Effectiveness Of Reinforcement Technique During Counseling For The Students With Attention Deficit Hyperactivity Disorder: Gender Based Comparative Study

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Abstract

School psychologists play an important role in the academic life of students with ADHD because counseling provided by them is helpful in positively modifying student’s behavior. Reinforcement techniques help psychologists during counseling to improve the performance of student with ADHD on certain tasks like behavior tasks and social interaction. The aim of the study was to investigate the perspectives of school psychologists regarding the effectiveness of reinforcement techniques during counseling of the students with ADHD also explore the perception of school psychologists about effectiveness of reinforcement techniques based on gender. Qualitative research design was used in this study while the nature of the study was phenomenological. This study also based on Skinner’s reinforcement model. Interview guide was based on structured interview guide with selected school psychologists. Fourteen (7 Female and 7 Male) school psychologists were selected through purposive sampling techniques in different special education centers of Lahore, Kamonki, Hafizabad and Gujranwala. Four open-ended questions were developed in an interview guide. Structured interview was conducted through school psychologists, having at least 30 minutes. The collected data were analyzed through Microsoft excel sheets. The findings of the study show that most of the female participants stated that reinforcement technique are best for ADHD children and they use tangible reinforcement during their session. They elaborate that reinforcement techniques include giving rewards like candies or biscuits, clapping or appreciating him/her. They give reinforcement immediately increases the attention span of the child and improve sitting behavior that is very helpful to convey the message in a next session easily. They always appreciate the children by given technique. In this way, they do some activities like jumping, swimming, and racing and art also this technique is very helpful to
develop some skills like academic, social, dressing, cognition, receptive etc. This study recommended that for male school psychologists must adopt all therapies, strategies and also held workshops for awareness of parents, teachers and children must be organized. They also arranged some training workshops for school psychologists about the awareness of latest term and techniques of counseling.

**Keywords:** School Psychologists, ADHD Students, Reinforcement Technique. Gender base analysis

**Introduction**

Psychologists deal individually with all age groups, families, and institutions. Psychologists deal the emotional, social, school and physical health problems, life stresses and other severe issues. They collaborate with teacher, administrator and other schools and develop strategies for general issues. School psychologists address the child academic and developmental problems. School psychologists assist and overcome the specific type of disability. They develop strategies to address the behavioral issues with the help of teacher and school administrator. School psychologists prepare IEP for students (Armour, Műllerová,& Elhai, 2016) .

Numerous children’s experience challenges sitting as yet, focusing on tasks and embarrass their behavior. These qualities are practically natural for child development. However, if these behaviors start to influence academic, friends and family connections, Diagnose of Attention Deficit Hyperactivity Disorder (ADHD) might be assured. The overhauled version of the DSM of intellectually disorders, DSM-IV indicates that ADHD comprises of three subtypes that differ in how much people present with troubles with attention, lack of caution, and hyperactivity (DuPaul and Stoner, 2003) . Much literature on ADHD focuses on the factors, symptoms, causes, treatment and medication related to this disorder. However, numerous misconceptions about ADHD and their counseling through school psychologist still exist, these misconception directly affect the school staff, environment, parents and individual with ADHD (Flanigan, 2016) .

In Pakistan, ADHD has been found around 2.49%. If we compare children with and without ADHD, find children more injuries (59% vs. 49%). Children with ADHD diagnosing rate increase a common of 3% per year 1997 to 2006 and common increase 5% per year 2003 to 2011. Boys who diagnose with ADHD rate are 13.2% and girl’s rate is 5.6% (Mohamed and Sciences, 2016) . ADHD is a standout amongst the most continuous youth conduct issue, influencing a few million kids and their families in the U.S. consistently. The ebb and flow Demonstrative and Factual Manual of Mental Disorders (DSM-V; APA, 2013 recognizes the occurrence of ADHD at 5% of kids, prevalence possibly as high as 11%. Since the manifestations may last into adulthood in up to 33% of those determined to have the confusion (ATTENTION-DEFICIT, 2011) . Psychologists are proficient mentors must get a graduate degree or higher in emotional well-being mentoring or marriage and family treatment. They work with customers to enable them to adapt better approaches to deal with their issues, essentially by giving talk treatments (Harpin, 2005) .
Hupp, Reitman, and Jewell (2008) Skinner's theory of operant behavior additionally represents decreases in the quality of conduct. Specifically, operant conditioning includes retaining the introduction of results keeping up a given conduct, though negative reinforcement includes lessening the recurrence of conduct by the evacuation of an outcome following the presentation of a behavior. Positive reinforcement includes debilitating conduct by including over stimulate unforeseen the exhibition of a conduct. Skinner incorporates precursor sin his examinations of fortification possibilities and explicitly concentrating on forerunner improvements (e.g., separate upgrades) that control social reactions on account of a background marked by support within the sight of those boosts. The three terms possibility portrays the significant connection that exists between precursors the stimuli, the behavior and its consequence (i.e., the supposed A-B-Cs). Under certain circumstances and setting occasions that modify the segregating elements of the precursor boosts are additionally incorporated into the examination. At last, Skinner made numerous other significant commitments to conduct theories and connected conduct examination, including the ideas of reinforcement schedules, shaping, changing and token economy just to give some examples. Reinforcement is a key rule that underlies numerous conduct behavior modification methodologies. First contemplated widely by Skinner (1938) and Ferster and Skinner (1957) support is characterized as the procedure wherein the consequence of a conduct reinforces the future likelihood of the conduct. There are two types of reinforcement the first one is encouraging feedback, in which behavior is fortified when it results in the conveyance of a positive reinforce and negative support, the second one is in which behavior is fortified when it brings about break or evasion of aversive stimuli. The outcomes of the conduct engaged with both positive and negative reinforcement may comprise of changes in the physical condition or the conduct of others.

Competent psychologists in office and school settings may help kid Clint with ADHD and their families through an assortment of intercessions. Academic weaknesses is regularly tended to straightforwardly by instructors, proficient guides may explicitly enable children to figure out how to adapt to social impedances that happen with ADHD so as to treat the full range of manifestations (McConaughy, Volpe, Antshel, Gordon, and Eiraldi, 2011). Research on directing kids with ADHD proposes that activity arranged methodologies are fundamental and that play treatment might be viable when working with youthful kids adapting to ADHD indications (Portrie-Bethke, Hill, and Bethke, 2009). Gathering guiding for kids with ADHD has likewise been proposed alongside receiving a fundamental intercession approach consolidating standard parent and instructor meetings despite the specific setting or advising approach (Webb and Myrick, 2003). Three territories of center are of significance when directing youngsters with ADHD. These three zones, including compromise, inspiration and self-viability and confidence may enable advisors to sort out and structure their intercessions. Besides, these center zones can help advisors while counseling with guardians, parental figures, instructors and other social insurance suppliers to build up a collective and dynamic treatment plan which is basic to guarantee achievement (Herr, 2009).

If a person not suffering with a major problems such as depression, stress and addiction but facing some problems and hurdles that you would like to address. For example, you need to improve ability to complete the school work or task at time, some understanding and
knowledge about ADHD techniques and strategies or know why these problems or issues coming up. Short term counseling is usually take weeks or months rather than many years and is often goal-oriented. (Low, 2019)

School psychologists had appreciably better information of ADHD than teachers and their big schooling and schooling associated with ADHD. School psychologists are relatively skilled in all of these areas, making them priceless within the assessment and capacity diagnosis of ADHD (Flanigan, 2016). ADHD students mostly need a different therapies and medication as an intervention but in special education institutions no proper therapies and medication provide to these students. In government sector counseling is not gave on a regular bases. The problem is that school psychologists have no clear knowledge and concept about ADHD disorder and counseling. They don’t know about the effectiveness of counseling. In government sector the parents are not allowed to attend session with children. School psychologists have no clear knowledge about reinforcement techniques, rules and how it is apply to different students. The aim of this study was to know clearly about the reinforcement techniques used during sessions for ADHD students.

School psychologists plan every session activity before start the session. They divide session into three parts. School psychologists choose different activities and plan with the help of reinforcement techniques rules and guide. Reinforcement techniques are very important during session so because of its importance it is very essential to know the use of all techniques during sessions of ADHD students.

Objective of the study:
Research objective of this study was:

1- To investigate the effectiveness of reinforcement techniques used by the school psychologists for ADHD students.
2- To explore perception of school psychologists about effectiveness of reinforcement techniques based on gender.

Research Question
Research question of this study was:

1- What are the counseling techniques used by the school psychologists for ADHD students?
2- What are the perception of school psychologists about effectiveness of reinforcement techniques based on gender?

Research Methodology
Research Design
The research opted qualitative research design according to the need of the research because research need more in-depth and detailed information about reinforcement techniques used during counseling session for ADHD students. Only through qualitative research get detailed
interview and collect overall information about the use of reinforcement techniques during counseling. The researcher chooses the nature of basic qualitative research design for this study.

**Population**

Population of this study was entire school psychologists working in special education public and private centers of districts Lahore, hafiz Abad, Kamonki and Gujranwala. There are some special centers that enrolled ADHD students in their centers and school psychologists give counseling sessions.

**Sampling**

Fourteen school psychologists (7 Female, 7 Male) choose from Lahore, Kamonki, Hafizabad and Gujranwala for gender based comparison. Purposive sampling technique was used for this research. Only the school psychologists who are working as a psychologist in a special education institution included in this study. School psychologists working with ADHD students and give almost 15 sessions to ADHD students. All school psychologists done their degree in clinical psychology, applied behavior analysis or diploma in a behavior therapist included in this study. All the school psychologists have minimum three years’ experience of counseling in special centers.

**Instrument**

Researcher developed the interview guide with the help of literature review and Skinners reinforcement model. Recent studies and published articles related to this topic helps to develop interview guide. Semi-structured interview guide was developed to know about the use of reinforcement techniques used school psychologists during counseling for the students with ADHD. Interview guide has five questions:

1- How do you convey your message to ADHD students during counseling? Any technique?

2- During counseling reinforcement technique helps you in which ways or which type of improvement you see?

3- As a psychologist do you prefer individual counseling or group counseling for ADHD child?

4- Do you think parents counseling is helpful for child betterment? Individual or group counseling which one you prefer?

**Data Collection Method**

Researcher collects the list of special centers and the collects data through semi-structured interview. Researcher briefly describes the aim of the study to participants before start the interview. Validity of the interview guide was making sure from the field experts and from supervisors. All the experts gave positive feedback and make some changes in it. After the validation the data collection process was started.

**Data Analysis**
After the data collection process, researcher use Microsoft excel spread sheet for data analysis. Researcher makes one theme and codes it and gets results for this research.

Results of the Study

1- How do you convey your message to ADHD students during counseling? Any technique?

During school psychologists interview researcher find many techniques that apply psychologists during counseling session with ADHD children. Most of the female participants state that reinforcement techniques are best for ADHD children. They elaborate that reinforcement techniques include giving reward like candies or biscuits, clapping or appreciating him/her. They use reinforcement techniques also when the child is sitting without creating any disturbance. They report that they have a session about 40-45 minutes. They take 2 to 3 counseling sessions minimum in a week for the ADHD children. They give reinforcement immediately increases the attention span of the child and improve sitting behavior that is very helpful to convey the message in a next session easily. They make a weekly chart in which they give stars to the children for a positive response. They emphasize that this chart clearly explains the reward list to the children which they receive after the positive feedback. They always appreciate the children by given technique. In this way, they do some activities like jumping, swimming, racing and art.

Some male participants state that they use play therapy and behavior modification techniques with reinforcement techniques to convey a message during counseling sessions to the ADHD children. They use to start with the easy steps then take difficult steps to change the behavior of the child. They state that in play therapy, they choose different activities according to the child e.g. games, jumping, racing, puzzles, blocks etc. They suggest that in behavior therapy they ensure to include parents in this therapy. They think play therapy helps to convey message with the help of some indoor and outdoor activities. For example participant states:

“Play therapy and behavior therapy are the best therapies in counseling. I plan therapies according to the condition of a child. For mild ADHD, we plan counseling sessions, and for treatment and counseling, we make sure that child follows the same rules everywhere”. (Participant 9)

Few participants state that counseling is not a good suitable word for motivational interviews. Training, encouragement and management are the main things to guide the child during session. They inform the child at first that he has a session with therapist and do different activities to engage the child e.g. color within the boundary. They think four above mentioned strategies helped them to manage the child without using any techniques in sessions.

2-During counseling reinforcement technique helps you in which ways?

Most of the male participant state that reinforcement technique helps to make short and long term goals of counseling because goals setting they cannot achieve anything. They choose child favorite reinforce with the help of assessment and diagnoses. Children’s previous history helps them to make goals according to the children severity level and symptoms. Positive and
negative reinforcement techniques mostly used during counseling. They point out that they divided reinforcement techniques through different goals. Short term goals are sitting behavior improvement, eye contact skill, engaged a child in activity, increase attention span, reinforce the child, motivate the child, differential reinforcement, token economy, response cost, shaping and chaining, self-development skills, and the sense of wrong and right. They include all these in short term goals. They never label the child during counseling and always try to reduce their symptoms.

They also make long term goals with the help of reinforcement techniques. Long term goals that take time to achieve something. They propose that these goals cover behavior and conceptual level of the children which included socialization, self-esteem, improve academic skills, and build confidence, behavior modification, decreasing of hyperactivity, academic skills and social skills. They report that long term goals are made after developing short term goals. They report that some short term goals change into long term goals. They think when child’s learning is slow and level is severe then its short term goals achievement never shows at initial level. They always revise their goals after two to three months.

One female participant gives different views regarding reinforcement techniques. Goal setting and state that assessment, observation and testing are the main elements of goals setting and discusses that all these three help to check the level and behavior of the child and helps to set goals. The participant highlight that long term goals are already achieved up to 70% through short term goals. Participant emphasize that after many months, they set new short term goals and change the reinforcement of a child.

3-As a counselor do you prefer individual counseling or group counseling for ADHD child?

During interview researcher explore that ADHD children have not treat only through counseling. Individual or group counseling sessions are important for ADHD children. Researcher found during one-to-one interview that school counselor chooses counseling sessions and activities according to the child level. Researcher finds out difference in individual and group counseling. Both sessions held sometime for the severe ADHD children. Researcher find out that ADHD children group counseling is not preferable. Many activities held school psychologists during individual or group sessions. Most of the female participant’s state that individual counseling for ADHD children is best and they appreciated the individual sessions for counseling. They report that if they find any improvements in a child, they start conducting group sessions but not group counseling. They state that group counseling means to consult with all the children of the area which is difficult to organize. They report that Reinforcement techniques are mostly used in individual sessions.

They emphasize that psychologists manage all behaviors problems of a child e.g. sitting, eating, bathing, jumping, swimming, and running etc. through individual counseling. They suggest that children can never survive in group counseling with these problems. They made a chart for every child and discuss all points and routine of a child in it.
They also emphasize that in individual sessions, level of children has also discussed in details and general things are discussed and general task are also performed. They remark that in individual session, child is focused carefully and also treated in good manners. They discuss that one normal student must join in an individually session which is beneficial for psychologists and ADHD child because ADHD child copy the activities, it could be helpful to treat and teach easily. They report that individual counseling develops socialization, likes or dislikes of the child, increase attention span, motivation and behavior skills.

Some male participants state that both types of counseling, individual and group, are the best for ADHD children. In start, they hold individual sessions and perform different activities like puzzles, blocks, coloring, painting, bounding and arts etc. with the child. On the other hand, they choose swimming, racing, jumping, and art activities are done in group counseling and children learn so many things in a short time.

Participants also report that both type counseling is chosen as per requirements of the child. They suggest that if the child has elements of severity then they prefer individual counseling because child can hit or injure someone and if the child has a mild or moderate level then after some sessions they do group counseling with them. They report that both are compulsory for ADHD children.

One participant states that ADHD child and one normal child sits together in a session that is better than all ADHD children include in group counseling. Participant report that normal child act during session and ADHD child follow this child. She suggests that this method work more effectively than individual counseling.

4-Do you think parents’ counseling is helpful for child betterment? Individual or group counseling which one you prefer?

Researcher find out that parents counseling is very important for the child betterment. Through one-to-one interview researcher explore that both male and female participants thought parents counseling is more important than ADHD children counseling. School psychologists gave individual or group counseling sessions to ADHD children parents. Through interview researcher found the best counseling session for ADHD children parents. All entire male and female participants state that parents counseling is very important to change the behavior of their children. They report that parents support plays a parallel role for psychologists. They give counseling sessions to the parents about child behaviors. They suggest that parent’s cooperation with them is important for gradual and rapid improvement in a child. They emphasize that children join a session for 2 to 3 hours and later they are in Parents Company, that’s why parents counseling is essential. They report that sometime parents never accept their child and ignore the child. They state that parents told us about the most irritating behavior of the child then worked on these issues.

They emphasize that during parents counseling they shared different strategies with parents which were effective for them. They changed parents’ minds and made them realize about importance of the child. They state that parents considered ADHD child as an abnormal but through counseling they realized that their children could also live a normal life like others.
children. They remove the label of the disable child which parents tag to the child. They preferred parents counseling first and then started working with the child. They demonstrate parents that 90% improvement of child is in the hand of parents if they made regular visits and follow the guidelines.

Some participants state that individual counseling is better for parents. They prefer individual session because sometimes parents are not accepting that their child has symptoms of disability. They suggest that sometimes parents are uneducated and cannot feel comfortable in a group session. They discuss that in group sessions they feel hesitated, when the parents are sole attendant of the session, they can share bout their child and give a positive feedback.

Few participants state that group counseling is better than individual. They use different techniques in group counseling. They choose modeling of behavior in group counseling.

They state that in group counseling all the parents discuss the major problems and give suggestions. They express that most of the time parent’s knowledge is gained from peer education. They said that every child has different symptoms when parents share their experiences with each other they also receive opinions and solutions from us. They report that during the sessions, we share the activity chart for the child and other ways to handle the child at home.

A few participants state that both group and individual counseling is important for parents. They suggest that sometime some things are repeated in different children that can be discussed in group easily and sometime someone can never discuss particular things in a group for some reasons. They report that during group session parents share their experiences with each other and find solution with the while doing “gup shup” (gossips). They also discusses that in individual sessions, they just share about the treatment of for the child at home and at school. They emphasize that group sessions provide an opportunity to discuss all the parents’ issues and they can be guided in a group.

One participant state that in government sector group counseling is not allowed, only individual sessions can be held. Participant proposes that in some institutions, parents stay in touch with teachers and do not communicate with the psychologists directly. She state that private institutions charge extra fees and parents do not cooperate with psychologist. They give time and attention to the children but this is vice versa in government sector.

Discussion

School psychologist’s role is very influential to change the behavior and mind of ADHD children. The students who are attention deficit, school psychologists plays essential role of screening for ADHD (Castelnau et al, 2017). Female Psychologists not only motivate or guide the children during counseling. Therapists only suggest therapies during session. No new therapy, technique or strategies they apply during counseling of ADHD children. These results are consistent with a research conducted by (Shabanpour, Mohammadyfar, Tale Pesand, and Rezaei, 2017) found that skinner behavior operant learning theory was used to strengthen the
behavior in different ways. Reinforcement technique helps change the behavior in a variety of ways and through learning process. This technique include Punishment (weakens behavior), behavior modification therapies, neutral and positive reinforces. Male therapist mostly used token economy also include with person or child target behavior changes with the help of different tokens like fake money, clue cards etc. This study also helps to control the human self-control, behaviors and emotions. Psychologists use the rules of the behaviorists and follow the principals of the theory which discuss in different theory of behaviorists during treatment of the children. School psychologists have no time to read latest researchers and adapt innovative methods of counseling for ADHD students.

In Pakistan, school psychologists are hiring not for a specific disorder. One psychologist gives counseling sessions to all disability children, who have the degree of masters in special education also include in psychologists. No specific age limit and qualification held for the psychologists. Both male and female school psychologists develop different skills in ADHD children through counseling. They improve academic, social, daily living skills of ADHD children but if the child has a mild level disability. Severe children cannot develop all these skills because counselor has not enough train and knowledge about this. Male school psychologists used old pattern in which specific and limited skills improved and better in children. No vocational or technical skill develops in ADHD children for better and secure future. School psychologists choose different ways and methods to change the behavior of the children. They choose reinforcement techniques, token economy, and play therapy, outdoor and indoor activities. School psychologists cannot contact with psychiatrist at the start of the counseling because ADHD children have a medically problem. School psychologists use medication only for the child sleeps well and attend counseling sessions in a fresh mood. School psychologists divided a counseling session into a different long term and short term goals. If a child cannot perform in a one goal they change the goal after three trials. Reinforcement technique helps to develop different socialization and behavior changes in children.

Continuing counseling and short term counseling also call cognitive therapy or talk therapy give children with ADHD with a secure, strategies for ADHD (low, 2019). Reinforcement technique usually used most during counseling in which they give different rewards like appreciate, clapping, positive reinforced and the chose different activities according to children interest. It helps to develop different domains skills like academic, receptive language, identification, concept of give, find, touch, dressing, grooming, social and cognition in a child. In most School psychologists didn’t know about difference between reinforcement technique and therapy. In Government sector of Pakistan they didn’t give parents concealing to ADHD students even they are not allowed to meet with sp. School psychologists give indirect concealing to parents when they come to school (Boucher’s, pamphlets).

Female school psychologists teach the class teachers of ADHD students to tell parents how to treat their child at home. School psychologists prefer both individual and group parents concealing but they don’t have clear concept about individual and group concealing. In other countries School psychologists start their concealing with parents, Guide then and make a chart...
how to deal with child according to different situations. Almost in these cases mother are more hyper and aggressive then ADHD child. According to School psychologists if ADHD child is behaving rudely and hyper, Mother behave more hyper and shout on child. In Pakistan the old tradition, (dam, darood) is very popular. Parents suggest peer group and believe in spiritual prayers. ADHD children mostly find in shrines. Once assistant professor of a special education department go to some chalid, his child diagnose with ADHD. After dam he said now my child is better. Government introduces 15 seats in a year for school psychologists. Systematic environment is compulsory because in Pakistan joint family system is very common. In which if the child is with ADHD they become more aggressive or hyper. Mostly parents or siblings slap on face and child become hyper.

**Conclusion**

The present study is qualitative in its nature. In this research, researcher used semi-structured interview for the objective of data collection. This research highlights the importance of reinforcement techniques during counseling of students with ADHD. In this study gender based use of different reinforcement techniques highlighted. Reflecting on data carried out 14 school psychologists of special education institutions of Lahore, Hafizabad, Kamonki and Gujrawala. After analyzing the conclusion of the study the investigator had concluded that almost 70% female school psychologists use latest and tangible reinforcement technique during counseling’s compare to social reinforcement which use male psychologists mostly. School psychologists develop limited skills in ADHD children but in rare cases, ADHD children mostly in special schools were shifted into hospitals. In government setup mostly parents have not knowledge about the psychologists. Counseling is the better solution to change the ADHD child behavior. Counseling is very effective for ADHD students because counseling has no side effects like medication. Combination of both things counseling and medication shows better result and improvement in a child. Counseling is more effective then medication. ADHD students generate more neuron chemicals parents are unaware about this. Hospital has a separate department of child psychiatry. In which all psychologists are very trained, experienced and deal ADHD children properly. If the student is very hyper or in severe condition school referred to hospital. Psychologists give counseling session with medication. ADHD requires constant supervision and persistent professional coaching. Reinforcement techniques psychologists used and followed the principals of Thorndike and Pavlov theories. A reinforcement technique has different steps and rules. School psychologists choose this technique through short term and long term goals. Apply all reinforcement techniques to run all goals in a session. This technique helps to change the behavior of a child socially, eye contact, on seat, aggression, grab things and name response in different activities. The result of the study show that this technique is very useful for ADHD students.

It is concluded that the workshops of awareness must be organized for parents and teachers as well as for the children’s. Also arrange some training workshops for school psychologists about the awareness of latest term and techniques of counseling. New methods and strategies of counseling should be introduced. We must involve psychologists in new
trends and researches. In this study, researcher concludes that in Pakistan, special schools have assessment method for ADHD children. This method show in below figure 1.2

**Recommendations**

On the support of the findings and conclusion of the study coming recommendations have been suggested:

Government should hire some experts and experienced trainers in selection committee of psychologists. All the school psychologists must have the degree of MSc clinical psychology or MSc in psychology and advance diploma in clinical psychology. Government and private sectors institutions should collaborate and facilitate new therapies and techniques to school psychologists. Government should held awareness workshops and seminars for parents.

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