30.5	32.6	1,759
45-49	4.3	7.1	6.1	22.9	28.7	30.9	1,197
**: Significance lev	/el 0 01						

^{**:} Significance level 0.01

Source: Prepared by researchers using the data of EDHS 2014.

Table 5 suggests that most children with parents never enrolled in school or who have completed their primary or secondary education, have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment at 42.3%, 44.3% and 36.5%, respectively. While the children whose parents have completed higher education have been subject to non-violent disciplining methods combined with psychological and mild physical punishment (40.2%). The table also highlights that a large proportion of children to mothers who have never enrolled in school or who have completed their primary or secondary education, have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment at 41.5%, 43.5% and 37.1% respectively. While for the children whose mothers completed higher education, have been subject to non-violent disciplining methods combined with psychological punishment and mild physical punishment at 41%. This indicates that the higher the father's and mother's educational level, the less severe physical punishment against the children.

The table also reveals that a large proportion of children to non-working mothers have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment (37.2%), as against children to working mothers, who have been subject to non-violent disciplining methods combined with psychological punishment and mild physical punishment at 35.4%. We can see from Table 5 that the physically violent practices are the very common among mothers of different age groups.

Relationships between the respondent's perspective on the use of violence and the type of disciplinary practices

Table 6 displays the incidence of the types of disciplinary practices by the opinion of respondents on the necessity of using physical violence to discipline a child. The results show that the relation between both was a significant at level of 0.01.

Table 6: Prevalence of child disciplinary practices by the opinion of respondents in the necessity of using physical violence to discipline a child, Egypt 2014

Disciplining method	Never received any disciplining methods	Non- violent disciplining methods only	Violent punishment only	Non-violent disciplining methods combined with Psy- chological punishment	Non-violent disciplining methods combined with Psychological and Mild physical punishment	Non-violent disciplining methods combined with Psychological and Severe physical punishment	Total
Necessity of u	ısing physical v	violence **					
Unnecessary	4.9	5.7	5.5	18.8	36.6	28.5	11,910
Necessary	1.1	1.2	5.8	5.2	27.2	59.5	3,604
**. C:::::	II 0 01						

^{**:} Significance level 0.01

Source: Prepared by researchers using the data of EDHS 2014.

Table 6 shows that a large proportion of children for whom the respondents thought that physical violence was unnecessary, have been subject to non-violent disciplining methods combined with psychological punishment and mild physical punishment at 36.6%. While for those who asserted the necessity of using physical violence, 59.5% of children have been subject to non-violent disciplining methods combined with psychological punishment and severe physical punishment.

Demographic and socioeconomic determinants for using the types of disciplinary practices to discipline a child

A multinomial logistic regression model has been applied to examine the regression relationship between the dependent variable (type of disciplinary practices) and a set of independent variables. The model depends on identifying what is called the reference category of the dependent variable, which in our case is has been subject to "non-violent disciplining methods only". The analysis asserted the significance of the model through examining the probability after ensuring the rejection of the null hypothesis that all the regression coefficients equal zero. The analysis shows that the P-value is 0.000, which is less than 0.05, meaning that there is at least one coefficient that is not equal to zero. Moreover, the results proved the validity of the model through the pseudo coefficients of determination, where the Nagelkerke coefficient is 0.2 and the Cox and Snell coefficient is approx. 0.19. These values are acceptable (the value of pseudo coefficients of determination acceptable in case the value of any of them is 0.2-0.4 (Menard, 2002).

14

The multinomial logistic regression model estimates 5 sub-models, where the number of categories of the variable "type of disciplinary practices" is 6 categories. Therefore, 5 models have been assessed depending on the reference category "has been subject to non-violent disciplining methods only". Accordingly, the assessed sub-models represent:

First model: "never received any disciplining methods to being subject to non-violent disciplining methods only",

Second model: "violent punishment only to non-violent disciplining methods only",

Third model: "non-violent disciplining methods combined with psychological punishment to non-violent disciplining methods only",

Fourth model: "non-violent disciplining methods combined with psychological punishment and mild physical punishment to non-violent disciplining methods only",

Fifth model: "non-violent disciplining methods combined with psychological punishment and severe physical punishment to non-violent disciplining methods only".

Table 7: Demographic and socioeconomic determinants of child disciplinary practices, Egypt 2014

Background	Sub-Model							
characteristic	First	Second	Third	Fourth	Fifth			
Child's sex								
Male	0.998	1.280*	1.014	1.072	1.348**			
Female (R.C.)								
Child's age group								
0-3	0.832	1.326	0.918	1.570*	1.237			
4-7	0.613*	1.013	0.978	1.603**	1.475*			
8-14 (R.C.)								
Child's education								
Pre-primary	2.029*	3.365**	1.299	2.817**	3.363**			
Primary	1.120	2.576**	1.261	2.295**	2.791**			
Preparatory/ Secondary (R.C.)								
Child's engagement in household chores								
No	1.623**	0.491**	0.500**	0.435**	0.355**			
Yes (R.C.)								
Sex of the household head								
Males	0.747	1.202	1.054	1.333	1.248			
Female (R.C.)								
Child's relation to head of household								
Not son/daughter	1.223	1.235	1.114	1.316	1.198			
Son/Daughter (R.C.)								
Father's education								
Never enrolled in school	1.970**	2.232**	1.142	1.428	1.958**			
Primary	1.149	1.991**	1.020	1.260	1.906**			
Secondary	1.456*	1.810**	0.995	1.238	1.535**			
Higher (R.C.)								
Mother's education								
Never enrolled in school	1.183	1.628*	0.989	1.183	1.529*			
Primary	0.787	1.270	0.792	0.886	1.377			
Secondary	1.159	1.277	1.146	1.391*	1.863**			
Higher (R.C.)								

Background			Sub-Model		
characteristic	First	Second	Third	Fourth	Fifth
Mother's age group					
15-19	2.848	1.811	1.408	2.124	1.144
20-24	1.619	1.601	0.771	1.211	1.423
25-29	1.197	1.302	0.907	1.425	1.687**
30-34	1.370	1.337	1.297	1.652**	1.885**
35-39	1.119	1.147	1.171	1.448*	1.575**
40-44	0.991	0.912	0.960	1.015	0.995
45-49 (R.C.)					
Mother's working status					
Not working	1.138	0.932	1.046	1.036	1.022
Working (R.C.)					
Wealth index					
Poorest	1.480	1.681	0.585*	0.660	0.993
Poor	1.132	1.295	0.610*	0.734	1.144
Middle	1.081	1.464	0.826	1.018	1.248
Rich	0.963	1.238	1.096	1.148	1.359*
Richest (R.C.)					
Family's structure					
Another structure	0.882	0.883	0.977	0.932	0.894
Father and mother live in HH (R.C.)					
Region					
Urban Gov.	0.720	0.676	0.267**	0.335**	0.462*
Lower Egypt					
Urban	0.150**	0.470*	0.229**	0.210**	0.469*
Rural	0.232**	0.731	0.297**	0.290**	0.550
Upper Egypt					
Urban	0.194**	0.257**	0.142**	0.186**	0.319**
Rural	0.149**	0.305**	0.205**	0.220**	0.311**
Frontier Gov. (R.C.)					
Crowdedness					
Low to Average	1.248*	1.207	1.070	1.117	1.319**
High (R.C.)					
Necessity of using physical violence					
No	0.922	0.216**	0.761	0.280**	0.105**
Yes (R.C.)					

(R.C.): Reference category

Source: Prepared by researchers using the data of EDHS 2014.

1. First Sub-Model: "Never received any disciplining methods" to "Non-violent disciplining methods only":

Child's age: children aged 4-7 years are less likely than children aged 8-14 years (odds value of 0.613) to being subject to "never received any disciplining methods" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Child's educational level: children in pre-primary are two times as likely as children in preparatory or secondary (odds value of 2.029) to being subject to "never received any disciplining methods" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Children engagement in household chores: children who do not engage in household chores are more likely than children engaged in household chores (odds value of 1.623) to being in the category of "never received any disciplining methods" than being in the category of those who were subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Father's education: children whose fathers had never enrolled in school or had completed secondary education are more likely than children whose fathers had completed higher education (odds values of 1.97 and 1.456 respectively) to fall in the category of "never received any disciplining methods" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Region: children residing in urban and rural areas of Lower and upper Egypt are less likely than children in frontier governorates (odds values of 0.150, 0.232, 0.194 and 0.149 consecutively) to fall in the category of "never received any disciplining methods" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Crowdedness: children living in households which are not crowded are more likely than children living in crowded households (odds value of 1.248) to fall in the category of "never received any disciplining methods" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

2. Second Sub-Model: "Violent punishment only" to "Non-violent disciplining methods only":

Child's sex: males are more likely than females (odds value 1.280) to be subject to "violent punishment only" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Child's educational level: children in pre-primary or primary levels are two to three times more likely than children in preparatory or secondary (odds values of 3.365 and 2.576 respectively) to be subjected to "violent punishment only" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Child's engagement in household chores: children who do not engage in household chores are less likely than children who are engaged in household chores (odds value of 0.491) to be subject to "violent punishment only" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Father's education: children whose fathers have never enrolled in school or with primary or secondary education are nearly two times as likely as children whose fathers have higher education (odds values of 2.232, 1.991, and 1.810 consecutively) to be subject to "violent punishment only" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Mother's education: children whose mothers have never enrolled in school are more likely than children whose mothers have higher education (odds value of 1.628) to be subject to "violent punishment only" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Region: children residing in urban areas of Lower Egypt and in urban and rural areas of Upper Egypt are less likely than children who live in frontier governorates (odds values of 0.470, 0.257 and 0.305) to be subject to "violent punishment only" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Respondent's perspective on the necessity to use physical punishment of the child: the analysis shows that children who are living in households which do not agree on the use of physical punishment are less likely than children living in households which see that the physical punishment is necessary (odds value of 0.216) to be subject to "violent

punishment only" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

3. Third Sub-Model: "Non-violent methods combined with psychological punishment" to "Non-violent disciplining methods only":

Child's engagement in household chores: children who do not engage in household chores are less likely than children who are engaged in household chores (odds value of 0.500) to be subject to "non-violent methods combined with psychological punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Wealth index: children living in the lowest two wealth quintiles of households are less likely than children living in the richest household (odds values of 0.585 and 0.610) to be subject to "non-violent methods combined with psychological punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Region: children residing in urban governorates and in urban and rural areas of Lower and Upper Egypt are less likely than children who live in frontier governorates (odds values of 0.267, 0.229, 0.297, 0.142 and 0.205 consecutively) to be subject to "non-violent methods combined with psychological punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

4. Fourth Sub-Model: "Non-violent combined with psychological punishment and mild physical punishment" to "Non-violent disciplining methods only":

Child's age: children in the age groups 0-3 years and 4-7 years are more likely than children aged 8-14 years (odds values of 1.570 and 1.603) to be subject to "non-violent psychological punishment combined with mild physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Child's education: children at the pre-primary or primary levels are two to three times more likely than children in preparatory or secondary levels (odds values of 2.817 and 2.295) to being subject to "non-violent psychological punishment combined with mild physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Child's engagement in household chores: children who do not engage in household chores are less likely than children who are engaged in household chores (odds value of 0.435) to be subject to "non-violent psychological punishment combined with mild physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Mother's education: children whose mothers have secondary education are more likely than children whose mothers have higher education (odds value of 1.391) to be subject to "non-violent psychological punishment combined with mild physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Mother's age: children whose mothers fall in the age groups 30-40 years and 35-39 years are more likely than children whose mothers are aged 45-49 years (odds values of 1.652 and 1.448) to be subject to "non-violent psychological punishment combined with mild physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Region: children residing in urban governorates and in urban and rural areas of Lower and Upper Egypt are less likely than children who live in frontier governorates (odds values of 0.335, 0.210, 0.290, 0.186 and 0.220 consecutively) to being subject to "non-violent psychological punishment combined with mild physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Respondent's perspective on the necessity to use physical punishment of the child: children who are living in households which do not agree on the use of physical punishment are less likely than children living in households which see that the physical punishment is necessary (odds value of 0.280) to be subject to "non-violent psychological punishment combined with mild physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

5. Fifth Sub-Model: "Non-violent methods combined with psychological and severe physical punishment" to "Non-violent disciplining methods only":

Child's sex: males are more likely than females (odds value of 1.348) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Child's age: children aged 4-7 years are more likely than children aged 8-14 years (odds value of 1.475) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Child's education: children at the pre-primary and primary levels are nearly three times more likely than children in preparatory or secondary levels (odds values of 3.363 and 2.791) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Child's engagement in household chores: children who do not engage in household chores are less likely than children who are engaged in household chores (odds value of 0.355) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Father's education: children whose fathers have never enrolled in school or with primary or secondary education are more likely than children whose fathers have higher education (odds values of 1.958, 1.906 and 1.535) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Mother's education: children whose mothers have never enrolled in school or with secondary education are more likely than children whose mothers have higher education (odds values of 1.529 and 1.863) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Mother's age: children whose mothers fall in the age groups 25-29 years, 30-34 years and 35-39 years are more likely than children whose mothers aged 45-49 years (odds values of 1.687, 1.885 and 1.575 consecutively) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Wealth index: children living in rich households are more likely than children living in the richest household (odds value of 1.359) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Region: children residing in urban governorates, urban areas of Lower Egypt and urban and rural areas of Upper Egypt are less likely than children who live in frontier governorates (odds values of 0.462, 0.469, 0.319 and 0.311 respectively) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Crowdedness: children living in households which are crowded are more likely than children living in less crowded households (odds value of 1.319) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

Respondent's perspective on the necessity to use physical punishment of the child: children living in households which do not agree on the use of physical punishment are less likely than children living in households which see that the physical punishment is necessary (odds value of 0.105) to be subject to "non-violent methods combined with psychological and severe physical punishment" than being subject to "non-violent disciplining methods only", given all other predictor variables in the model are held constant.

6. Discussion of Results

This paper is the first in-depth study in Egypt that addresses the demographic and socioeconomic determinants of using violent disciplinary practices by the parents or caregivers to control the child's behaviour. Violence against children within the family is one of the most common forms of child abuse, which includes all forms of physical and psychological maltreatment that causes actual or potential harm to the child's health, growth or dignity.

The paper highlights the factors related to the use of violent disciplinary practices to control the child's behaviour, which have long-term consequences on the child's life. Thus, it has been necessary to study the demographic and socioeconomic determinants of using any form of violent disciplinary practices by the parents or caregivers to control the children's behaviour in Egypt by building a statistical model appropriate for the nature of the variables that have been examined. In addition, there was also a need to measuring the impact of some of the environmental characteristics surrounding the child at home on the probability of using the violent disciplinary practices to control the child's behaviour. EDHS 2014 sample has been used for the analysis.

A multinomial logistic regression model has been used, with many independent variables (child's sex, child's age group, child's education, sex of the household head, crowdedness, mother's age group, mother's education, mother's working status, father's education, number of adults in the family, child's engagement in household chores, region, wealth index, respondent's perspective on the method of the child's punishment), in order to identify the dependent variable, and that is the type of disciplinary practices, which are divided into six categories:

Category 1: never received any disciplining methods,

Category 2: has been subject to non-violent disciplining methods only,

Category 3: has been subject to violent punishment only,

Category 4: has been subject to non-violent methods combined with psychological punishment,

Category 5: has been subject to non-violent, psychological and mild physical punishment, and

Category 6: non-violent, psychological and severe physical violence.

A multinomial regression model has been applied after ensuring its significance, appropriateness to the data and predictability of the type of disciplinary practice against a child, per the characteristics of the child and his/her family which have been proved significant in the model.

The model illustrated that the **male children** are more likely than female children to be subject to physical punishment in general, however they are equally probable to not being subject to any punishment, as well as psychological and mild physical punishment. This shows that the sex variable differentiates between the severe physical punishment and other forms of punishment. Such result is in line with the results of the previous studies (including Antai et al., 2016; McKee et al., 2007), which concluded that the male children is more likely than female children to be subject to maltreatment by their parents and caregivers. Moreover, the results of Fry and Blight, 2016, which relies upon the data of 14 countries in Asia and Pacific region and through the in-depth analysis of violence against children, show that 1 out of 3 female children is subject to psychological violence, while 1 out of 4 male children is subject to psychological violence. On the contrary, 1 out of 8 female children is subject to physical violence, compared to 1 out of 6 male children. This indicates that male children are more subject to physical violence, whereas female children are more subject to psychological violence.

Fulu et al., 2017 suggests that the proportion of the male children suffering childhood trauma ranges between 59-92%, while the proportion of females ranges between 44-84%. Childhood trauma has been associated with the experience of violence against intimate partner, particularly physical and sexual violence. The study shows that there is a significant difference according to sex in the strength of relationship between childhood trauma and each of: practicing physical violence against the intimate partner, cruel fathers and mothers. As indicated in the World report on violence and health, 2002, male children are subject to high risk as a result of harsh physical punishment in many countries compared to females.

The results also emphasized that physical violence is associated with the child's age group. Children in the age group (4-7 years) were more exposed to violent disciplinary practices than children in the older age groups. This result is in compliance with the results of a study in China, where the highest rate of physical violence occurs in the age group (3-6 years). This is different from other countries where the highest rates of violent disciplining practices occur in the age groups (6-11 years) in India and (6-12 years) in the United States.

The results of these studies are in compliance with the results of some of the countries included in the Report. The results showed that the more the child's age, the less the violent disciplinary practices. The results are also in line with Antai et al., 2016. The Summary Report on Fatherhood Patterns and Perspectives on Discipline (Office of the Minister for Children and Youth Affairs, 2010) states that the children in the age group (2-9 years) are more prone to slapping as a disciplining method.

The results on the **child's education** are in line with the results of the child's age due to their relevance. As pre-primary and primary school children are younger, making them more likely to belong to children who have been severely punished than to children who have received only non-violent discipline. The results also emphasize that the children's engagement in household chores increases their vulnerability to violent disciplinary practices.

It is logical to assume that the less the father's educational level, the more the violent disciplinary practices. This has been proved through the model, which also indicated that the less the mother's educational level, the more the child's vulnerability to 'violent punishment only', 'non-violent methods combined with psychological and mild physical punishment', 'non-violent methods combined with psychological and severe physical punishment'. These results are in compliance with the results of many previous studies, including the World report on violence and health, 2002, which asserted that the parents who receive low education are the most violating of the child's rights.

The results of the respondent's perspective on the necessity of using physical violence to discipline the child are in line with the results of meta-analysis thereof. The probability of moving from the category of children who have been subject to non-violent disciplining methods only decreases with the parent's assertion of the necessity of using physical punishment to discipline their children.

Furthermore, the results highlighted that the more the **mother's age**, the more her children are prone to non-violent, psychological and mild physical punishment, and non-violent methods combined with psychological and severe physical punishment. This result differs from the results of the Summary Report on Fatherhood Patterns and Perspectives on Discipline (Office of the Minister for Children and Youth Affairs, 2010), which show that the parents in younger ages (less than 35 years) are more likely to use physical punishment than their peers at older ages.

The results also pointed out that physical violence is more common in the poorest and poor families than the richest families, where the "wealth index" variable has been significant in moving from the category of children who have been subject to non-violent methods combined with psychological punishment to the category of children who have been subject to non-violent disciplining methods only, and moving from the category of children who have been subject to non-violent methods combined with psychological and severe physical punishment to the category of children who have been subject to non-violent disciplining methods only. It is worth mentioning that this phenomenon has occurred since 2005 to present, as the same result was concluded by Antai et al., 2016, which is based on the data of EDHS 2005. Also, the World report on violence and health 2002 emphasized the high incidence of violence in the poorest families.

The **place of residence** was one of the factors influencing the shift between the several types of disciplinary practices, where the region was significant in the shift from all the punishment categories to the "non-violent disciplining methods only" category. This means urban governorates, Lower Egypt and Upper Egypt are more likely to use violent disciplining practices compared to frontier governorates. Such result has been referred to by Horn et al., 2004, although it has concluded its results through an in-depth analysis of several studies that addressed the discipline methods adopted by Africa-Americans, who have their own nature that differs from that of the Egyptians. We can briefly say that the type of the place of residence impacts the population's culture, customs and traditions and acts as a factor in determining the forms of disciplinary practices used by parents.

The **level of crowdedness** was significant in shifting the classification of children from the category who have never been subject to punishment or who have been subject to non-violent disciplining methods combined with psychological and severe physical punishment to the category of children who have been subject to non-violent disciplining methods only. The higher the level of crowdedness, the more violent disciplines are practiced on children. Such result is in compliance with the World report on violence and health 2002, which asserted that the larger the family, the more opportunities of violence against children, in addition to Antai et al., 2016 which indicated that the greater number of children in the household, the greater probability of using violent disciplinary forms.

On the other hand, the variables of the **sex of the household head**, mother's working status and relation to the household head have an impact in the model, which is contrary to the results of some other studies like the World report on violence and health, 2002, which shows that the mothers practice violent disciplining methods more than the fathers, however the fathers are the more common perpetrators of severe violence. The report also shows that the violent disciplinary practices against children are most practiced by not working parents.

7. Recommendations

Violence against children is one of the most dangerous phenomena that impacts the child's life. Therefore, there is need to look for solutions to minimize the impact of this problem. Following are some of the actions that can help in addressing the issue:

- Providing psychological support to the families that use violent disciplinary practices against their children;
- Conducting deeper studies to address the disciplinary practices used by parents against their children according to the sex and age of the child;
- Raising the awareness of families about positive and constructive disciplinary practices that benefit their children.
 Parents need practical examples to help them positively manage their reactions to their children's behaviours, without using violent methods, particularly parents with low educational levels, older mothers and mothers with low economic level:
- Promoting legal frameworks to prevent and respond to violence against children;
- Encouraging media campaigns that raises awareness about the child's rights, strengthening the role of the
 committees on the rights of the child, and designing overlapping programmes to be initiated in the areas where
 the most serious variables occur and are in compliance with the high probabilities of the children's vulnerability to
 forms of violent punishment.

8. References

English References

- 1. Antai, D., Braithwaite, P., & Clerk, G. (2016). Social determinants of child abuse: evidence of factors associated with maternal abuse from the Egypt demographic and health survey. Journal of injury and violence research, 8(1), 25.
- 2. Barkin, S., Scheindlin, B., Ip, E. H., Richardson, I., & Finch, S. (2007). Determinants of parental discipline practices: a national sample from primary care practices. Clinical Pediatrics, 46(1), 64-69.
- 3. Butchart, A., & Mikton, C. (2014). Global status report on violence prevention, 2014.
- 4. Chang, M. (2007). Cultural differences in parenting styles and their effects on teens' self-esteem, perceived parental relationship satisfaction, and self-satisfaction.
- 5. Chatterjee, S., & Hadi, A. S. (2015). Regression analysis by example. John Wiley & Sons.
- 6. Committee on Psychosocial Aspects of Child and Family Health. (1998). Guidance for effective discipline. Pediatrics, 101(4), 723-728.
- 7. De Zoysa, P. (2011). A study on parental disciplinary practices and an awareness program to reduce corporal punishment and other forms of negative parental practices. Retrieved October, 3, 2012.
- 8. Ellsberg, M., Arango, D. J., Morton, M., Gennari, F., Kiplesund, S., Contreras, M., & Watts, C. (2015). Prevention of violence against women and girls: what does the evidence say?. The Lancet, 385(9977), 1555-1566.
- 9. Fry, D., & Blight, S. (2016). How prevention of violence in childhood builds healthier economies and smarter children in the Asia and Pacific region. BMJ global health, 1(Suppl 2), i3-i11.
- 10. Fulu, E., Miedema, S., Roselli, T., McCook, S., Chan, K. L., Haardörfer, R., & Huque, H. (2017). Pathways between childhood trauma, intimate partner violence, and harsh parenting: findings from the UN Multi-country Study on Men and Violence in Asia and the Pacific. The Lancet Global Health, 5(5), e512-e522.
- 11. Halpenny, A. M., Nixon, E., & Watson, D. (2010). Parenting Styles and Discipline: Parents' and Children's Perspectives. Stationery Office.
- 12. Horn, I. B., Joseph, J. G., & Cheng, T. L. (2004). Nonabusive physical punishment and child behavior among African-American children: a systematic review. Journal of the National Medical Association, 96(9), 1162.
- 13. Howard, B. J. (1996). Advising parents on discipline: what works. Pediatrics, 98(4), 809-815.
- 14. Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). The world report on violence and health. The lancet, 360(9339), 1083-1088.
- 15. McCord, J. (1996). Unintended consequences of punishment. Pediatrics, 98(4), 832-834.
- 16. McKee, L., Roland, E., Coffelt, N., Olson, A. L., Forehand, R., Massari, C.,... & Zens, M. S. (2007). Harsh discipline and child problem behaviors: The roles of positive parenting and gender. Journal of Family Violence, 22(4), 187-196.
- 17. Menard, S. (2002). Applied logistic regression analysis (Vol. 106). Sage.
- 18. Ministry of Health and Population [Egypt], El-Zanaty and Associates [Egypt], and ICF International. (2015). Egypt Demographic and Health Survey 2014. Cairo, Egypt and Rockville, Maryland, USA: Ministry of Health and Population and ICF International.
- 19. Regalado, M., Sareen, H., Inkelas, M., Wissow, L. S., & Halfon, N. (2004). Parents' discipline of young children: Results from the National Survey of Early Childhood Health. Pediatrics, 113(Supplement 5), 1952-1958.
- 20. UNICEF. (2010). Child disciplinary practices at home: Evidence from a range of low-and middle-income countries. New York: UNICEF.
- 21. UNICEF. (2014). Hidden in plain sight: a statistical analysis of violence against children. New York: United Nations Children's Fund,
- 22. World Health Organization. (1996). Violence: a public health priority. WHO global consultation on violence and health. Geneva: World Health Organization.
- 23. World Health Organization. (2002). World report on violence and health.

Arabic References

- 1. Abdel Hafeez Maaousha and Saad El-Deen Boutabal, 2017. "Psychological pressures and psychosomatic disorders and how to address them".
- 2. National Council for Childhood and Motherhood and UNICEF, Violence against Children in Egypt, 2015. "A Quantitative Survey and Qualitative Study in Cairo, Alexandria and Assiut", Cairo.
- 3. Supreme Council for Family Affairs, 2013. "Abuse and Violence against Children", Qatar.
- 4. Hayat, Abdel Aziz, 2011. "Degree of practicing domestic violence against children and its relation to some demographic variables: a study in the light of the principles of Islamic education", Umm Al-Qura University, College of Education, Department of Islamic Education and Comparative Studies.
- 5. Moeen Hassan Ahmed Gasser, 2011. "A study on the demographic structure and housing characteristics, Chapter 2: housing characteristics", pages 62-78, The Islamic University Gaza.
- 6. Khalil, Elian, 2007. "Violence against Children in Jordan", UNICEF.
- 7. United Nations, General Assembly, 2006. "Report of the Independent Expert for the United Nations Study on Violence against Children".
- 8. United Nations, General Assembly, 1989. "Convention on the Rights of the Child".

Websites

http://sdsegypt2030.com, last visited on 30 August 2018.

"Statistics in Focus" is a series issued by CAPMAS and UNICEF Egypt.

This research paper has been prepared by Ms. Hagar Ali³, Ms. Walaa Ibrahim⁴ from CAPMAS, under the supervision of Dr Noura Anwar⁵ and Dr Abdel Hameed El-Shabrawy⁶ - UNICEF Consultants.

The English version of the paper is reviewed by Ms. Manar Soliman⁷ and Mr Shantanu Gupta⁸ - UNICEF.

The views expressed in this paper are those of the authors and do not necessarily reflect the views or policies of CAPMAS or UNICEF. However, readers are encouraged to refer to, analyse, and extract figures from "Statistics in Focus", provided that both entities shall be mentioned and recognized as the source.

Reference: CAPMAS and UNICEF Egypt – 2018 – Determinants of Violent Disciplinary Practices for Children in Egypt – Cairo 2018.

- ³ Statistics specialist, General Department for Samples, Evidence and Classifications, Population Statistics and Censuses Sector
- ⁴ Statistics specialist, General Department for Fertility and Population Estimates, Population Statistics and Censuses Sector
- ⁵ Lecturer, Institute of Statistical Studies and Research, Cairo University
- ⁶ Assistant Lecturer, Institute of Statistical Studies and Research, Cairo University
- ⁷ Knowledge Management and Statistics Officer, UNICEF
- 8 Monitoring and Evaluation Specialist, UNICEF

CAPMAS Office

Tel: (+20 2 24023031) Mail Box: 2086

E-Mail: pres_capmas@capmas.gov.eg Link: http://www.capmas.gov.eg/

United Nations Children's Fund (UNICEF)

UNICEF Office in Egypt
Intersection of Rd. 87 & 14, in front of "Lycee El-Horeya School",
Maadi, Cairo, Egypt
Email: infoegy@unicef.org
www.unicef.org/egypt/



