The Effectiveness of a Counselling Program Based on Play in Reducing Sleep Disorders in Children of Sexual Abuse

Ola Al Hwayyan¹ & Fayez Mahamid²

Abstract
This study aimed to test the effectiveness of a counseling program based on play in reducing sleep disorders in children of sexual abuse. The participants were 3 male and 3 female children who were sexually abused and registered at Al Hussein Social Foundation of the Ministry of Social Development in Amman, Jordan. They participated in a play-based group counseling program for 15 sessions. The results indicated the effectiveness of the counseling programs in decreasing sleep disorder symptoms in these children. Based on the results, the study recommends using similar methods for other counseling patients who suffer from sleep disorders, such as traumatized children, juvenile delinquents, and children with chronic and intractable diseases, and constructing counseling programs to reduce sleep disorders based on other therapeutic approaches such as drama, narrative therapy and emotion-centered theory.

Key words: counseling program, play therapy, wake up and sleep disorders, children of sexual abuse.

Introduction
There is clear evidence that violence against children in different forms is a global issue with deep origins in cultural, economic and social practices and that the solution requires an understanding of its occurrence in various environments and due to various causes and the psychological and social consequences for children. Statistics indicate increasing incidence of various forms of abuse worldwide. Among about 3.188 million children reviewed by child protection offices in the United States after being subjected to violence in 2013, 79% suffered from bodily neglect and 9% of them experienced sexual violence, while around 1,520 died as a result of such violence. Overall, nine out of every 1,000 children have been subjected to a form of violence (Sporober et al., 2014).

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In Jordan, the number of child abuse cases handled by the Department of Family Protection in 2018 amounted to 1,778, distributed as follows: 523 cases of sexual abuse (319 females and 224 males); 1,255 cases of physical abuse (83 males and 1,174 females), and 30 cases of neglect (12 males and 18 females) (Department of Family Protection, 2017).

Sexual Abuse

The World Health Organization defines abuse as arbitrariness against or mistreatment of children; all forms of bodily and sexual abuse; neglect; emotional abuse; and negligent treatment or exploitation, commercial or otherwise, that may harm the child’s health, life, dignity, or growth in the context of a relationship of responsibility, trust and authority. Such experiences have a grave negative impact on the child and threaten his or her social, personal and emotional growth. They also increase the likelihood of the child developing mental health problems such as low self-esteem, anxiety, depression, learning difficulties, or sleep disorders, as well as antisocial behavior (Owtani, 2008).

Sexual abuse is sexual intercourse involving coercion, psychological or physical, or including at least one person who cannot consent to contact (e.g. a child). This abuse may take many forms, such as pedophilic activity (activity rooted in sexual desire towards children), rape or incest. This problem is one of the most common in society (Al Katarne, 2018). The rate of sexual abuse towards children varies according to the definitions of the concept of ‘child’, as ‘childhood’ may be said to end at any age from 12 to 19 years. There are also disagreements on what behaviors constitute sexual abuse. Some consider any kind of sexual interaction with a child to be tantamount to sexual abuse, even if it did not include physical contact, while others consider direct physical contact a prerequisite. Still others required to contact through saliva or genitals or believe that even consensual sexual contact occurring with a person under the legal age is sexual abuse (Hooley & Butcher, 2013).

Children who are sexually abused suffer a wide range of negative short- and long-term consequences, which may include anxiety, post-traumatic stress disorder, low self-esteem, inappropriate sexual behavior, or sleep disorders (Al-Harasis, 2012). Some studies indicate a relationship between the incidence of sexual abuse during childhood, mental disorders during puberty, symptoms associated with dyslexia, and personality disorders in general (Rashad &
Nashwa, 2015). Perhaps one of the most common disorders in these children is sleep disorders due to deep psychological (Migdadi & Yusuf, 2003).

Sleep Disorders

Sleep disorders are associated with a wide range of negative physiological and psychological effects. Physiological effects include a general decline in physical health, and psychological effects include poor mental health and poor overall performance. It has been found that sleep has a significant role in the human learning process, promoting a more ‘flexible’ brain by creating new neurotransmitters (An, Li, Shin & Yang, 2017).

Insomnia is one of the most common sleep disorders associated with sexual abuse in children. It causes persistent difficulty in falling and staying asleep despite adequate sleep conditions, which may lead to poor performance during the day. The prevalence of this disorder in children is 1% to 6%, and this percentage increases significantly in children with neurological growth disorders, autism, and children who are subjected to sexual abuse. This rise to a prevalence ranging from 25% to 50% for preschool children who have been subjected to sexual abuse (Hooly & Butcher, 2013).

It is also common for children of sexual abuse to suffer from disorders that occur in the sleep stage of rapid eye movement (REM sleep or deep sleep) and sleepwalking disorders. In sleepwalking, the child leaves the bed during the night and walks about without the slightest degree of awareness and no memory of the event afterwards, even after moving to another room. Usually, the child is able to move but may trip or bump into objects. Trying to wake a child in this state is very difficult and may confuse him or her (Cortese & Litvinenko, 2014).

Night terrors are one of the most serious disorders in children who have been sexually abused. They are episodes of intense fear, which begin with sudden crying or screaming, accompanied by increased activity of the autonomic nervous system. This disorder is most prevalent in pre-adolescent victims. Parents describe the child as not responding to calming behaviors, and there is a positive correlation between this disorder and high levels of anxiety, which may be suffered by children in general and, more specifically, children of sexual abuse (Cui, Fiska, Titus & Webb, 2018).

Many studies have provided evidence for the connection between sexual abuse and sleep disorders. Okada et al. (2017) aimed to examine such a connection in a study of 273 children in Japan ranging from four to 15 years old. The study used a questionnaire and interview to collect data. The results
of the study showed that more than 40% of the abused children suffered from various sleep problems, from insomnia to disturbing dreams and nightmares, with about 19% displaying symptoms of sleep disorders and psychological and behavioral disorders.

The research of Greenfield et al. (2011) aimed to examine the relationship between sexual abuse of children in childhood and problems with sleep in adolescence. The study sample consisted of 835 children who had been sexually abused in the United States. The severity and duration of sexual abuse experienced by the individual in childhood was hypothesized to be connected to sleep disorders that appear in their adolescence. The results of the study provided evidence for this hypothesis with a statistically significant correlation. They also revealed that the abuse of children in adolescence was also associated with sleep problems among in that same life phase.

Merclongo (2014) studied the relationship between sleep disorders, depression, and sexual abuse in a sample of 47 females aged 14 to 25 years in the United States. The results showed that sexual abuse can be associated with many psychological and emotional problems and that the girls suffered from a variety of sleep disorders after a long period of abuse.

In a longitudinal study, Nell et al. (2006) examined the relationship between sexual abuse in childhood and sleep disorders and depression in adolescence. The sample consisted of 147 girls, 75 of whom had been sexually abused, and 69 of whom had not, and data collection was done through self-assessment scale. The results of the study indicated statistically significant differences in sleep disorder prevalence among girls subjected to sexual abuse in childhood. The abused girls were found to have increased sleep problems as well as emotional and behavioral problems.

Play Therapy

Without therapeutic intervention, children of sexual abuse have an increased likelihood of severe mental disorders and antisocial behavior in adolescence. Play therapy is a type of treatments for children. Playing can provide an opportunity for children to discover and express themselves and their feelings freely and spontaneously and establish a therapeutic relationship based on trust, respect, and empathy. It also serves as a game-like diagnostic tool for determining the degree and nature of the abused experienced by the child, as well as for evaluating his or her stage of therapeutic progress (Mahamid & Fayez, 2016).

There have been many definitions dealing with treatment through play, with each researcher providing a different theoretical framework. Schaefer (2010) has defined it as a personal process through which the child and therapist use roleplay, communication, and activity to help the child
to deal with psychological problems and to prevent future problems. The framework is used to play a variety of methods and techniques that determine how to use play materials to ensure appropriate therapeutic use of them.

The Association for Play Therapy defines the systematic use of theoretical models for interpersonal relationships in which the therapist uses the techniques to play to help the child cope with current challenges and to prevent future problems to achieve healthy growth in all developmental aspects (Abojedi, 2010).

The goal of play-based therapy is to remove the emotional pain caused by the abuse through various expressive and imaginative tools, as well as to help the child with self-expression (Kaduson & Schaefer, 2001).

The treatment helps the child to practice social skills such as cooperation and expression of emotions. It also helps the child to effectively solve problems and make decision and provides an opportunity for emotional venturing, which reduces the child’s feelings of tension and anxiety. The play is also important in diagnosis and understanding. By observing the child’s interactions, expressions, feelings and thoughts, the therapist can better understand the nature of the child’s problem (Green, 2005).

Play is used effectively to treat children with adaptive problems by using it in a planned way to achieve changes in the child’s behavior and personality to make his life happier and productive (Carmichael, 2006).

Play therapy can teach children new life skills and ways to adapt to their environment. Children require assistance to remain in harmony with their environment, as this is a skill that many children lack, resulting in anxiety. Through play therapy, the child works through feelings of tension and anxiety with dolls or games, as well as receiving the opportunity to discover his willingness to perform the tasks (Geldard & Geldard, 2001).

Play therapy has been used in various forms within various theoretical frameworks. The first to use play in psychotherapy were a group of therapists who embraced the principles of psychoanalysis. Thomas and Ross (1993) wrote about the methods of psychoanalysis used by Hug-Hellmuth, Anna Freud and Barlingham, who used toys as an alternative to free fall and adopted an approach in which the therapist was more responsive and encouraging toward the child compared to what the therapist did with adults in the free fall.
The person-centered theory has developed its concepts of play therapy through Axline (Abojedi, 2010), which uses non-directed toys and in which the therapist focuses on communicating with the child. The therapist can only empathize with and attempt to understand the child’s issues and can only rarely explain the child’s behavior and motivations. As a result, the therapist must trust the child’s ability to grow and drive his or her growth. This framework serves as an appropriate input for the use of toys in the treatment of children, especially for novice therapists of different theoretical orientations.

The proponents of cognitive theory have developed their methods to match play therapy. Meichenbaum suggests that children can be taught self-control using visualization and imagination, in which play is used to modify ideas. Nell developed behavioral models that use modeling and reinforcement, and the methods of Gardner use mutual storytelling as a means of treatment (Knell, 1997).

Landreth (1991) points out that the stages of treatment with toys stand out as a result of the interaction between the child and the therapist, and in this context, several models have emerged that outline with the stages of treatment with toys. These include those of Rogers, the bean model, that of Norton and Norton (1997), and the multidimensional treatment model of Yasnii and Gardner (2004). Broken down into stages, the following is a description of the Norton and Norton Model (1997), which has been relied upon to build the indicative programmed, as it is the most comprehensive.

1. Exploratory Stage: During this stage, children seek two goals: familiarity and comfort within the playroom. Children can touch several games and move from one activity to another. At this stage, children are not engaged in continuous play or meaningful play. The second goal is to build a relationship with the therapist. Children’s comments about the games give the therapist details about what the child prefers and does not prefer. The therapist will accept anything children say to build a therapeutic relationship. Children at this stage also ask a number of questions in order to identify the playroom, games, and therapist. Common questions in this context include: ‘How do you play this game? What are these? And how do you use these toys? Do other children come here?’ (Higgins, 2003).

2. Testing for Protection Stage: After the children come to feel comfortable with the therapist during the exploration phase, they seek to test his or her patience, tolerance and reliability. They
exhibit unacceptable behavior to find out if the therapist can protect and accept them, and here, the role of the therapist is to accept behaviors, be aware of them improve them (Ray & Wilson, 2017).

3. Dependency Stage: Most children spend their time during the therapeutic process at this stage, as their play show metaphorical and symbolic implications. Their imaginative play includes metaphors and signs of the traumatic events they have experienced. They thereby invite the therapist on the healing journey in a way that they feel pain and stress. At this stage, children’s play is intense, emotional and meaningful (Clauber, Flasch, Robinson & Taylor, 2017).

4. Growth Stage: After the children experience their pain in symbolic play, they will develop ways to overcome their wounds. By returning to the traumatic event and dealing with it, they will regain their confidence. The emotional experiences of the children are reshaped, so that remembering traumatic experiences will not cause distress. When children reach the point of remembering the traumatic events without feeling intense emotion, they then move on to the next stage and develop a new sense of self. With this renewed sense of self, the nature of their games changes to include laughter and pleasure (Baggerly, 2004).

5. Termination Stage: There are two tasks that the therapist seeks to achieve during this stage. The first is to have the children close the play by reviewing the stages of the treatment process and content, and children may display some of the responses they showed in the previous stages but with decreased emotion. The second task is to have the child say goodbye to the therapist, again highlighting the issue of trust and acceptance as the child tries to understand the termination and not continue treatment. The children direct their toys to show that they have overcome their problems and reached solutions (Abojedi, 2010).

Play therapy is based on a range of therapeutic methods, from which it derives its strength and effectiveness. These methods have been used in treatment both play-oriented or non-directed, and this depends on the therapist’s skills and experience in the use of these methods. Common methods include:

1. Story-based methods: In these methods stories are used for therapeutic, developmental or diagnostic purposes.
2. Methods based on expressive arts (painting, roleplaying, masking, masks, etc.)
3. Puppet-based methods: Dolls are used as a diagnostic or therapeutic method by having the therapist play one of the characters (Clauber, Flasch, Robinson & Taylor, 2017).
4. Methods based on the use of games that express themes and include plastic games, which reflect either tools used in life, such as cooking tools or medical tools, or games that reflect the roles of individuals, such as soldier or farmer, or represent means of transport, means of communication, or domestic or wild animals.

5. The methods based on games, including a series of popular and traditional games, which are used to achieve counseling or therapeutic goals (Kaduson & Schaefer, 2001).

A group of studies on the role of therapy have investigated play and the extent of its effectiveness in the treatment of many behavioral and psychological problems in children, including hyperactivity and attention deficit. This might involve taking medication to play with children with similar problems, such as lack of attention, aggression, and low self-efficacy. All of the studies proved the effectiveness of this method in alleviating the symptoms of these problems.

One of the studies, by Misurell (2010), investigated the therapeutic efficacy of play based on cognitive behavioral theory with children who have been sexually abused and mistreated, using a sample of 37 females and 23 males. The results showed that the therapeutic programme has alleviated the problems suffered by these children, including sleep disorders, and improved their social skills and self-concept.

The study by Almerasi (2010), conducted in California, failed to provide evidence for the effectiveness of therapy play in reducing the symptoms of disordered sleep, lack of attention and aggression. The sample consisted of 27 children ranging in age from six to 11 years. The results showed that no statistically significant differences between teachers’ and parents’ evaluations of performance before and after the intervention. Parents and teachers agreed that sleep problems and attention deficit problems still persisted.

In a study by Hill (2006), the aim was to examine the effectiveness of play therapy in reducing sleep disorders in five male and five female children who were sexually abused in New York City, USA. The results showed the effectiveness of the therapeutic intervention in reducing sleep disorders in the experimental group and showed no differences between males and females in the extent of therapeutic improvement.

Hiller, Springer and Misurell (2016) examined the effectiveness of cognitive behavioral therapy based on play in reducing behavioral problems in sexually abused children in the United States. The study results showed the effectiveness of such play therapy in reducing symptoms of anxiety,
psychological trauma and sleep disorders and did not show differences in the level of improvement on the two measures of follow-up with respect to gender.

A study by Hlavka, Lashley and Olinger (2010) looked at the effectiveness of treatment employing dolls in the reduction of sleep disorders in sexually abused children in Boston. The results of the study showed the effectiveness of the treatment in reducing sleep disorders and revealed that this type of treatment improved participants’ skills in communication and social interaction.

**Study Problem**

Sexual abuse is considered as one of the greatest threats to a child’s development in all its aspects: emotional, psychological, cognitive and physical. Children exposed sexual abuse will face serious problems in future life situations, especially those related to family relations, school relations, and peer relationships. Perhaps the most important effect of sexual abuse on children is sleep and wake-up disorders. Sexual abuse creates a deep psychological trauma in the child, characterized by many psychological, social and emotional problems. Furthermore, play is one of most important intervention tools used in helping these children, as playing can help the child express his feelings and experiences, develop awareness strategies for traumatic experiences and establish a relationship between the child and counselor based on trust, acceptance and empathy.

**Hypothesis testing**

Recognising the rareness of counselling programmes that deliver play-based therapy to individuals and groups to reduce sleep and wake-up disorders in sexually abused children, the researchers create such a programme and tested its effectiveness. The current study aims to verify or reject the following hypotheses:

1. There are no differences at the level of significance ($\alpha = 0.05$) in the pre-test of sleep disorder due to gender.
2. There are no differences at the level of significance ($\alpha = 0.05$) in the post-test of sleep disorder due to gender.

There are no differences at the level of significance ($\alpha = 0.05$) between the pre-test and post-test in the sleep disorders among the experimental group members.
Method

Research Design
The current study can be classified as a single-group experimental study, as the number of potential participants to which the researchers had access were limited (i.e., children who have experienced sexual abuse and are suffering from sleep disorders). This design was also used because it allowed the researchers to calculate the change in sleep disorder among the participants in with pre-test and post-test, as illustrated by the following symbols:

\[ E \quad O_1 \times O_2 \]

E: Experimental group
O1: Pre-test
X: Experimental treatment
O2: Post-test

Study Group
The total number of participating children at the Hussein Social Institution of the Jordan Ministry of Social Development in 2018 was 10 children with a history of exposure to sexual abuse, six of whom were recorded as having a severe sleep disorder. Participants’ history of sexual abuse and level of sleep disorder were evaluated, and all six were accepted.

Data Collection Tools

Sleep and wakeup disorders.
The researchers used a scale on sleep and wake-up problems developed by Alraggad (2010). It is comprised of 14 items, each of which participants rated on a five-point scale, from 1 (‘This is not a problem for me.’) to 5 (‘This is a problem I always have.’). Higher scores reflect a higher level of sleep and wake-up disorder. This is the tool used by the specialists in the institution.

Counselling game program.
The researchers developed a play-based counselling programme rooted in the theoretical and applied literature in the field, including intervention programmes such as Migdadi (2003),
Mahamid (2010), Hawash (2012), Baggerly (2004) and Higgins (2003). The programme contains from fifteen counselling sessions, with a session duration of 90 minutes and two sessions per week. Every session included a goal and a counselling exercise, and the counselling was conducted with all participants at the same time, as a play group. The researcher introduced a play counselling programme to a group of specialists in psychological counselling to determine the suitability of the programme. The following is a brief description of the programme sessions:

Session 1: The first session aims to acquaint the child with the counsellor and build confidence in the relationship, as well as provide an opportunity for children to explore the play environment, give the child a sense of safety, and provide some playing instructions (time, place, date of meeting).

Session 2: This session aims to help the children to identify the playroom and allow the child to explore its contents and create an affinity between the child and some of the games in the room. It also aims to allow the child to act freely and to express verbally or non-verbally what he or she thinks and feels.

Session 3: This session aims to further develop the child’s sense of safety; reduce anxiety and tension, which contributes to reducing the child’s sleep disorder symptoms; and set the limits of the game involving time, play method and mechanisms of expression through play.

Session 4: This session aims to help the child to express their emotions about abuse experienced by using the drawing tools (papers, pencils, colouring wax, watercolours, brush drawing, stickers, games, etc.) and a house model to play games representing interactions between family members. This activity leads to emotional discharge and helps reduce stress and nightmares resulting from the internal suffering and suppressed feelings.

Session 5: The purpose of this session is to develop the sense of child’s sense of responsibility and decision-making by allowing the child to attempt some of the games and test out making decisions about it. In this session, the counsellor uses the ACT treatment model.

Session 6: This session aims to improve self-esteem building using cubes, paste, small dolls and drawing tools.
Session 7: The purpose of this meeting is to increase child’s awareness of their feelings by using a sandbox and various dolls (model soldiers, airplanes, various plastic games representing family members, mother, father, children, etc.).

Session 8: This session is aimed at detecting conflicts within the child and help them to develop a sense of safety to reduce sleep disorders, using between 18 and 20 dolls ranging in between represent different forms, including aggressive, neutral, fictional, real or dressed for a profession such as doctor and policeman.

Session 9: This session aims to improve the child’s social skills using cards and graphics bearing social attitudes, as the counsellor displays cards with certain positions and then discusses the child in these positions.

Session 10: This session aims to further improve the child’s social skills by helping them form concepts such as cooperation, participation, communication or sense of social responsibility.

Session 11: This session aims to help the child to integrate an awareness of internal conflicts and coping strategies through team play, paper bags, colours, stickers for decorating and scraps of paper.

Session 12: The aim of this session is to develop commitment and teamwork in the counselling group, increase the child's awareness of himself and enhance his strengths by using magic shop games and the talent market.

Session 13: This session aims to help the child in self-expression through play and promote self-assurance behaviours in various social situations, which in turn contributes to the reduction of sleep problems among these children using the robot games, ice and fire, a ball game and a projection game.

Session 14: This session aims to promote self-assertiveness behaviours and help the child to navigate various conflicts by helping him or her to identify some of their conflict topics and then writing a story that involves the conflict and tension the child is facing and helping him develop a solution to that conflict.
Session 15: The final session aims to address unresolved conflicts of the group counselling members by talking about their experiences during the programme and the extent to which the programme met their expectations.

Data Collection
The researchers obtained approval for this study from the Institutional Review Board and the Hussein Social Institution. Data was collected using the Sleep and Wake-Up Disorder scale, applied as a pre- and post-test before and after the treatment. The first stage of data collection was to select the participants by applying the scale and determining the severity of their sleep disorder. The second stage was the counseling programmed. The third stage was the post-test.

Data Analysis
The researchers used SPSS to analyze the data. For the first two hypotheses, Mann-Whitney test were conducted to determine any difference in the pre- and post-test according to gender, while for the third hypothesis, the Wilcoxon test was used to determine any difference between groups.

Findings and Discussion
First: There are no differences at the level of significance (α = 0.05) in the pre-test of sleep disorder due to gender.

To test this hypothesis, the data were processed using the Mann-Whitney test to identify the significance of the differences between the averages of the male and female participants on the pre-test, as shown in Table 1.

Table 1
Mann Whitney test to identify the differences in gender on the pre-test

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Average rank</th>
<th>Total rank</th>
<th>U Factor</th>
<th>W</th>
<th>Z Values</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3</td>
<td>3.83</td>
<td>11.50</td>
<td>3.50</td>
<td>9.50</td>
<td>-0.49</td>
<td>0.65</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>3.17</td>
<td>9.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1 shows that the value of Z reached -4.49, the coefficient of U reached 3.50 and the value of P reached 0.65, which is larger than 0.05, indicating that there were no differences in the average of male and female participants on the pre-test.

The researchers attribute this result to the nature of the abuse experience, which can cause psychological and physical disorders and a negative social impact on the child, regardless of gender. Sexual abuse is considered one of the most traumatic experiences possible in childhood, which can be reflected in the child’s development of a negative self-concept and view of life in general and cause long-term psychological effects. Sleep disorders are one of the most common issues in such children. They have likely been subjected to harsh experiences even before the sexual abuse. In children in this age range, the severity of the impact is usually determined by variables other than gender, such as age at abuse, degree, duration and severity of abuse.

**Second: There are no differences at the level of significance (α = 0.05) in the post-test of sleep disorder due to gender.**

To answer this hypothesis, the data were processed using the Mann-Whitney test to determine the significance of the differences in the averages of the male and female participants on the post-test, as shown in Table 2.

**Table 2**

*Mann-Whitney test to identify the differences in gender on the post-test*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Average rank</th>
<th>Total rank</th>
<th>U Factor</th>
<th>W</th>
<th>Z Values</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3</td>
<td>3.17</td>
<td>9.50</td>
<td>3.50</td>
<td>3.50</td>
<td>-4.43</td>
<td>0.65</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>3.83</td>
<td>11.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The value of Z reached -4.43, the coefficient of U reached 3.50, and the P value amounted to 0.65, which is greater than 0.05, indicating that there were no differences in the male and female participants on the post-test.

The results obtained with respect to this hypothesis showed no differences in the male and female participants on post-test due to gender. The researchers attribute this result to the nature
of the improvement in the effectiveness of the play therapy, which contributed to the improvement of the participants’ sleep disorders regardless of gender. This indicates the extent to which the counselling programme is suitable for all the objectives, techniques and methods of play-based treatment in the target group, which supports this programme being used in future studies aimed at reducing disorders of sleep in children in general. The studies of Hiller, Springer & Misurell (2016) and Hlavka, Lashley & Olinger (2010) agree with this result, as they have indicated the effectiveness of treatment based on play in reducing behavioural problems and sleep disorders in children of sexual abuse and did not find differences in the level of improvement in the two measurements and follow-up post-test with respect to gender.

Third: There are no differences at the level of significance ($\alpha = 0.05$) between the pre-test and post-test in the sleep disorders among the experimental group members.

To test this hypothesis, the data were processed using the Wilcoxon test to identify the significance of the differences between the averages in the two tests of the Sleep disorders scale, as shown in Table 3.

### Table 3

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Rank distribution</th>
<th>N</th>
<th>Mean rank</th>
<th>Sum of rank</th>
<th>Z Values</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>Negative</td>
<td>6</td>
<td>3.5</td>
<td>21.00</td>
<td>-2.20</td>
<td>0.02 *</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equally</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is clear from the previous table that there are significant differences at the level of significance 0.05 in the test averages of the experimental group, showing an improvement in the post-test. The value of $Z$ is -2.20, the $P$ value is 0.02, and the average for the pre-test was 3.5 while mean rank for the post-test was 0.00, which is lower than the pre-test average.

Results obtained for this hypothesis showed differences in sleep disorders between the mean of the pre-test and post-test levels. It appears that the experimental group showed a decrease in sleep disorders. The researchers attributed this result to the collective experience of the play therapy programme and the exercises and techniques used. The group created opportunity for
interaction with others and a sharing of feelings and experience, leading to an improvement in the child’s mental health and a decrease in the severity of problems such as sleep and wake-up disorders. The group environment contributed to effective communication between the members, and this communication is made even more effective presence of a qualified instructor, such as a counsellor, who can regulate interaction among the members of the group. Abused children and other counselling groups already exist together for long hours a day only. Participation in the therapeutic group also pushed participants to invest themselves in the programme’s objective, both through discussions during the sessions, and through the exercises, techniques and tasks to be implemented at home, most of which relate to the problems and situations participants face in their daily lives. This investment is thought to have contribute greatly to their improvement. This result is consistent with the findings of Misurell (2010); Almerasi (2010); Hill (2006); Hiller, Springer & Misurell (2016); and Hlavka, Lashley & Olinger (2010), all of whom indicated that play-based counselling can reduce sleep and wake-up disorders in sexually abused children.

**Conclusion**

The current study attempted to test the effectiveness of play therapy in reducing sleep disorders in children who suffer from sexual abuse. Results indicated the effectiveness of a treatment plan based on play in reducing sleep disorders among participants in this research. Play therapy is an intervention designed to meet children’s developmental needs. It is through play that children with sexual abuse most naturally express their inner selves; thus, therapy for children that uses play can provide children the most developmentally appropriate means of developing self-efficacy and healing. On a theoretical level, the therapeutic conditions provided by non-directive play therapy, which require unconditional positive regard, empathy and congruence (e.g. therapists’ use of their own feelings therapeutically as they arise within social interactions) and the method’s more recent emphasis on a developmental approach to treatment, all point to the possibility that this method benefits children of sexual abuse both emotionally and socially. The therapeutic condition of unconditional positive regard concentrates on accepting children’s current functioning, along with assuming that they possess an innate drive towards improving functioning. Children suffering from sexual abuse may be afraid to express their feelings of guilt, fearful of being accused or blamed for not taking action against the assault. Through a therapeutic relationship in play therapy, children may be able to reveal these feelings of self-blame. Additionally, they can play out
scenarios of taking action and preventing the trauma in their fantasy, which may serve to assuage their feelings of guilt.

**Limitations and Future Directions**

This study was conducted with a sample of sexually abused children at the Hussein Social Foundation in Amman, Jordan, enrolled in the year 2018. We had difficulty obtaining official approval to implement the therapeutic programme and sleep disturbance measure due to the specific features needed in the participants. The researchers recommend the use of play therapy in dealing with other counselling problems that may cause sleep and wake-up disorders, such as traumatised children and children with chronic diseases. Furthermore, it is worth investigating possibilities for the creation of other types of counselling programmes to reduce sleep disorders, such as those involving drama, novel therapy, and emotion-based therapy.

**References**


