The Effects of Mindfulness Intervention on the Social Skills of Students with Specific Learning Disability


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Abstract

The aim of the present study was to determining the effect of mindfulness intervention on social skills of the students with specific learning disability (SLD). For this purpose, in a single- subject multiple baseline across subjects, three students with SLD in the third grade of primary school were selected as participants. The instrument for assessment of social skills was social skills rating system (SSRS) by Gresham, & Elliott, in a checklist format that was completed by parents. Mindfulness intervention was conducted in eight 45-minutes’ sessions individually, in a single subject multiple baseline across subjects. The checklist of social skills were completed by the parents during the base line, intervention, and follow-up procedures. Comparing the participants’ performance in the base line, intervention and follow-up procedures demonstrated that the mindfulness intervention had positive effects on the social skills of all the three participants. This study demonstrated that mindfulness intervention improves social skills in children with SLD.

Keywords: Specific Learning Disability, Mindfulness, Social Skills, Students.

Introduction

About one-third of the students with SLD, experience difficulties in social skills (Morris, 2000; Van der Sande et al., 2018, Schiff & Joshi, 2016). Inadequacy in social skills in children with SLD causes variant problems including poor performances in resolving conflicts, inability in managing failures, problems in commencing and continuing a conversation, listening, showing sympathy, and keeping a friendly relationship in a teamwork (Smith et al., 2015). Some of these children with SLD show social incompatible behavioral patterns, which lead to some disadvantages in learning and social communication and numerous difficulties in school and finally a poor communication with their peers (Alsopp, Santos, & Linn, 2000). In addition, some of these people with SLD experience multiple difficulties in interactional skills and face challenges in various social environments such as school (Harnadek & Rourke, 1994).

Children with SLD are incapable of performing proper social skills which brings about various consequences including, interpersonal difficulties (Tyrer et al., 2006;
Wiener, 2004), social information processing difficulties (Bauminger&Kimhi-Kind, 2007), and difficulties in social interactions. Students with SLD face much more difficulties in comprehension and interpretation of social situations and prediction of behavioral consequences in comparison to their peers (Saloner&Gettinger, 1985; Cavioni et al., 2017; Margari et al., 2013). In general, various research demonstrate that inadequacy in social skills is the most common form of difficulties facing people with SLD (Buonomo et al., 2017; Brooks et al., 2015).

However, research projects that have been done in this field of study were mostly concerned with identifying different kinds of difficulties, their nature and their etiology and also how they are connected to each other in people with SLD. In spite of achieving great discoveries in these research projects, identifying the intervention of mindfulness in decreasing social problems in students with SLD, has often been neglected. In fact, in SLD domain of study, there is no absolute answer to the question of the most effective interventions to cure social problems of the people suffering from SLD. Furthermore, answering this question requires experimental and interventional research on the people involved.

Among effective interventions in improving social skills of the children with SLD are mindfulness-based interventions (Malboeuf-Hurtubise et al., 2017). Mindfulness can be defined as a moment-to-moment awareness of one’s experience without judgment(Keller, 2012). Mindfulness is the result of three main items of an active attentiveness which leads to awareness, being attentive to the present, being aware of the past or the future and accepting the circumstances without prejudice (Hooker & Fodor, 2008).

Saltzman (2014) revealed that teaching mindfulness has positive effects on understanding emotions and excitements ability, and behavioral modulation. Some positive effects such as; improving mental health and social skills, controlling impulses, and enhancing physical health could be counted as advantages of mindfulness intervention (Garrison Institute Report, 2005).

Generally, the effect of mindfulness interventions on improving social skills has been confirmed (Singh et al., 2007). Since mindfulness in working with children suffering from SLD with the aim of lessening their social skills difficulties has not been utilized, the question of the present study is weather the intervention of mindfulness on these children effective or not? Considering the vulnerability of these children in facing social skills, this investigation with the aim of helping them and their families is crucial. The present study is also significant practically and clinically. Furthermore, identifying effective interventional methods to improve social skills of the aforementioned children is of the necessities of doing this research.

By making teachers, trainers, and therapists working with children with SLD, aware of the most effective interventional methods with scientific support, help them to improve these children’s social skills with more accurate and more successful performances. Therefore, the present study is concerned to evaluate the effectiveness of mindfulness intervention on social skills of the children with SLD. In fact, the present study seeks to answer the following questions:

1. Does mindfulness intervention effective on social skills of the children with SLD?
2. Does the effect of mindfulness intervention on social skills of students with SLD persist over time?

Materials and Methods

The design used in this study was, a single subject multiple baseline across subjects.

The Participants

The subjects participated in this study, were three students (two girls and a boy) in the third grade of a public elementary school. These participants are introduced below. The names of the participants are aliases

Maryam: Maryam was an eight and half year-old girl who had finished the third grade in a public elementary school. Based on an interview with her mother, she had received a hard strike in her pregnancy, which caused her a preterm delivery in her eighth month of pregnancy. She also had suffered extreme stress and anxiety levels in her pregnancy. Maryam showed high temperature in her infancy. Her sight, hearing, taste, smell, and touch were reported normal in her childhood. Her speech and language, movement and behavioral developments were accompanied with a general delay. Maryam is the first born and she has a younger brother who goes to preschool. Her parents are not blood relatives and they don’t have academic education. Her father is an office worker and her mother is a housewife. She was first diagnosed with SLD when she was referred to a special institute for SLD from school. In this institute, she was examined clinically and her school achievement was evaluated. Furthermore, a Stanford Binet questionnaire IQ test was taken.
She showed poor school achievement in comparison to the normal rate of her age. After showing significant difference in school performance in some specific areas regarding her general abilities, she was diagnosed with SLD. She had reading and writing problems.

**Zahra:** She was eight and four months old, who had finished the third grade in a public elementary school. Based on an interview with her mother, she had no problem during her pregnancy. Her five senses of, sight, smell, hearing, taste and touch was normal in her childhood. Her speech and language, movement and behavioral developments were accompanied with a general delay. She is an only child. Her parents are not blood relatives and they do not have academic education. Her father is a military officer and her mother is a housewife. She was first diagnosed with SLD when she was referred to a special institute for SLD from school. In this institute she was examined clinically and her school achievement was evaluated. Furthermore, a Stanford Binet questionnaire IQ test was taken. She showed poor school achievement in comparison to the normal rate of her age. After showing significant difference in school performance in some specific areas regarding her general abilities, she was diagnosed with SLD. She had reading and moderate mathematics problems.

**Mohammad:** Mohammad was eight and eleven months old. He had finished the third grade in a public elementary school. He repeated the first year of elementary school due to severe problems in reading, writing, comprehension, and memorization; he is doing appropriately well in mathematics. Based on an interview with his mother, she had extreme food repulsion during her pregnancy and took very little in that period. She delivered her child in the seventh month of pregnancy. Mohammad was born with low birth weight and suffered from severe lung problems; therefore, he spent two weeks in an incubator. His five senses of, sight, smell, hearing, taste and touch were normal in his childhood; yet, his speech and language, movement and behavioral developments were accompanied with a slight general delay. He underwent jaundice, asthma, and high fever. He is the third child. He has two older sisters and one younger brother. His parents are not blood relatives and they do not have academic education. His father is a freelance worker and his mother is a housewife. He was first diagnosed with SLD when he was referred to a special institute for SLD from school. In this institute he was examined clinically and his school achievement was evaluated. Furthermore, a Stanford Binet questionnaire IQ test was taken. He showed poor school achievement in comparison to the normal rate of his age. After showing significant difference in school performance in some specific areas regarding his general abilities, he was diagnosed with SLD. He had reading problems.

**Setting**

The place of conducting this research was, a room in a consultation clinic named Parsa, located in Shiraz. Parsa consultation clinic is giving services in psychological consultation, speech therapy, occupational therapy, and providing education in diverse fields such as: learning disabilities, hyperactivity, behavioral and speech and language disorder. The clinic’s building has four spate rooms on the first floor for consultation and therapeutic interventions. The assigned room for conducting the research was furnished with a desk and a chair for the researcher, and a desk and a bench in front, for the subject. The room enjoyed a calm and quiet atmosphere with an appropriate ventilation system.

The educational intervention included, mindfulness interventional program, and carried out once a week. Each session lasted 40 to 45 minutes. All the sessions of evaluation and performing interventional education were held in this consultation room between 8 to 12 in the morning.

**Instruments**

**Parental consent form:** to participate in this present study, each of the subjects’ parent was required to sign a consent form. This form was consisted of general information germane to the purpose of the study, instruments, conducting procedure and its content, number and duration of the sessions, and the name and the address of the researcher. After sending an invitation from Parsa Clinic of to the subjects’ parents and their presence in the clinic, they were provided with the consent forms to sign them provided that they agreed to the terms and conditions. The parents of the three aforementioned subjects agreed and signed the consent forms.

**Social Skill Rating System (SSRS):** The Social Skills Rating System: The Social Skills Rating System (SSRS) was developed by Gresham and Elliott in 1990. The SSRS includes three behavior rating forms for parents, teachers and students. The elementary school parent form (grades K-6) was used in this study. This measure is based on a 30-item questionnaire rated on a three-point Likert type scale. Numerical scores 0, 1, and 2 were assigned for
the answers Never, Sometimes, and Very Often, respectively. Therefore, a score of 60 would be used potentially for the maximum score and zero for the minimum. Internal consistency coefficient range from .83 to .94 was reported for the SSRS using test re-test method and Cronbach’s alpha (Gresham & Elliott, 1990).

Furthermore, in a study in Iran, Cronbach’s alpha and split-half methods estimated a reliability of .90 and .83 respectively by Shahim (1999). The SSRS questionnaire booklet was filled out by the parent of each student. They filled their forms of the baseline, intervention and follow-up checklists by observing the students’ behaviors at home. The approximate time of answering the SSRS was 5 to 10 minutes.

**Procedure**

In this section the procedure of the research is described. The procedure includes; selection of the subjects, the process of conducting baseline, intervention, and follow-up stages, and how the data is collected.

**Selection of the Subjects:** In order to select the subjects, after acquiring the letter of introduction from Shiraz University, Education Department of Shiraz was referred to. Afterwards, the subject matter, aim and process of the research were discussed with Education Department’s agents. The department agents examined instruments and components of the research, introduced researchers to learning disabilities centers. Researchers discussed the subject matter and the aim of the study, with the assistance of the manager of the center selected three students who were diagnosed with learning disabilities and had the inclusion criteria. The inclusion criteria for the present research were, having SLD, IQ of 85 and higher, no significant sensory or motor deficit, poor educational performances regarding their age, and their parents’ consent to participate in the research.

**The Process of Administering Baseline, Intervention, and Follow-up Stages:** After selection of the subjects, and prior to administering of the intervention, considering the selected research design, the baselines in the checklist of the social skills for all the three students were filled by the parents. In the baseline section none of the subjects received mindfulness intervention, nor did they participate in any educational or therapeutic programs. The baseline section was designed to measure social skills abilities of the subjects prior to the mindfulness intervention. The duration of the baseline section for each participant varied, depending on the time that the baseline input was considered as sufficient and also the time when the mindfulness intervention lead to progress in the previous subject.

When the baseline inputs for the first subject reached to a stable and steady level, the researcher started the mindfulness intervention, meanwhile the two other participants were still in the baseline section. When the target behavior (the dependent variable) in the first subject should progress, mindfulness intervention was started on the second participant while the third subject was still in the baseline. The same process was repeated for the third subject.

In the mindfulness intervention stage, each participant directly received mindfulness intervention individually. Each session was designed with the aim of educating mindfulness. Each session lasted 40 to 45 minutes. In these sessions, each participant was provided with separate practices to be done. During the sessions, they were given time to practice and feedback.

In an educational intervention setting, each subject received 8 sessions of mindfulness intervention. In the follow-up stage, in order to measure if the social skills was stable in the subject, three weeks after the last intervention session, social skills checklist were filled again by the parents. In this stage each subject was evaluated five times, with two days’ interval for each time.

**Mindfulness Intervention**

Kabat-Zinn (2003), have accounted seven particular agents which construct the fundamentals of mindfulness. These elements are: 1. Non-judging. 2. Patience. 3. Beginner mind 4. Trust 5. Non-striving. 6. Acceptance. 7. Letting go. These elements are not separate from each other, in contrast they support and overlap with each other (Cardaciotti, 2005).

The mindfulness intervention was adapted from the Snel (2013), entitled "Sitting still like a frog: Mindfulness exercises for kids (and their parents)". Each session lasted 40 to 45 minutes. Each participant directly received mindfulness intervention individually. The summary of the mindfulness intervention sessions are presented in the table 1:
Table 1.
**General description of the mindfulness intervention sessions**

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Steps</th>
<th>Description of the session</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>Observation with a beginner’s mind</td>
<td>• welcoming the subject</td>
<td>45 minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• explaining mindfulness, attention and its kinds, and mindfulness in daily life</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• playing a game of visual focus, practicing and focusing and attentive memory</td>
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<tr>
<td>Second</td>
<td>Frog meditation</td>
<td>• explaining breathing with mindfulness</td>
<td>45 minutes</td>
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<tr>
<td></td>
<td></td>
<td>• meditating with nostrils breathing, chest and stomach, breathing with conscious mind</td>
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<tr>
<td></td>
<td></td>
<td>• 5 minutes of conscious breathing while sitting, walking, with a long pause and a deep</td>
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<tr>
<td></td>
<td></td>
<td>breath with mindfulness</td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td>Sound, breathing, and body mindfulness</td>
<td>• explaining about shifting attention and mindfulness</td>
<td>45 minutes</td>
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<tr>
<td></td>
<td></td>
<td>• listening to music, sound and breath and body mindfulness and stop practice</td>
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<tr>
<td></td>
<td></td>
<td>• 10 minutes of sound, breath, and body mindfulness (sitting or walking). Listening to</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>music with mindfulness. Talking about day experiences, patience and listening practices</td>
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<tr>
<td>Fourth</td>
<td>Body consciousness</td>
<td>• explaining about five senses mindfulness, attending to thoughts, “I am from Mars”</td>
<td>45 minutes</td>
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<tr>
<td></td>
<td></td>
<td>practice with different foods</td>
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<tr>
<td></td>
<td></td>
<td>• 4 times eating with mindfulness each day</td>
<td></td>
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<tr>
<td>Fifth</td>
<td>Physical senses and motor mindfulness</td>
<td>• explaining mutual relationships between mind and body</td>
<td>45 minutes</td>
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<td></td>
<td></td>
<td>• body exploring, managing anxiety, child emotional status forecasting</td>
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<td></td>
<td></td>
<td>• attending practice to now needs</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• 10 minutes of daily practice, painting practice from emotional status of the child</td>
<td></td>
</tr>
<tr>
<td>Sixth</td>
<td>Emotional mindfulness</td>
<td>• explaining emotions and their features</td>
<td>45 minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• recording daily events, practicing emotional report, by the aid of frog figures</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>showing different emotions</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• 10 minutes of attending to good, bad, neutral emotions in daily events. Enhancing being</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>conscious about daily emotions</td>
<td></td>
</tr>
<tr>
<td>Seventh</td>
<td>Mindfulness of thoughts</td>
<td>• speaking about the subject’s anxieties and obsessions of the child</td>
<td>45 minutes</td>
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<tr>
<td></td>
<td></td>
<td>• using anxiety little box</td>
<td></td>
</tr>
<tr>
<td>Eighth</td>
<td>Being kind is advantageous</td>
<td>• explaining the significance of being kind and its effect on life</td>
<td>45 minutes</td>
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<tr>
<td></td>
<td></td>
<td>• using visualization practices to get prepared for performing a task</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• using a rubber band to remind them of being kind</td>
<td></td>
</tr>
</tbody>
</table>

**Data Analysis Methods**

In this present study, data visualization, comparative average, and effect size methods were employed to analyze the gathered data. The effect size index is employed as a compliment of data visualization and it must always be utilized with data visualization. The effect size in this research was calculated by percentage of non-overlapping data. The method of calculating this index is variant due to the content of the behavior or the purpose of the study. In research projects that they aim to enhance a certain behavior in the subjects, to calculate the percentage of the non-overlapping data, the highest point of the target behavior must be defined in the base line stage. Afterwards, the higher points, in comparison to the previous point (non-overlapping data), in the intervention stage are counted. Finally, the ratio of non-overlapping data is divided on the total number of data in intervention stage and multiply by 100. In the studies with the aim of reduction of some target behaviors, the lowest point of the target behavior in the base-line stage and the lower points in the intervention stage must be put in the above-mentioned formula. The percentage of non-overlapping data, provides an index of effect size of the intervention. The range of the results of the percentage of non-overlapping data can vary from 0 to 100 percent. The interpretation guide of the index of the percentage of non-overlapping data reveals that if the index percentage is less than 50, the intervention is non-effective, if it is between 50 to 70 percent, it means the intervention demonstrates questionable effectiveness, the index between 70 to 90 percent is fairly effective,
and higher than 90 percent reveals highly effectiveness of the intervention.

**Results**

To investigate the effectiveness and permanency of the mindfulness intervention on social skills in students with SLD, three methods including: data visualization, average comparison of performances, and effect size were employed. Social skill average of performances in base line, intervention, and follow-up stages is illustrated in table 2 and the subjects detailed performances are shown in diagram 1. The result of this analysis for each student is described as follows.

**Maryam**

In the base-line stage, the average of Maryam’s performance in social skill variable was 48; however, in the intervention stage which included 8 sessions of mindfulness intervention, this average reached to 57, that demonstrates 9 points increase of average variable of social skills in Maryam (Table 2). In comparison to the base-line stage, an nine-point increase in social skills variable reveals positive effects of mindfulness intervention on her social skills. Therefore, it is safe to say that mindfulness intervention has improved the social skills of this student. The average of Maryam’s social skill performance in intervention stage was 57, and in the follow-up stage was 59 (table 2). Consequently, by comparing the average numbers, a stability in her social skills in the follow-up stage was concluded.

<table>
<thead>
<tr>
<th>Students</th>
<th>Base line</th>
<th>Intervention</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryam</td>
<td>48</td>
<td>57</td>
<td>59</td>
</tr>
<tr>
<td>Zahra</td>
<td>42</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Mohammad</td>
<td>48</td>
<td>59</td>
<td>56</td>
</tr>
</tbody>
</table>

Visual data analysis of table 1 shows, in the base line stage the slope of her social skills performance curve did not change significantly; however, by the initiation of the mindfulness intervention there is a tangible change in her social skills performance curve. In addition, by comparing the direction and general trend of her social skills performance curve in mindfulness intervention stage to the base-line stage, there is tangible increase in the slope of the curve. Therefore, considering very limited alterations of social skills performances in the base-line stage, and the tangible increase in the slope of social skills performances curve in the intervention stage, improvement on the student’s social skill performances is undeniable. The result of visual data analysis of diagram 1, demonstrates that Maryam’s social skills in the follow-up stage in comparison to her performance in the intervention stage, enjoyed a significant stability. Hence, her social skills in the follow-up stage has remained stable.

![Diagram 1](image-url)

**Diagram 1.**

Subjects’ performance on social skills in base-line, intervention and follow-up sessions
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The index of percentage of non-overlapping data for Maryam in her social skills is equivalent to 87% that shows fairly effectiveness of the intervention (table 3). This effectiveness index indicates that she has shown 87% more proper performance on social skills in comparison to the highest point of performance in the baseline stage.

<table>
<thead>
<tr>
<th>Students</th>
<th>Percentage of Non-overlapping data</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryam</td>
<td>87% fairly effective</td>
<td></td>
</tr>
<tr>
<td>Zahra</td>
<td>100% highly effective</td>
<td></td>
</tr>
<tr>
<td>Mohammad</td>
<td>87% fairly effective</td>
<td></td>
</tr>
</tbody>
</table>

**Zahra**

Zahra’s performance in the base-line stage in social skills variant was equal to 42; yet, in the intervention session this average increased to 54, that shows 12 points of increase in the average variant in her social skills (table 2). Regarding that an increase in the social skills variant, indicates and improvement in social skills, positive effects of mindfulness intervention on this particular student is concluded. Furthermore, the average of her social skills in the intervention stage is 54, and in the follow-up stage is 52(table 2). This result indicates that the average of her social skills in the follow-up stage has slight changes and remained stable.

Visual analysis of diagram 1 shows slight variability in the slope of social skills curve. Moreover, as the intervention initiated, no tangible changes were observed in the slope of social skills performances’ curve; yet, general trend of her social skills performance’ curve shows tangible changes in the in mindfulness intervention stage. Therefore, considering very limited alterations of social skills performances in the base-line stage, and the tangible increase in the slope of social skills performances’ curve in the intervention stage, improvement on the student’s social skills performances is undeniable. The result of visual data analysis of diagram 1, demonstrates that Zahra’s general social skills in the follow-up stage in comparison to her performance in the intervention stage, enjoys a proper stability.

The index of percentage of non-overlapping data for Zahra in her social skills is equivalent to 100% that shows highly effectiveness of the intervention (table 3). This effectiveness index indicates that she has shown 100% more proper performance on social skills in comparison to the highest point of performance in the baseline stage.

**Mohammad**

Mohammad’s performance in the base-line stage in social skills was equal to 48; yet, in the intervention session this average increased to 59, that shows 11 points of increase in the average in her social skills (table 2). Therefore, considering the increase in the average of his social skills performances in the intervention stage, an improvement on his social skills is concluded. Furthermore, the average of his social skills in the intervention stage is 59, and in the follow-up stage is 56 (table 2). This result indicates that the average of his social skills in the follow-up stage has slight changes and remained stable.

Visual analysis of diagram 1, indicates a partial stability in Mohammad’s social skills in the base-line stage; yet, with the initiation of mindfulness intervention, the slope of social skills performances’ curve underwent a tangible change. Furthermore, comparing the general trend of his social skills performance’ curve in base-line and intervention stages, shows a tangible increase in the intervention stage. This student showed slight progress in social skills performances in the initial sessions of intervention stage, and he continued progressing as the sessions carried on. Therefore, the visual data analysis and the concluded results from the base line and intervention stages indicate improvements on his social skills performances. This result from diagram 1, indicates that the average of his social skills in the follow-up stage has slight changes and remained stable.

The index of percentage of non-overlapping data for Mohammad in his social skills is equivalent to 87% that shows fairly effectiveness of the intervention (table 3). This effectiveness index indicates that he has shown 87% more proper performance on social skills in comparison to the highest point of performance in the baseline stage.

**Discussion**

The result of the present study demonstrated that mindfulness intervention has positive effects on social skills of students with SLD and this effect in the follow-up stage has remained stable. The result of the present study indicating the positive effect of mindfulness intervention on social skills in children with SLD has been proved consistent with the previous research in this field. Some of these research projects are Ghasemi Bistagani and Mousavi (2017), Beaucheminand et al. (2008), Greco et al. (2011), Waldemar et al. (2016).

One possible explanation of this finding is that mindfulness intervention probably can improve proper emotional responses in children.
One of the weaknesses of children with SLD is their inability to communicate effectively and sustainably (Maiuri, 2020). At the same time, mindfulness training sessions focused on self-understanding of the child's personal feelings, empathy training, elimination of repeated judgments about himself and others, and kindness training, which helped them develop their social skills.

In addition, mindfulness intervention helps the child trust his or her personal experiences, recognize the intrinsic goodness of others, and establish lasting and deep social relationships with others (Perry-Parrish et al., 2016). Growing up in these areas means improving the performance of these people in empathy, maintaining friendship and cooperation (Smith et al., 2015), creating interpersonal communication and actual interpretation and predictions of social situations (Tyrer et al., 2006) that have contributed to the development of participants' social skills.

Another explanation for the effectiveness of mindfulness on social skills of students with SLD can be attributed to their difficulty in managing behavioral responses in conditions of failure and weakness in predicting immediate behavioral consequences. The presence of such problems in people with SLD has adverse effects (such as rejection) on their social relationships, especially in interaction with peers. On the other hand, one of the important results of mindfulness in individuals is awareness of thoughts and feelings of control over behavior instead of sudden and thoughtless reactions (Saltzman, 2014); Therefore, it can be said that mindfulness, by strengthening the ability to reflect and think about behaviors and predicting the consequences of behavior before doing so, has helped to prevent sudden reactions and the development of participants' social skills.

Conclusion

Mindfulness intervention has positive effects on social skills of students with SLD. This finding provides promising results for researchers, therapists, teachers, and parents working with children with SLD in identifying effective interventions to improve social skills in these children.

References


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