The Role of Parenting Styles in Aggressive Behavior Among Preschoolers Children at Zagazig City

Doaa Kadry (1), Salwa Abbas Ali (2), Amany Sobhy Sorour (3)

(1) Demonstrator of Community Health Nursing, Faculty of Nursing, Zagazig University (2 & 3) Professor of Community Health Nursing, Faculty of Nursing, Zagazig University

Abstract

Background: Parenting is one of life's most difficult role which influences children behavior. Through effective discipline children learn self-discipline and exhibit lower levels of children's aggressive behavior. Aim of the study was to explore the role of parenting styles in aggressive behavior among preschoolers children. Subjects & Methods: Research design: A cross-sectional descriptive design was used to achieve the aim of the current study. Setting: The study was conducted at two nursery schools from each educational zone available at Zagazig City Subjects: A purposive sample of 661 parents and their preschoolers' children who fulfilled the study inclusion criteria. Tools of data collection: One tool was used in the present study which composed of three parts, the first was a socio-demographic questionnaire, the second was The Parenting Practices Questionnaire (PPQ) and the third was Aggressive Behavior Scale. Results: revealed that the most commonly used parenting style in the studied sample was authoritative parenting style presented (90.91%) among mothers and (87.62%) among fathers. Preschooler children exhibited moderate aggressive behavior (45.08%) which appeared to increase in children whose parents were authoritarian or permissive and decrease in children whose parents were authoritative. Conclusion: Authoritarian and permissive parenting styles were positive predictors for aggressive behavior of preschooler children. Recommendations: Health education programs especially for young age parents about appropriate parenting styles and educate them about how to manage aggressive behavior of their children.

Key words: Parenting Styles, Aggressive, Behavior, Preschooler Children

Introduction

The preschool years are a critical period for the development of socialization. One of the tasks of preschoolers is learning socially acceptable behavior and the ability to control aggression and redirect their anger.

Parenting styles and practices are closely related to children's behavior. Effective discipline skills have been shown to be crucial in protecting psychological well-being and predicting lower levels of children's aggressive behavior.

Childhood Aggression is a major public health problem worldwide especially in recent years. Additionally, childhood aggression leads to a significant risk for continued behavior problems and other social and emotional challenges throughout their life time. The problematic levels of aggression in adolescence can be identified in the preschool years and can be traced to events occurring early in life.

According to Social Learning Theory, changing coercive parenting behavior to more effective parenting strategies are associated with reduced likelihood of child aggression. Additionally, the ideal protection from aggression is stable family unit, characterized by strong bonds between children and parents and non-violent form of discipline.

Significance of the study

Parents play an integral role in their child's behavior. The responsiveness of parents to their children, and the manner in which parents deal with and teach their children are important determinants of children's behavior. Further, risk factors for aggression may include low parental involvement, poor supervision, low emotional attachment to the parent, and a harsh, lax, or
inconsistent form of discipline.\(^{(10)}\) Additionally, the first few years of life are formative and play vital role in shaping behavioral child outcomes.\(^{(11)}\) In Egypt, the prevalence of positive disciplinary practices adopted by parents of children aged 3-5 years are only 4.4\% and about 82.8\% of Egyptians using physical punishment.\(^{(12)}\)

**Aim of the study:**

The present study aimed to explore the role of parenting styles in aggressive behavior among preschooler children.

**Research Question**

What is the relation between parenting styles and preschool aggressive behavior?

**Subjects and methods:**

**Research design:**

A cross-sectional descriptive design was used.

**Study setting:**

The study was conducted at two nursery schools from each educational zone available in Zagazig City. From the first zone (West Administration) Sheba and Om-Elmomenien preschools, while from the second zone (East Administration) Abdel-Lateef Hassanein and Elmalek Nasef preschools.

**Study subjects:**

A Purposive sample of 661 parents and their preschooler children who fulfilled the following inclusion criteria:

- Age of children ranged from (3 to< 6) years.
- At least one parent accompanied with the child (mother or father).
- Both sexes
- Free from any physical or mental disabilities.

**Tools of data collection:**

A self-administered questionnaire sheet for data collection composed of the following parts:

**Part I: Socio-demographic data:**

- **Personal data:** such as child's age, gender, residence, birth order
- **Family data:** such as parents' age, educational level, occupation
- **Socio-economic data:** such as family size, family income, and mass media

**Part II: Parenting Practices Questionnaire (PPQ):**

The Parenting Practices Questionnaire developed by Robinson et al.\(^{(46)}\) and has 62 items to measure Baumrind's three parenting styles; authoritarian (20 items), authoritative (27 items), and permissive (15 items).

**Part III: Aggressive behavior scale:**

Aggressive Behavior Scale developed by Amayrah,\(^{(47)}\) and adopted by American Association Scale for Adoptive Behavior. Aggressive Behavior Scale is Behavior Scale is 27 items and measures the degree of aggressive behavior distributing on three domains; verbal aggression (4 items), physical aggression (16 items), and aggression toward property (7 items).

**Scoring system of Parenting Practices Questionnaire**

The PPQ used closed-ended questions and response scales on a continuum from "Always (5)" to "Never (0). Because the three parenting dimensions found in the PPQ have a differing number of items [i.e., authoritative subscale = 27 items with a potential range (0-135), authoritarian subscale = 20 items with a potential range (0-100), and permissive subscale = 15 items with a potential range (0-75)], each individual's total score for each subscale was summed and then divided by the number of items in the subscale. This average item value represented each parent’s
degree of parenting on that subscale The parenting style in which each parent had the highest average item value became the assigned typology of the parent. Thus, the same parent may have had high authoritative scores, moderate permissive scores, and low authoritarian scores depending upon that person’s self-reported parenting practices. (e.g., mother authoritative = 3.91, mother permissive = 2.03, mother authoritarian = 2.10, this mother would be classified as an authoritative parent).

**Scoring system of Aggressive Behavior Scale**

Response choices ranged from ‘never’ to ‘always’ on a 3-point Likert-type scale. For the scoring system of aggressive behavior scale depended on summing up the score of all scale items. The potential range for the scale items is (0-54). Aggressive behavior scale used The scale identified three main scores:

- Low aggressive behavior (0-18)
- Moderate aggressive behavior (19-36)
- High aggressive behavior (37-54)

**Content Validity & Reliability:**

The tools were tested for content validity by 3 experts in the field of community medicine, psychiatrists and statisticians who conducted face and content validity of all items. For Parenting Practices Questionnaire, authoritarian items have a Cronbach alpha of 0.992, permissive items have a Cronbach alpha of 0.993, and finally authoritative items have a Cronbach alpha of 0.991. The level of significance was at 0.01 for all items. For aggressive behavior scale, verbal aggression items have a Cronbach alpha of 0.982, physical aggression items have a Cronbach alpha of 0.993, and finally aggression toward property items have a Cronbach alpha of 0.983. The level of significance was at 0.01 for all items.

**Field work:**

After securing official permissions, the researcher visited the selected preschools, and met with the headmaster and the social worker. Then, the director assigned a social worker to help the researcher. The social worker sent a letter with the child to announce parents about the meeting with the researcher according to predetermined schedule. The letter described the purpose and nature of the study. Two days per week were scheduled to meet parents in preschools. The researcher met about 20-30 parents each time. The researcher started by introducing herself to parents and the data collection forms. Parents were reassured that information obtained is strictly confidential. Once parents' consents were secured orally, the researcher asked parents to fill in the questionnaire sheet under guidance of the researcher who stayed for any clarification. Time spent to fill the questionnaire sheet ranged from 30-45 minutes. The duration of data collection lasted 4 months started from beginning of February 2016 to the end of May 2016.

**Pilot study:**

Before performing the main study, a pilot study was carried out on 60 participants (10%) of the study subjects to test clarity of the tools, the format of the questionnaire, comprehension of the items, and to estimate the exact time required for filling the questionnaire sheet. No modification was recommended. The participants involved in the pilot study were excluded from the main study sample.

**Administrative and ethical considerations:**

The study protocol was approved by the pertinent committees at the Faculty of Nursing, Zagazig University. Agreement for participations was taken.
from participants after fully explanation of the aim of the study, as well as its procedures. They were given the opportunity to refuse the participation and they were notified that they could withdraw at any phase if they want without giving any reasons. As well they assured that all information of the data collection interviews; also they will be assured that the information would remain confidential and would be used for the research purpose only.

**Statistical analysis:**

Data entry and statistical analysis were done using the statistical package for Social Science (SPSS), version 16.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for quantitative data. Pearson Correlation analysis was used for assessment of the interrelationships among quantitative variables. In order to identify the independent predictors of aggressive behavior among children, simple linear regression analysis was used. Statistical significance was considered at p – value < 0.05.

**Results:**

Table (1): shows that the mean age of the studied sample was 4.62 ± 0.87 years, and more than half (52%) of the studied sample were males. Additionally, more than two fifths (42%) of the studied sample ranked to the first birth order. Furthermore, approximately two thirds (59.30%) of the studied sample were from urban origin.

Table (2): illustrates that both mothers and fathers reported greater tendencies toward authoritative parenting (90.91%, and 87.62%) respectively, while the lowest parenting style was permissive (4.76%) among fathers, and (2.44%) among mothers.

Table (3): I indicates that more than two fifths (45.08%) of the studied children had moderate aggressive behavior.

Table (4): Reveals that the highest tendency of children's aggressive behavior was verbal aggression (51%) followed by physical aggression (31%) and the least one was aggression against properties (18%).

Table (5): Indicates that statistically significant positive correlations were found between child age, gender, birth order and children's aggressive behavior P < 0.05.

Table (6): Reveals that authoritarian mother and mother permissiveness were positive predictors of children's aggressive behavior. The regression model for authoritarian mother explains 31% of the variation in children's aggressive behavior as indicated by r- square value. The regression model for mother permissiveness explains 28% of the variation in children's aggressive behavior as indicated by r- square value.

Table (7): Indicates that both father permissiveness and authoritarian father were positive predictors of children's aggressive behavior. The regression model for father permissiveness explains 25% of the variation in children's aggressive behavior as indicated by r- square value. The regression model for authoritarian father explains 21% of the variation in children's aggressive behavior as indicated by r- square value.

**Discussion:**

The quality of parenting a child receives is considered the strongest potentially modifiable risk factor that contributes to behavioral problems in early childhood Ministry of Health Promotion (13). Decades of research have suggested that parenting
behaviors and practices associated with parenting styles are related to child outcomes of externalizing behavior problems Jewell, (14). More recently researchers have made exceptions to the conclusion that parenting style and practices are closely related to children's behavior. Hockenberry, (1)

The findings of the present study revealed that the authoritative parenting style is the most practiced parenting style by parents. This might be attributed to their high level of education. This result was in agreement with Li et al. (15) found that authoritative parenting style is being viewed as optimal parenting among Caucasians. In the same line, a study conducted in China by Cheung &MCBríde-Chang (16) found that authoritative parenting style is the most common parenting style among Euro-American families.

On the contrary, Net Industries (17) conducted a study in U.S.A and found that authoritarian parenting is more prevalent in African-American and Asian American parents in United States. This might be attributed to the differences in ethnic, cultures or beliefs within these multicultural societies.

Nevertheless, permissiveness is the least common parenting style among the studied sample of the current study. This relatively small group of permissive parents might be unaware about the importance of setting some limits and standards for their children's conduct or might prefer to spoil their child. This result was contradicted with Garcia &Gracia (18) who found that the permissive parenting style is the optimum style in Spain. This might be attributed to the availability of the laws in such societies which give child the right to report about parental harshness or punishment.

The current study revealed that more than two fifths of the studied children had moderate aggressive behavior. This might be related to the fact that preschool children characterized by intense activity, egocentrism, and they are concerned with satisfying their own needs and less frequently the needs of others.

In accordance with this, Amin et al. (5) in Al-Asher 10th of Ramadan City implemented a study for preschool age children in Bader nursery school and revealed that more than two thirds of children occasionally suffering from aggression.

Conversely, Bendersky et al. (19) indicated that one third of African American children identified as higher in aggression by both mothers and teachers. Similarly, a survey conducted in Ontario revealed that one fifth of children entering kindergarten had high problems with aggression. (20)

Additionally, similar results were found by Cote et al. (21) in Canada. This might be attributed to harsh over-controlling parenting or lack of parental warmth and positive encouragement during the preschool years.

Concerning types of aggressive behavior exhibited among children, the results of the present study showed that slightly more than half of the studied children demonstrated verbal aggression, followed by one third of them demonstrated physical aggression. This might be due to reflection of parent's behavior on child behavior. These results were consistent with results from a study conducted in China found that more than two thirds of children reported being verbally bullied compared with one third reported being physically bullied. (22)

Concerning the answering of research question, the current study demonstrated that there was statistically significant negative correlation between authoritative parenting styles and child's aggressive behavior. This might be related to the
reflection of authoritative parenting style's positive characteristics on child behavior. This was supported by Esfandyari et al. (23) in Europe found a significant relationship between positive family relationship and the decrease of externalizing behavior problems, such as social aggression. Similarly, a study in United Kingdom found that children with authoritative parents were less involved in fights. (24)

In agreement with this, Baumrind et al. (25) reported that children from authoritative homes are better adjusted than children from authoritarian homes. Additionally, appropriate responsiveness that is characteristic of the authoritative style of parenting is positively associated with effortful control in the preschool years (26) and to the development of self-regulation in early childhood. (27)

On the other hand, findings of Asian families in United States and Hong Kong investigated that authoritative parenting did not bring beneficial outcomes for Asian children. (28) This might be related to ethnicity differences.

Regarding correlation between authoritarian parenting style and child's aggressive behavior, the current study revealed that authoritarian parenting style considered as a positive predictor for child's aggressive behavior. This might be attributed to harsh disciplinary technique which reflected on child behavior. This result was corresponded to a study in Boston found that reduction of harsh parenting reduced aggression in children. (29) Similarly, an experimental intervention study conducted in China showed that reduction of harsh parenting predicted lower rates of aggression. (30) As well, a study in Canada suggested that hostile ineffective parenting had an effect on the appearance of aggression in children. (31) Additionally, Park et al. (32) in Wisconsin reported that harsh over-controlling parenting or lack of parental warmth during the preschool years has been linked with relational aggression. Furthermore, similar results were found among European American parents (33), and in U.S.A. (34)

On the contrary, Asian Americans more benefited in their adjustment from authoritarian than authoritative parenting. (35) Additionally, a study conducted among Indian parents who endorsed authoritarian parenting and yet, they did not feel negatively about their children behavior. (36) This might be attributed to culture discrepancies.

Concerning correlation between permissive parenting style and child's aggressive behavior, the current study showed that permissive parenting style considered as a positive predictor for child's aggressive behavior. This might be due to the fact that permissive parents are excessively lax, set very few rules and exert little or no control over their children's actions. Congruently, a study conducted in America found that permissive parenting was believed to be positively related to children's aggression. (37) Similarly, a study in U.S.A found that permissive parenting style was associated with higher rates of aggression in children. (38)

Regarding factors positively effect on child aggressive behavior, the results of the present study demonstrated that the preschool children aged more than 4 years suffering from aggression than those aged less than 4 years. This might be related to their strong body building and violent media. In accordance with this, Amin et al. (39) showed that the preschool age children >5 years suffering from aggression than those aged less <5 years. On the same line, Vaillancourt et al. (39) in Canada found that girl's use of aggression increased with age.

On the contrary, a study conducted among Korean fourth graders followed over four years and found that aggressive behavior tend to decrease...
as children grow older and develop better cognitive and verbal problem-solving skills. This might be due to the wide age categories compared to the relatively narrow age range in the current study sample.

As regards children's aggression in relation to their gender, results of present study revealed that boys had aggressive behavior than girls. This might be due to the societal norms, which may be more accepting of such behavior from boys compared with girls.

This result was corresponded to the results of a study conducted by Amin et al. found that preschool boys had aggressive behavior than preschool girls. As well, Kamel et al. in Zagazig City, Egypt reported that aggression among primary school male children were higher than aggression among female children. Additionally, a study conducted in Saudi Arabia and found boys more aggressive than girls. Furthermore, similar studies were found by Dutt et al. in a rural area of West Bengal. Conversely, a study in Swaziland, in southern Africa, reported that bullying by girls occurred as frequently as boys. This might be attributed to differences in cultures, environmental conditions and methods of child rearing practices.

Considering the relationship between birth order and children's aggression, results of the current study showed that first birth children suffering from aggression than those of second and more rank. This may be due to receiving lower level of care or that children learn to be aggressive from all around them including parents, teachers and peers. The same was reported in Florida revealed that first born children were most likely to exhibit more aggression than third or later born children.

Conclusion:

The study concluded that authoritarian and permissive parenting styles were positive predictors for aggressive behavior of preschooler children. More than half of the studied preschooler children were boys. More than two fifths of the studied preschooler children exhibited moderate aggressive behavior and the most common type of aggression was verbal followed by physical, and lastly aggression against properties. Additionally, Aggressive behavior of preschooler children appeared to increase in children aged more than 4 years or being boys.

Recommendations:

• Health education programs are recommended especially for young age parents about the appropriate parenting styles and disciplinary strategies.
• Nursing intervention should be directed for mothers about how to manage aggressive behavior of their children.
• Further researches are recommended to study others risk factors for aggression.
Table (1): Personal characteristics of the studied children (n = 661)

<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-</td>
<td>115</td>
<td>17</td>
</tr>
<tr>
<td>4-</td>
<td>261</td>
<td>40</td>
</tr>
<tr>
<td>5 &lt; 6</td>
<td>285</td>
<td>43</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td>3.00 – 6.00</td>
</tr>
<tr>
<td>Mean±SD</td>
<td></td>
<td>4.62 ± 0.87</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>344</td>
<td>52</td>
</tr>
<tr>
<td>Female</td>
<td>317</td>
<td>48</td>
</tr>
<tr>
<td>Birth Order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The first</td>
<td>280</td>
<td>42</td>
</tr>
<tr>
<td>The middle</td>
<td>159</td>
<td>24</td>
</tr>
<tr>
<td>The last</td>
<td>222</td>
<td>34</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>392</td>
<td>59.30</td>
</tr>
<tr>
<td>Rural</td>
<td>269</td>
<td>40.70</td>
</tr>
</tbody>
</table>

Table (2): Description of Parenting Styles among studied parents (n of mother = 451) & (n of father = 210)

<table>
<thead>
<tr>
<th>parenting styles</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother Authoritativeness</td>
<td>410</td>
<td>90.91</td>
</tr>
<tr>
<td>Father Authoritativeness</td>
<td>184</td>
<td>87.62</td>
</tr>
<tr>
<td>Mother Authoritarian</td>
<td>30</td>
<td>6.65</td>
</tr>
<tr>
<td>Father Authoritarian</td>
<td>16</td>
<td>7.62</td>
</tr>
<tr>
<td>Mother permissiveness</td>
<td>11</td>
<td>2.44</td>
</tr>
<tr>
<td>Father permissiveness</td>
<td>10</td>
<td>4.76</td>
</tr>
</tbody>
</table>
Table (3): Description of the studied children according to their level of aggressive behavior (n=661)

<table>
<thead>
<tr>
<th>Levels of children's aggressive behavior</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>28</td>
<td>4.24</td>
</tr>
<tr>
<td>Moderate</td>
<td>298</td>
<td>45.08</td>
</tr>
<tr>
<td>Low</td>
<td>335</td>
<td>50.68</td>
</tr>
</tbody>
</table>

Table (4): Description of the studied children by their types of aggressive Behavior (n=661)

<table>
<thead>
<tr>
<th>Types of children’s aggressive behavior</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>205</td>
<td>31</td>
</tr>
<tr>
<td>Verbal</td>
<td>338</td>
<td>51</td>
</tr>
<tr>
<td>Against properties</td>
<td>118</td>
<td>18</td>
</tr>
</tbody>
</table>

Table (5): Correlation between personal characteristics of children and aggressive behavior (n=661)

<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>Total aggressive behavior</th>
<th>Person correlation</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>Person correlation</td>
<td>p-value</td>
</tr>
<tr>
<td>3-</td>
<td></td>
<td>0.063</td>
<td>0.104</td>
</tr>
<tr>
<td>4-</td>
<td></td>
<td>0.164</td>
<td>0.001</td>
</tr>
<tr>
<td>5&lt;6</td>
<td></td>
<td>0.147</td>
<td>0.032</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>0.111</td>
<td>0.004</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>0.069</td>
<td>0.075</td>
</tr>
<tr>
<td>Birth Order</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The first</td>
<td></td>
<td>0.205</td>
<td>0.001</td>
</tr>
<tr>
<td>The middle</td>
<td></td>
<td>0.177</td>
<td>0.221</td>
</tr>
<tr>
<td>The last</td>
<td></td>
<td>0.202</td>
<td>0.401</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td>-0.013</td>
<td>0.738</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td>-0.004</td>
<td>0.913</td>
</tr>
</tbody>
</table>

Statistically significant at P<0.05
Table (6): Best fitting linear regression model for mother's parenting styles on children's aggressive behavior

<table>
<thead>
<tr>
<th>Parenting Styles</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B0</td>
<td>B1</td>
<td>STD Error</td>
</tr>
<tr>
<td>Mother permissiveness</td>
<td>25.95</td>
<td>0.31</td>
<td>0.05</td>
</tr>
<tr>
<td>Mother authoritativeness</td>
<td>48.71</td>
<td>-0.11</td>
<td>0.02</td>
</tr>
<tr>
<td>Mother authoritarian</td>
<td>23.08</td>
<td>0.24</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Table (7): Best fitting linear regression model for father's parenting styles on children's aggressive behavior:

Statistically significant at P<0.05

<table>
<thead>
<tr>
<th>Parenting Styles</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B0</td>
<td>B1</td>
<td>STD Error</td>
</tr>
<tr>
<td>Father permissiveness</td>
<td>26.96</td>
<td>0.26</td>
<td>0.07</td>
</tr>
<tr>
<td>Father authoritativeness</td>
<td>53.68</td>
<td>-0.18</td>
<td>0.03</td>
</tr>
<tr>
<td>Father Authoritarian</td>
<td>28.07</td>
<td>0.15</td>
<td>0.05</td>
</tr>
</tbody>
</table>

References:
42. Zaide, Z.F.: Gender Differences In Human Brain. The Open Anatomy Journal. 2010; 2(1): 37-55, Department of Anatomy, Faculty of Medicine, King Saud University, Riyadh, Saudi Arabia.