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**EFFECTIVENESS OF COGNITIVE-BEHAVIORAL GROUP COUNSELING (CBGC)  
ON MIDDLE SCHOOL FEMALE STUDENTS' SHYNESS AND ACCOUNTABILITY  
(CASE STUDY OF ABADDEH TASHK, FARS PROVINCE)**

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**ABSTRACT**

The aim of the present study was to explore the effectiveness of cognitive-behavioral group counseling (CBGC) on middle school female students' shyness and accountability in Abadeh Tashk, Fars Province. To this end, a quasi-experimental research design with pretest and posttest and control group was used. The population under study included all middle school female students at Hajar School in Abadeh Tashk in the school year 2013-2014. The respondents in the research sample were 40 students with lower scores on Accountability Questionnaire and higher scores on Shyness Inventory. The respondents, then, were divided randomly into two groups: control and experimental. The data were collected through Samuei Shyness Inventory and California Accountability Questionnaire. The collected data were analyzed using analysis of covariance. The results indicated that CBGC has a significant impact on the respondents' shyness ( $P < 0.0001$ ). It was also noted that CBGC has a significant impact on the respondents' accountability ( $P < 0.0001$ ).

**Keywords: Cognitive-Behavioral Approach; Shyness; Accountability; Abadeh Tashk**

## INTRODUCTION

Since adolescence is one of the most important stages of people's life, an awareness of young people's problems and helping to solve them will facilitate the establishment of a healthy and sublime society whose people enjoy mental health and are engaged in social activities. Middle school coincides with the period when an adolescent is going through puberty with all its features such as gaining independence, taking accountability, developing a sense of discipline. Gaining such advantages, an adolescent starts to change its childlike behavior into more adult-like behavior.

One of the most important causes of problems associated with establishing relationships with other people is student feeling of shyness. In the past thirty years, shyness has been of interest for researchers and they have conducted numerous studies to understand this phenomenon (Koydemir & Demir, 2008). Cheek and Buss (2006) defined shyness as an individual's negative reaction to have relationships with strangers or relatives by marriage. Such reactions may include tension, worry, incompetent and saddening feelings, hatred, and inhibition of social behavior.

Shy people almost always avoid having social interactions with others so they withdraw to their seclusion. Therefore, the most important

shyness symptoms are similar to those of social anxiety such as mental and physical disorders, excessive attention to oneself, preoccupation with one's feeling, thoughts, and physical reactions (Gillian Butler, cited in Gharache Daghi, 2011).

If antisocial behaviors of shy people are not resolved, such people are more likely to develop excessive stress and the most serious mental disorders such as schizophrenia and depression (Zimbardo, 1997; cited in Ghiasi Zadeh, 2011).

Accountability means an individual's ability to satisfy his needs in a way that such satisfaction does not prevent the satisfaction of others' needs. Accountability makes one feels valued and that can be useful to others and other people appreciate him in return (Goslar, 2006).

According to Goff's theory, conscientiousness, accountability, reliability, acting based on rule and order, and the belief that reason should govern one's life are among relatively stable intrapersonal and interpersonal personality traits. Goff maintains that although accountability is to some extent correlated with socializing and self-restraint, values and controls should be emphasized as important factors in individuals' life. People with a high accountability sacrifice their aspirations for

the sale of collective wants and desires. Such people accept consequences of their actions as they are reliable and feel committed to a larger social structure. Although they are not leaders, they are honest and keep their promises (Marnat, cited in Pasha Sharif, 2011).

According to the cognitive theory, distorted or dysfunctional thinking is the cause of all psychological disorders. In addition, dysfunctional thinking has a great impact on our mood and actions. The key concept of the cognitive theory assumes that events by themselves do not have an impact on our behaviors but this is our understanding of these events that affect our behaviors. According to this view, indifferent situations, automatic thoughts are activated in people's mind. These thoughts are directly affected by central and intermediate beliefs that affect our reactions. The reason for why different people react differently to the same situation is that fundamental beliefs that affect people's mind in these situations are different. This is to say a given situation can evoke different emotional and behavioral reactions which depend on our perception and understanding of the situation (Ledley, Marx, & Heimberg, 2005).

In a study conducted by Hupps et al., (2003) to evaluate the effectiveness of cognitive-

behavioral approach to reduce the sense of isolation among people with physical disabilities, the results showed that after being exposed to cognitive-behavioral interventions, the participants would feel less lonely.

Based on what was mentioned above, it can be suggested that research on shyness and the accountability among female adolescents using a cognitive-behavioral approach is of great importance. As such, the aim of the present study is to investigate the effectiveness of cognitive-behavioral group counseling (CBGC) on shyness and accountability among middle school students. To this end, the following hypotheses are going to be tested in this study:

**H1:** Cognitive-behavioral group counseling (CBGC) has a significant impact on reducing female adolescents' shyness.

**H2:** Cognitive-behavioral group counseling (CBGC) has a significant impact on improving female adolescents' accountability.

## **MATERIALS AND METHODS**

### **Population and sampling:**

The present study employed a quasi-experimental research design with pretest and posttest and control and experimental groups. The population under study included all middle school female students at Hajar School in Abadeh Tashk. The respondents in the research sample were 40 students with

lower scores on Accountability Questionnaire and higher scores on Shyness Inventory. The respondents, then, were divided randomly into two groups: control and experimental. The respondents in the experimental group were exposed to the cognitive-behavioral counseling group for eight 90-min sessions. In contrast, the control group received no treatment.

#### **Instruments:**

The instruments used to collect data were Samuei Shyness Inventory and California Accountability Questionnaire described as follows:

#### **Samuei Shyness Inventory:**

The inventory was developed by Samuei (2003). It contains 44 items. The items with positive content are scored using a 0-4 point scale, where 0 shows the lowest score and a value of 4 shows that highest score. On the contrary, the items with negative content are scored using a 4-0 point scale, where 4 shows the lowest score and 0 shows that highest score. The reliability of the instrument through the Cronbach alpha was reported to equal 0.80. In addition, its reliability was significant using split-half method at the significance level of 0.0001 ( $P < 0.0001$ ).

The concurrent validity of the instrument administered simultaneously with psychological interviews was significant at

0.01 ( $P < 0.01$ ). Test-retest reliability of the inventory at an interval of 3 weeks was 0.97 and significant at 0.0001 ( $P < 0.0001$ ). The value of Cronbach's alpha was calculated with a value of 0.82. In order to respond an item, the respondent is required to read the item carefully and choose the best option matching his/her personality (Always = 4, Most of the time = 3, Sometimes = 2, Never = 0).

#### **California Accountability Questionnaire:**

To measure the respondents' level of accountability, accountability subscale taken from the 42-item California Psychological Inventory (1951) was used. The inventory was first published by Goff (1951) and it contained 648 items and 15 scales to assess personality traits. In 1957, 5 more scales were added to the inventory and it included 20 subscales (Marnat, cited in Nikkho, 2007). The 42-item inventory measure personality traits such as conscientiousness, commitment, hard work, diligence, reliability, behavior based on discipline and accountability (Marnat, cited in Nikkho, 2007).

The validity coefficient of the inventory was reported to be 0.70 (Mousavi, 1998), 0.65 (Rezaie, 1998), and 0.64 (Mahmudi, 2004).

#### **Data Collection Procedure:**

The respondents in the research sample were 40 students with lower scores on Accountability Questionnaire and higher

scores on Shyness Inventory. The respondents, then, were divided randomly into two groups: control and experimental. The respondents in the experimental group were exposed to the cognitive-behavioral counseling group for eight 90-min sessions, one session per week. In contrast, the control group received no treatment. In each session, a homework assignment was given to the respondents. They were asked to do the assignment at home and bring it back in the next session. At the end of the treatment, the respondents took the post-test. The data collected were analyzed by using SPSS. In addition, descriptive statistics including median, mean, standard deviation, tables, and graphs and inferential statistics such as analysis of covariance were employed to test the research hypotheses.

## RESULTS

The first research hypothesis states cognitive-behavioral group counseling (CBGC) has a significant impact on reducing female adolescents' shyness. To test this hypothesis, the mean scores and standard deviations for the control and experimental groups were calculated as shown in Table 2:

As it can be seen in the above table, there is a significant difference between the mean scores of the control and experimental groups on the posttest. Analysis of covariance was

used to assess the impact of pretest. In addition, F test was used to determine the equality of variances as shown in Table 3: As can be seen in the table, the significant level is 0.06 which is due to the homogeneity of variances at the significance level of 0.05. This enables us to the use of analysis of covariance in our data analysis. To test this hypothesis, ANCOVA was used to determine the significance or insignificance of shyness in the control and experimental group. ANCOVA is a prerequisite for equality of group variance. As can be seen in the second row, the value of F concerning the effect of the independent variable is 261.5, which is significant at 0.0001 ( $P < 0.0001$ ). Accordingly, it can be suggested that there is a significant difference between the mean scores of shyness on the posttest after removing the effect of pretest. Therefore, the first hypothesis was confirmed, showing that cognitive-behavioral group counseling (CBGC) has a significant impact on reducing female adolescents' shyness.

The second hypothesis assumes that cognitive-behavioral group counseling (CBGC) has a significant impact on female students' accountability. To test this hypothesis, the mean scores and standard deviations of accountability for the

respondents in the control and experimental groups were calculated as shown in Table 5:

As it can be seen in the above table, there is a significant difference between the mean scores of the control and experimental groups on the posttest. In addition, F test was used to determine the equality of variances as shown in Table 6: As can be seen in the above table, the significant level is 0.06 which is due to the homogeneity of variances at the significance level of 0.05. This enables us to the use of ANCOVA in our data analysis.

To test the second hypothesis, ANCOVA was used to determine the significance or insignificance of accountability scores in the control and experimental group. ANCOVA is a prerequisite for equality of group variances.

As can be seen in the second row, the value of F concerning the effect of the independent variable is 363.6, which is significant at 0.0001 ( $P < 0.0001$ ). Accordingly, it can be suggested that there is a significant difference between the mean scores of accountability on the posttest after the effect of pretest being removed. Therefore, the second hypothesis was confirmed, showing that cognitive-behavioral group counseling (CBGC) has a significant impact on reducing female adolescents' accountability.

**Table 1: Training protocol in cognitive-behavioral approach**

Session	Goals	Intervention
First	Group members become familiar	Members become familiar, introducing cognitive-behavioral approach, introducing rules and principles of treatment sessions
Second	Introducing the term shyness	Familiarity with the concept of shyness, its causes and outcomes, relationship with others and its role in mental health
Third	Introducing the term accountability	Characteristics of accountability-based behavior, decision-making, and planning
Fourth	Skill training	Mental imaging, cognitive errors
Fifth	Introduction to Skills	Mental imagery training-Introduction to cognitive errors
Sixth	Technique application	Techniques to change the patterns of thinking and doing things differently, building confidence, the necessity of planning in works and affairs
Seventh	Technique application	Presenting some exercises on how to start conversations, self-expression, attacking the feeling of shyness, presenting self-assertion
Eighth	Overview and conclusion	An overview of the acquired skills and create incentives for exercising what is learnt in life after training sessions

**Table 2: Mean scores and standard deviations for control and experimental groups on the posttest**

Variable	Group	Number	Mean	SD
Shyness	Experimental	20	118.80	13.6
	Control	20	63.45	6.9

**Table 3: Variance equality of shyness scores on the posttest:**

F-value	First degree of freedom	Second degree of freedom	Sig.
3.73	1	38	0.06

**Table 4: The differences between shyness posttest scores**

Sources of change	Sum of squares	Degrees of freedom	Mean square	F	Sig.
Pre-test effect	131.689	1	131.689	1.1	0.2
Effects of independent variable	30480.612	1	30480.612	261.5	0.0001
Errors	461/4312	37	116.55	-----	-----
Adjusted total	00/367231	40	-----	-----	-----

**Table 5: Mean scores and standard deviations for control and experimental groups on the posttest**

Variable	Group	Mean	SD
Accountability	Experimental	30.60	1.9
	Control	18.25	3.9

**Table 6: Variance equality of accountability scores on the posttest:**

F-value	First degree of freedom	Second degree of freedom	Sig.
1.29	1	38	0.2

**Table 7: The differences between accountability posttest scores**

Sources of change	Sum of squares	Degrees of freedom	Mean square	F	Sig.
Pre-test effect	198.710	1	198.710	43.2	0.0001
Effects of independent variable	1669.247	1	1669.247	363.6	0.0001
Errors	169.840	37	4.59	-----	-----
Adjusted total	25757.00	40	-----	-----	-----

## DISCUSSION AND CONCLUSION

The aim of the present study was to explore the effectiveness of cognitive-behavioral group counseling (CBGC) on middle school female students' shyness and accountability. The results indicated that CBGC affects middle school female students' shyness and accountability. This is going to be discussed as follows:

The first research hypothesis stated that cognitive-behavioral group counseling (CBGC) has a significant impact on reducing female adolescents' shyness. As can be seen in in Table 4, there is a significant difference between the respondents in the control and experimental groups. Therefore, the first hypothesis was confirmed, suggesting that cognitive-behavioral group counseling (CBGC) has a significant impact on reducing the respondents' shyness. Ajmal et al., (2011) found that that there is a negative correlation between shyness and self-esteem. In addition,

Behroozifar (2008) showed that CBT has a significant impact on self-esteem. The results of the present study are in line with the finding of the previous research (Ramazani, 1994; Vakilian, Hashemabadi, & Tabatabaee, 2008; Dadashzadeh, Yazdust, & Asgharnezhad, 2012; Hosseinian, Darakhshani, & Yazdi, 2006; Bashirpour & Farahbakhshi, 2012; Ghiasizadeh, 2012).

The findings of this study are consistent with a study conducted by Bashirpour and Farahbakhshi (2012). They evaluated the effectiveness of cognitive-behavioral approach on reducing teenage boys' shyness. Their findings suggested that cognitive-behavioral group counseling acts as a treatment method for students as it reduces their shyness. Similarly, Hossinian and Darakhshani (2006) found that social skills training (assertiveness) can reduce students' level of shyness. This finding can be explained in the light of the fact that as its name suggests, cognitive-behavioral approach

focuses on problematic attitudes and behaviors and show how these beliefs and behaviors are involved in the creation of psychological problems and more importantly how such attitudes contribute to the continuity of such problems over time. One of the characteristics of shy people is that they refrain from social interactions and retreat into solitude. Shy people's negative attitudes make them vulnerable so that they feel they are incompetent, unfriendly, and non-attractive. In their background, they imagine that they are not decent people. Therefore, attitudes can be said to play an important role in increased shyness. However, it should be noted that beliefs and thoughts affects emotions. Besides, beliefs can produce anxiety. If a shy person can change his mindset, he can change his feeling and actions too. Since shyness is an acquired and learned behavior, de-learning should be employed to treat it or replace it by new socially desirable behaviors.

The respondents in this study were exposed to group counseling for 8 sessions. During these sessions, they got familiar with their own thoughts and beliefs as well as social skills with the help of cognitive-behavioral therapy. Individuals are very active in cognitive-behavioral groups and they are able to perform their assigned tasks and roles. Group

interactions also help the members to try new behaviors and use new techniques instead of the old ones. Besides, homework assignments help the group members to develop a new perspective in relation to audacious behaviors. All studies conducted about shyness suggest that if shyness is not treated timely and appropriately, it may lead to serious effects in the future and prevent shy people from actualizing their talents and creativities or taking advantage of their capacity. That's why parents can play a significant role in preventing the development of shyness in their children by developing their self-esteem, sense of responsibility, social skills. In addition to family, school is the second most important institution that can have decisive role in weakening shyness or developing social skills.

According to the second hypothesis the cognitive-behavioral group counseling have a significant impact on middle school female students' accountability.

As can be seen in Table 7, after excluding the impact of pre-test, there is a significant difference between female students in the experimental and control groups ( $F = 363.6, p > 0.0001$ ). Therefore, the second hypothesis was confirmed. This shows that the cognitive-behavioral group counseling has a significant impact on students' accountability. This is

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consistent with the findings of research conducted by Robert Cools (1996), Khedri (2001), Ranjbarian et al., (2005), Akbarinezhad and Soheili (2008). Similarly, Akbarinnezhad (2008) observed that social skill training has a significant impact on improved self-esteem and accountability.

This can be explained by the fact that accountability is one of the human psychological traits which is considered as one of the key variables of social behavior and it plays a significant role in development of behaviors and social skills. The higher independence and accountability among adolescents, the less significant will be the role of parents. Accordingly, adolescents can make decisions by relying on their abilities and talents and are able to accept the responsibility of the decisions they make.

The development of patterns of cognitive-behavioral through training helps clients so they can solve their problems and achieve a reasonable understanding. The employment of this approach in group especially for adolescents can increase its effectiveness.

Accountability and identification of personal values play a significant role in preventing or reducing the risk of development of behavioral, social, psychological, and personality abnormalities. Therefore, accountability training is one of the most

precious gifts that we can give to our children. Such training will enable them to care for themselves and can assume their responsibilities in future as adults. In this study, the respondents benefited significantly from accountability training offered in 8 sessions and they could dramatically increase their skills. Accountability development program using the cognitive-behavioral approach focuses on different aspects of personal, social, and family life. In addition to cognitive-behavioral skills, this program also deals with effective communication skills and personal relations.

Accountability is the most important factor responsible for the enforcement of laws and regulations and social norms and it can avoid many of the disorders and criminalities in the society and finally lead the society towards the development and progress. Accountability can also prepare humans to cope with life problems and enhance life management skills and effective communication with the environment and the people around them. Parents and families have a great impact on guiding children towards the success, cognitive social growth, and the formation of identity. Various methods of communication and parenting affect the growth of children and teenagers in terms of different aspects. Therefore, accountability is one of the most

important skills for humans. Besides, having a bright future is impossible without training accountable people.

### **LIMITATIONS OF THE STUDY**

- Lack of cooperation from the authorities to provide the required information and the necessary facilities for holding treatment sessions.
- This study has been done on female students and care should be taken when generalizing the results for male students.
- Due to the sensitive nature of the items, the respondents answered the questions with great sensitivity.
- Some respondents did not participate regularly in meetings until the end of group activities.
- Some factors may have influenced the internal and external reliability of the findings of the study.

### **SUGGESTIONS**

- Conducting further studies and offering more training programs and treatment strategies to reduce shyness and reinforce responsible behavior.
- Undertaking similar studies with male students and comparing the results obtained

- Conducting further studies on how adolescents are influenced by other family, social, and personal factors concerning shyness and accountability.
- Based on the findings of this study, the development of such characteristics in adolescents should be incorporated in planning made by educational institutes, families, and relevant organizations.
- Since one of the goals of the education system is to train individuals with a sense of social involvement and accountability, education administrators and officials are expected to provide all needed facilities in order to develop all potential talents not only in terms of academic achievement but also in other respects.
- Little research is done on shyness in Iran. Therefore, conducting more studies on the causes of shyness and its treatment approaches at all levels of education is very use.

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