Abstract

The research aimed to improve parents’ communication language while talking to 3-6 years old children about sexual development. The research was carried out using the experimental model, one of the quantitative research methods. It was a quasi-experimental study with pretest, posttest, and control groups. Seventy-six parents voluntarily participated in the study, thirty-eight were in the experimental group, and thirty-eight were in the control group. A personal information form and a Sexual Communication Scale for Parents were used as data collection tools. The Online Child Sexual Education and Communication Program were applied to improve the communication language of the parents in the experimental group. The study results showed that the communication language used by the parents while talking to children about sexual development improved after the program. There was a significant difference between the parents' communication language pretest and posttest scores in the experimental group. However, no significant difference was found between the communication language pretest and posttest scores of the parents in the control group. There was a significant difference in pretest and posttest scores of the experimental group parents' communication language for sexual education.

Introduction

Many parents assume that the preschool period is too early for providing children with information about sexual development. They believe the issues surrounding sexual development should be taught during adolescence. However, children can recognize the gender differences between 2-3 years old (Martin & Torres, 2014), and initial sexual identity characteristics appear at the age of 3-7. During this period, children are likely to have an intense curiosity about the world around them, just like the aroused interest in their bodies. Similarly, they begin to ask the initial questions about sexuality during this time: "How was I born?", "Why don't I have a penis?" "Is the girls' penis broken off?" (Stone, Ingham, & Gibbins, 2013). It is crucial to satisfy children's curiosity.
by establishing appropriate communication and giving appropriate responses and information to their questions. Criticism of children due to such curious questions may lead them to feel guilty. Therefore, parents should be supported on how to talk with their children about sexual topics. (Bayrak, Başgül, & Gündüz, 2011).

In addition to supporting children's other developmental areas, sexual education involves the information and awareness-raising activities provided to children to follow their sexual development, support them to accept the gender roles, and inform about the characteristics of their gender and the opposite gender (Stoppard, 2016). Sexual education is a long process that begins with birth and includes adolescence. Sexual education should be given to children primarily by their parents, which prevents children from searching other sources to satisfy their curiosity (Byers, Sears, & Weaver, 2008; Stoppard, 2016).

Sexual education in the preschool period is one of the main concerns parents worldwide face (Truax & Carkhuff, 2007; Sharifi et al., 2016). Since sexual issues and problems are prevalent among adolescents, the necessary concern about sexual development is not shown to preschool children. However, today it is well-known that sexual maturation does not occur suddenly during puberty. Sexual maturation begins with birth and is necessary to support the sexual development of the individual (Pınar et al., 2009).

As the primary sources of education, parents and other family members affect children's sexual self-awareness and (male or female) gender roles (Jackson, 2014; Ganji et al., 2017). Parents play an essential role in the sexual development of children (Martin & Torres, 2014). In Turkish culture, sexual issues in the family and education system are delayed until adolescence and adulthood due to certain beliefs such as "humility, privacy, and shyness" (Sharifi et al., 2016). Parents' knowledge, attitudes, and beliefs -especially mothers- about sexual development are critical because family is considered the beginning of life, and children spend most of their time with their families. Several studies stressed the important roles of mothers in sexual education, but they also revealed that mothers still felt inadequate in providing sexual education (Goldman, 2011).

Addressing the sexual development needs of children, as in other developmental areas, shows the importance of sexual education. Sexual education is based on providing age-appropriate information to children, and it is of great importance. However, there is no systematic sexual education program or intervention in the Turkish education system. Studies prove that many factors prevent parents from talking to their children about sexual development (Abedini, Tabibi, Ziaee, & Kheibari, 2016). These factors include parents’ lack of interest, reluctance, ignorance, embarrassment, or business to talk about sexual development, assuming their child is too young or unready for such a conversation, and concerns about stimulating their sexual curiosity (Vanderberg et al., 2016). Parents' attitudes and prejudices about providing age-appropriate sexual education also affect the quality of conversation with their children (Stone, Ingham, & Gibbins, 2013). Studies have shown that Latino and Asian mothers rarely talk to their children about sexual matters (Meneses et al., 2006).

Studies show that parents drive forces in supporting preschoolers’ sexual development (Stone, Ingham, & Gibbins 2013). They primarily teach their preschool children body parts and the difference between good touch and bad touch to prevent sexual abuse (Martin et al., 2011). Therefore, parents should have healthy communication with their children to protect them from possible harmful situations. Martin and Luke (2010) argue that mothers talk more to their daughters than to their sons about such issues; that is, there are gender differences in the sexual education provided by parents.

Parents who have healthy communication with their children and provide a suitable sexual education contribute to other related issues surrounding sexual development, such as protection from sexual abuse (Stoppard, 2016). Thus, age-appropriate sexual education help children become sexually healthy adults (Izugbara, 2008). However, since sex is taboo in Turkey, parents feel uncomfortable talking to their children about sex. They generally hope that children would somehow learn from school, books, media, or friends (Coffelt, 2010). Parents experience anxiety about talking about sex, and the information that children learn from their peers or the media may
be wrong, exaggerated, confusing, or frightening. When parents avoid talking to their children and answering their questions about sex, they convey particular messages: "I do not want to talk about this matter; it is wrong to ask such questions; you should not come to me with such questions, comments, and concerns." In this sense, it is crucial to raise parents’ awareness and support them to use appropriate language while talking to their children about sexual education. Thus, the study aimed to improve parents’ communication language while talking to their 3–6-year-old children about sexual development. In the study, answers to the following questions were sought:

1. Is there a significant difference between the communication language pretest and posttest scores of the parents in the experimental group after the online sexual education and communication program?

2. Is there a significant difference between the communication language pretest and posttest scores of the parents in the control group after the online sexual education and communication program?

3. Is there a significant difference between the communication language pretest and posttest scores of the parents in the experimental and control groups after the online sexual education and communication program?

1. Method
1.1. Research Model
It was a quasi-experimental study, one of the quantitative research methods, including pretest, posttest, and control group (Metin, 2014).

1.2. Participants
The study was carried out in the province of Ankara. The participants were selected using the criterion sampling method, one of the purposive sampling methods. The participation criteria were: having a child between 3-6 years old, not having any communication disability, following the informational activities, and using the Zoom program. The parents who did not fill the data collection tool or follow the informational activities and who wanted to withdraw from the study were not included in the sample. There were 76 volunteer parents, 38 of whom were in the experimental group and 38 in the control group. Voluntary consent was obtained from the parents. Permission was also asked to record the informational activities. Demographic information of the parents in the experimental and control groups is shown in Table 1 below.

<table>
<thead>
<tr>
<th>Table 1. Parents’ Demographic Characteristics</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Gender</td>
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<td></td>
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<tr>
<td>Gender (Child)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Age (Child)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Education Status</td>
</tr>
<tr>
<td>(Parent)</td>
</tr>
</tbody>
</table>

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Twenty of the parents in the experimental group were female, and eighteen were male. Twelve parents had one child, nineteen had two, six had three, and one had four. Twenty-four parents had daughters, and fourteen had sons. Eleven of the children were three, seven were four, ten were five, and ten were six years old. Five of the parents were primary school graduates, five were high school graduates, 17 were university graduates, and eight were master’s/doctoral graduates. Thirty-two parents were employed, and six mothers were unemployed.

There were 23 female and 15 male parents in the control group, 18 of whom had one child, 12 had two, three had three, and four had four children. Twenty-five had a daughter, and 13 had a son. Ten children were three, ten were four, 11 were five, and seven were six years old. Four parents were high school graduates, 28 were university graduates, and six were master’s/doctoral graduates. Thirty-six parents were employed, and two mothers were unemployed.

1.3. Data Collection Tools

A personal information form and the Sexual Communication Scale for Parents were the data collection tools.

**Personal Information Form:** The researchers prepared the form to collect data about participant parents’ gender, number of children, children's age, employment status, and educational status.

**Sexual Communication Scale for Parents:** The scale was developed by Artan, Ceylan, and Kurnaz Adıbatmaz (2020). It was a 4-point Likert type scale [i.e., Totally Disagree (1), Partially Disagree (2), Partially Agree (3), Totally Agree (4)] involving 23 items and four sub-dimensions: content, body language, managing the process, and anxiety. High scores in the sub-dimension indicated the appropriateness of the communication language. The internal consistency coefficient of the sub-dimensions ranged between .70 and .80, and there were moderate relations between the sub-dimensions.

1.4. Data Collection Process

The study data were collected in April. Pretests were administered to the experimental and control groups on 1-9 April 2021. Informational activities were completed with the experimental group on Zoom between 12-23 April. The posttests were administered to the experimental and control groups between 26-30 April 2021.

1.5. Study Procedures

**The Online Child Sexual Education and Communication Program**

Parents in the experimental group received online training on Zoom between 18:00 and 20:00 on 12-23 April. They were informed in detail about the related topics that were explained with examples. An online link was sent to all participants before the education, including informational activities. The education content and program are presented in Table 2.

<table>
<thead>
<tr>
<th>Session</th>
<th>Control Group</th>
<th>Goal</th>
<th>Experimental Group</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>No intervention</td>
<td>- Increasing parents’ knowledge and awareness of the sexual development of their 3-6-year-old children.</td>
<td>-Introduction</td>
<td>-Explaining the study goal</td>
</tr>
<tr>
<td>“Sexual Development in Children”</td>
<td></td>
<td></td>
<td>-Learning about expectations</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Online Education Program
The sexual development: examining communication between parents and their children. The Journal of International Scientific Researches, 7(Ek), 56-65.

Session 2
“Questions About Sexuality”
No intervention
- Increasing parents’ knowledge and awareness of the questions their children ask.
- Assisting parents on how to give appropriate answers to children.

Session 3
“Privacy Education”
No intervention
- Increasing parents’ knowledge and awareness of privacy education.
- Providing information on how to inform their children about privacy.

Session 4
“Sexual Abuse”
No intervention
- Increasing parents’ knowledge and awareness of sexual abuse.
- Informing parents on how to prevent sexual abuse.
- Giving information on how children can be protected from sexual abuse.
- Giving information on how to respond to a child who is a sexual abuse victim and the procedures to be followed.

Session 5
“Communication with the Child”
No intervention
- Increasing parents’ knowledge and awareness on how to improve the quality of communication with a child.
- Assisting parents to communicate appropriately with child.

1.6. Data Analysis
Shapiro Wilk Normality Test was performed for all sub-dimensions of the scale, and it was found that the data had a normal distribution. Therefore, the pretest and posttest scores of the experimental and control groups were analyzed using the paired samples t-test for dependent groups. Besides, independent groups t-test (Student’s t-test) was performed to analyze the experimental and control groups test results.

1.7. Ethical Approval for Research
The research was approved by the Health Sciences University Hamidiye Scientific Research Ethics Committee (Date: 06.11.2020, No: 20/424). All ethical rules were followed during the research.

2. Results
The findings regarding the scale scores of all the parents before and after the online sexual education and communication program are presented in Table 3.

Table 3. Independent Groups T-test Results of the Experimental and Control Groups

<table>
<thead>
<tr>
<th>Content</th>
<th>Groups</th>
<th>n</th>
<th>X̄</th>
<th>Sd</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Experimental</td>
<td>38</td>
<td>2.63</td>
<td>1.36</td>
<td>.614</td>
<td>37</td>
<td>0.513</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>38</td>
<td>2.72</td>
<td>1.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Experimental</td>
<td>38</td>
<td>2.98</td>
<td>1.07</td>
<td>.159</td>
<td>37</td>
<td>0.471</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>38</td>
<td>2.93</td>
<td>1.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4. Dependent Groups T-test Results of the Experimental Group

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>( \bar{X} )</th>
<th>Sd</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>38</td>
<td>2.63</td>
<td>1.36</td>
<td>-3.194</td>
<td>37</td>
<td>0.003</td>
</tr>
<tr>
<td>Posttest</td>
<td>38</td>
<td>2.98</td>
<td>1.07</td>
<td>-1.901</td>
<td>36</td>
<td>0.064</td>
</tr>
<tr>
<td>Body language</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>38</td>
<td>2.40</td>
<td>1.28</td>
<td>-2.069</td>
<td>37</td>
<td>0.045</td>
</tr>
<tr>
<td>Posttest</td>
<td>38</td>
<td>2.92</td>
<td>1.28</td>
<td>-1.07</td>
<td>37</td>
<td>0.293</td>
</tr>
<tr>
<td>Managing the process</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>38</td>
<td>2.40</td>
<td>1.30</td>
<td>-1.013</td>
<td>37</td>
<td>0.316</td>
</tr>
<tr>
<td>Posttest</td>
<td>38</td>
<td>2.99</td>
<td>1.30</td>
<td>-1.013</td>
<td>37</td>
<td>0.316</td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>38</td>
<td>1.52</td>
<td>0.73</td>
<td>0.175</td>
<td>37</td>
<td>0.863</td>
</tr>
<tr>
<td>Posttest</td>
<td>38</td>
<td>1.53</td>
<td>0.71</td>
<td>0.175</td>
<td>37</td>
<td>0.863</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>38</td>
<td>2.34</td>
<td>1.12</td>
<td>1.038</td>
<td>37</td>
<td>0.309</td>
</tr>
<tr>
<td>Posttest</td>
<td>38</td>
<td>2.79</td>
<td>0.93</td>
<td>1.038</td>
<td>37</td>
<td>0.309</td>
</tr>
</tbody>
</table>

There was a statistically significant difference between the pretest and the posttest scores of the parents in the experimental group. This statistically significant difference was also measured in the content and anxiety sub-dimensions. The difference in the mean scale score indicated that the online informational activities improved the communication language of the parents in the experimental group. The posttest scores in the content sub-dimension were also significant (\( \bar{X}=2.98 \)), which shows that parents developed awareness about sexual education. The posttest scores in the anxiety sub-dimension were also significant (\( \bar{X}=3.47 \)), which suggests that as parents developed awareness about sexual education, their anxiety levels increased. The pretest and posttest results of the parents in the control group are presented in Table 5.

Table 5. Dependent Groups T-test Results of the Control Group

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>( \bar{X} )</th>
<th>Sd</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>38</td>
<td>2.72</td>
<td>1.14</td>
<td>0.096</td>
<td>37</td>
<td>0.958</td>
</tr>
<tr>
<td>Posttest</td>
<td>38</td>
<td>2.93</td>
<td>1.05</td>
<td>0.096</td>
<td>37</td>
<td>0.958</td>
</tr>
</tbody>
</table>
As seen in the table above, there was no statistically significant difference between the pretest and posttest scores of the parents in the control group. It might stem from that the parents in the control group did not participate in any informational activities to improve the communication language they used while talking about sexual development.

3. Discussion

There is a general belief in Turkey that preschoolers do not know or should not know anything about sexuality. Many parents implicitly assume that preschoolers should have limited information about their bodies and physiological genders, such as "I am a girl" and "I am a man." Although parents strive to fulfill their responsibilities and support their children's health and development, they experience various challenges in teaching sexual development. It lies in the fact that sexual development and sexual education are still taboo in Turkey. Even the word "sexual" affects parents' attitudes and leads them to avoid sexual matters to protect their children's innocence. They also think that sexual matters should be discussed only during adolescence. Sharifi et al. (2016) explained it as follows: "Parents often avoid talking to their preschool children about sexual development as they think that sexual matters are widespread among teenagers." According to Oktavianingsih and Ayriza (2018), the negative attitudes towards sexual education are cultural patterns that reduce the interactions between parents and children and the effects of the informational programs and interventions.

When the studies on sexual communication and sexual education in the preschool period are reviewed, it is seen that parents think that sexual education is essential for children, but should be given mainly by teachers (Eli Küçük & Sönmez, 2011; İşler & Gürşümşek, 2018; Bacıoğlu & Tezel, 2020). Parents should learn about sexual development in order to inform their children accordingly. However, many studies have shown that parents' knowledge is insufficient (Martin & Torres, 2014). Pop and Rusu (2015) found that parents are willing to support their children's sexual development, but they generally need informational and motivational support about the limitations and appropriate communication methods. Although there was no significant difference in the pretest scores of the participant parents, a significant difference was found in the posttest results in favor of the experimental group. In this sense, we concluded that the online informational activities contributed to the parents’ communication quality and awareness of sexual education and sexual matters. Besides, it can be suggested that the online program effectively met parents’ needs due to the statistically significant difference in the content sub-dimension posttest scores of the parents in the experimental group. This result shows that parents have developed awareness about the content of sexual education. Besides, as can be seen in the literature, parents do not prefer to talk about sexuality with their preschool children and ignore or pretend not to hear their questions about sexuality (Lersson & Svedin, 2002; Meschke & Dettmer, 2012; Ceylan & Çetin, 2015). It was observed that the parents who answered their children's questions admitted that they felt inadequate, uncomfortable, and anxious while talking about sexual matters (Aronowitz & Agbesie, 2012; Meschke & Dettmer, 2012). The study results indicated that parents confused sexual development and sexuality with sexual intercourse (İşler & Gürşümşek, 2018). Therefore, parents should be supported with evidence-based sexual education programs that help them communicate with their children about sexuality. In this sense, the applied education program would meet parents' needs.

When the pretest and posttest results of the parents in the experimental group were evaluated, the posttest average score in the anxiety sub-dimension was significant, which could be interpreted
as the anxiety increased as parents raised awareness about the content of sexual education. Indeed, talking to children about sexual matters is not easy for many parents. Ganji et al. (2017) stressed that parents found it very uncomfortable and scary to talk to their children about sexual development. Artan, Ceylan, and Adıbatmaz (2020) similarly concluded that as the parents’ education level increased, the anxiety they felt while talking to children about sexual education also increased, which overlapped with the current study findings. Similar studies in the literature show that most parents are worried about giving wrong information, causing misunderstanding, and triggering sexual thoughts in children while talking to them about sexual development (Meschke & Dettmer, 2012; Wilson et al., 2010). It is vital to change parents’ negative perceptions and thoughts about sexual communication while helping them overcome the anxiety of talking to children about sexual matters. Parents’ positive attitudes towards talking about sexuality may reduce anxiety, improve the quality of communication, and make them feel safe and comfortable while talking about sexual matters. Weekes, Haas, and Gosselin (2013) indicated a relationship between parents' communication self-efficacy and the quality of the talk to their children. In addition, Dilorio, Pluhar, and Belcher (2003) revealed that mothers who felt comfortable and self-confident talked more frequently to their children about sexuality.

**Conclusion**

In brief, it was concluded that the communication language the participant parents used while talking to children about sexual development improved after the online informational activities. Such online activities made a significant difference between the communication language pretest and posttest scores of the parents in the experimental group. However, there was no significant difference between the communication language pretest and posttest scores of the parents in the control group. A significant difference was also determined in favor of the experimental group regarding pretest and posttest scores.

The study results proved that parents should be supported to learn about sexual development and sexual education. In this sense, structured education programs can positively affect parents' self-efficacy, security, and comfort. Family education programs can be organized to support parents. Children should be able to talk to and learn from their parents about sexual development issues. Thus, evidence-based sexual education programs can be prepared to reinforce parents’ communication skills and knowledge about healthy sexual development. Parents' self-efficacy enhances their sexual communication skills.

**References**


