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A comparative study of mindfulness, assertiveness skills as well as behavioral activation and behavioral inhibition among 15 year old boys of single parent families and those without parents in Gorgan city

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Abstract

Introduction: Single parent families have been recently increased. Due to the prevalence of divorce and increased single-parent families and those with no parents, the present study aimed to compare the mindfulness, behavioral inhibition and assertiveness skills among 15 year old boys of single parent families and those without parents in Gorgan city.

Materials and Methods: The statistical sample of this comparative descriptive study includes 76 15-year-old single-parent and parentless boys (40 single-parent and 36 parentless) in Gorgan city, who were randomly selected in the fall of 2016. They were selected and asked to answer the behavioral inhibition/activation systems scale questionnaires, Gambrill and Ritchie's assertiveness (1975), and mindfulness questionnaire. The data was analyzed using the method of multivariate analysis of variance.

Results: Overall, there is a difference between observation, and non-judgment, among the variable dimensions of mindfulness, assertiveness, and behavioral activation/behavioral inhibition in two groups of single-parent and non-parent boys according to one-way variance analysis. There is significance at the level ($P < 0.001$). Also, there is no significant difference in other areas of mental awareness, such as non-reaction, description, and action with awareness, in two groups of boys with single parents and without parents.

Conclusion: Due to the results obtained from the study, it can be concluded that lack of two parent families can highly affect the cognitive and behavioral process of the individual's growth, and even single parent family plays an undeniable role in such relationships.

Keywords: Assertiveness, Behavior, Boys, Mindfulness, Parent

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Introduction

Since the 1960s, the single-parent family has become increasingly popular in the West. In these

families, children live with only one of their parents and, in most cases, with the mother (1). Social researchers have considered the main

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factors of the emergence and expansion of single-parent families to be the reduction of official marriage, cohabitation without marriage, excessive individualism, the tendency to divorce, and the simplification of divorce procedures (2). The children in the family suffer the most damage because they need the support of both parents in their growth; naturally, every family is formed by choice in the first place, and divorce is also considered a choice. When a person can make the right choice according to his conditions when he is relatively aware of all the cases and acts thoughtfully (3), in the meantime, mindfulness means being in the moment with everything that is now, without judgment and without commenting on what is happening. The experience of pure reality is without explanation. Conscious people perceive internal and external realities freely and without distortion and have a remarkable ability to face a wide range of thoughts, emotions, and experiences (4). Mindfulness affects improving mood, enjoying life and self-expression, improving symptoms of anxiety, stress, and exam anxiety, and reducing psychological distress (5). This process includes creating a special method of paying attention to our experiences (6), which is more or less different from the ordinary and everyday method of paying attention to our own lives and represents a kind of focused, flexible, and moment-to-moment revelation of the flow. It is thoughts, feelings, and physical sensations (7) that present themselves in our consciousness. Because mindfulness moderates emotions without judgment, increase awareness of mental and physical emotions, and help one see and accept emotions and physical phenomena as they happen (8).

It helps people adjust negative behaviors and thoughts and leads to regulating positive behaviors related to health (9). The results of Scott and Malouf's studies show that as mindfulness increases parallel to it, a person's relaxation, adaptive function, emotional abilities, and skills such as understanding, understanding, managing, and controlling their own and others' emotions also increase, slow and means paying attention to the present time in a specific, purposeful and judgment-free manner (10).

Since man is a social being, he somehow needs to form a family and have children, and he is

always trying to acquire skills to facilitate interpersonal relationships. More and more attention is paid to daring as a case of skill life, indicating the revelation of many values and effects of this skill (11). The importance of daring in interpersonal communication and its influential role in social interactions, especially among teenagers, has led to numerous research studies (12). The issue of self-expression and the category of daring is the ability of people to establish appropriate interpersonal relationships in social interactions and is one of the most important effective factors in mental health (13). Assertiveness can be considered at the heart of interpersonal behavior or communication skills (14). In general, assertiveness can be seen as the ability to honestly express opinions, feelings, and attitudes without feeling anxious, and it includes defending one's rights in a way that does not harm the rights of others (15). People with little courage cannot interact appropriately with the people around them. These people experience feelings of guilt, mistrust, and dominance in social relationships and show fear, anxiety, and depression, as well as a level of self-acceptance and low self-esteem in these people (15).

When children in the family and social environment learn to be bold and to behave and choose consciously, in the meantime, they ignore some behaviors and choose others, which leads to doing activities, which are called behavioral activation and inhibition, one of the neuropsychological models of personality is the reinforcement sensitivity theory, which the famous psychologist proposed, Jeffrey Gray, based on individual differences in response to punishing and rewarding stimuli (16). Gray's personality theory explains the relationship between personality dimensions and physiology (17). Gray proposes two neurocognitive systems, the behavioral inhibition system (BIS) and the behavioral activation system (BAS) (18).

BIS is characterized by sensitivity to signs of punishment, lack of reward, and avoidance behavior and overlaps with systems in which anxiety plays a role, While BAS is sensitive to reward cues, punishment avoidance, and pleasure orientation (19). An essential trait reflecting these two systems is anxiety and impulsivity, respectively. The activation system is the neurophysiological basis of impulsivity and is

associated with positive emotions and is activated by positive stimuli (20).

In contrast, the behavioral inhibition system is the neurophysiological basis of anxiety and is related to negative emotions and stimuli (21). Therefore, it is assumed that positive emotions such as happiness and peace are related to dispositional motivation (BAS), and negative emotions such as sadness and fear are related to avoidance motivation (BIS) (22). According to the above, this research aims to compare mindfulness, assertiveness and inhibition skills, and behavioral activation in 15-year-old single-parent and parentless boys in Gorgan city.

Materials and Methods

The statistical sample of this research includes 76 single-parent and parentless 15-year-old boys (40 single parents and 36 without parents) of Gorgan city in the fall of 2015, who were selected in a targeted non-random way. In the group of children without parents, sampling was done from welfare family-like children's centers. After providing explanations to the subjects about the purpose of the study and gaining the subjects' trust, and assuring them of the existence of the necessary conditions for the correct implementation of the tests, sampling was done. All subjects in two groups of teenagers, single parent and parentless, were measured with the following questionnaires.

Research instruments

A) *Gambrill and Ritchie Assertiveness Questionnaire (1975)*: To collect data in this research, the Gambrill Ritchie self-expression questionnaire was used. This questionnaire consists of two parts and has 40 items, and each item shows a situation that requires daring behavior. In the first part, the subject is asked to state the intensity of his discomfort when facing situations requiring expression on a 5-item grading scale (degree of discomfort). In the second part, the subject must express himself according to a 5-option rating scale that specifies how likely it is to perform the recommended behavior in those situations (probability of reckless behavior). The score range of this test in each part is between 40 and 200, and the higher the subject's score in each part indicates his self-expression. The factor validity of different

materials has been obtained. The reliability coefficient of this test was 0.87 by Gambrill and Ritchie. Furthermore, they have reported 0.81 for the probability of occurrence of a behavior. The validity of this questionnaire was examined by experts of Allameh Tabatabai University of Educational Sciences and Psychology and Isfahan University, and they confirmed content validity. The reliability coefficient obtained by Bahrami through retesting has been confirmed as 0.71 for the degree of discomfort and 0.88 for the probability of behavior occurrence (23).

B) *Mindfulness Questionnaire*: It is a 39-item self-measurement scale created by Bauer et al. by combining items from the Freiburg Mindfulness Questionnaire (FMI), the Brown and Ryan Mindfulness and Mindfulness Scale (MAAS), and the Kanchuki Mindfulness Scale. Bauer and Smith (KIMS) and Bauer et al.'s Mindfulness Questionnaire (FFMQ) have been developed using the factor analysis approach. In 2006, Bauer conducted an exploratory factor analysis on a sample of university students. This questionnaire had 112 items and five components. Based on the results, four out of 5 factors were comparable to the factors known in KIMS, and the fifth factor included items from FMI and MQ, which was defined as a non-reactive state to inner experience.

The obtained factors were named as follows: observation, action combined with awareness, being non-judgmental to inner experience, describing, and being non-reactive. The observation factor includes attention to external and internal stimuli such as feelings, cognitions, emotions, sounds, and smells. The description relates to the naming of external experiences with words. Conscious action involves acting with the entire presence of mind in each moment, as opposed to mechanical action, where one's mind is elsewhere when it occurs. Being non-judgmental to inner experience includes having a non-judgmental state towards thoughts and feelings, and being non-reactive to inner experience is allowing and going to inner thoughts and feelings without getting stuck in them (24). According to the results, the internal homogeneity of the factors was appropriate, and the alpha coefficient was in the range of 0.75 (in the non-reactivity factor) to 0.91 (in the description factor). Furthermore, the correlation

between factors was moderate and significant in all cases and ranged between 0.15 and 0.34 (25). Also, in a study conducted on the validation and reliability of this questionnaire in Iran, the test-retest correlation coefficients of the questionnaire in the Iranian sample were between $r=0.57$ (related to the non-judgmental factor) and $r=0.84$ (the factor observed) was observed. Also, the alpha coefficients were acceptable (between $\alpha=0.55$ for the non-reactivity factor and $\alpha=0.83$ for the description factor) (25).

C) *Behavioral Inhibition/Activation Systems Scale (BAS/BIS) (Carver and White, 1994)*: It includes 20 self-report questions, two BIS subscales, and a BAS subscale. The BIS subscale in this questionnaire includes seven items that measure the sensitivity of the behavioral inhibition system or response to threat and the feeling of anxiety when facing the signs of threat. The BAS subscale is also thirteen items, which measures the sensitivity of the behavioral

activation system, and it includes three other subscales, which are: drive (BAS-DR, four items), response to reward (BAS-RR, five items), entertainment search (BAS-FS, four items). Items are rated on a four-point scale by the subject. Carver and White reported the internal consistency of the BIS subscale as 0.74 and the internal consistency of the BAS as 0.71. Mohammadi has reported the psychometric properties of the Persian version of this scale in Iran in Shirazi students. The test-retest reliability for the BAS scale is 0.68, and for the BIS subscale, it is 0.71 (26).

Results

The statistical sample of this research includes 76 single-parent and parentless 15-year-old boys (40 single parents and 36 without parents) of Gorgan city in the fall of 2015, selected by a non-random, targeted method.

Table 1. Mean, standard deviation of subscales of mindfulness, assertiveness and behavioral inhibition and activation scales

Variable	Group	Mean	SD
Assertiveness	Single-parent	95.11	9.02
	Without parents	100.07	9.92
Observation	Single-parent	17.47	2.06
	Without parents	16.35	2.44
Description	Single-parent	20.27	2.85
	Without parents	19.12	3.18
Action with awareness	Single-parent	19.41	4.56
	Without parents	19.17	4.39
Non-judgment	Single-parent	16.77	4.02
	Without parents	19.20	3.71
Non-reaction	Single-parent	20.50	3.97
	Without parents	19.75	4.20
Behavioral activation	Single-parent	35.52	6.41
	Without parents	33.67	5.24
Behavioral inhibition	Single-parent	38.58	7.50
	Without parents	34.37	5.37

Table 2. Box test results

Box test	46.118
Freedom degree 1	36
Freedom degree 2	17993.961
P	0.269

Considering the non-significance of homogeneity of covariances test by Box's test and non-significance of homogeneity of variances by Levine's test, it can be said with a high probability

that the data are homogeneous and the assumptions of multivariate analysis of variance have been met.

Table 3. The results of the multivariate analysis of variance (MANOVA) on the difference in the scores of the subscales of mindfulness, assertiveness and inhibition skills, and behavioral activation

Effect	Amount	F	DF	DF error	P	Squared Eta	Effect size	Power test
Pilay effect	0.403	5.657	8.000	67.000	0.000	0.403	45.254	0.999
Wilks's lambda	0.597	5.657	8.000	67.000	0.000	0.403	45.254	0.999
Hotelling	0.675	5.657	8.000	67.000	0.000	0.403	45.254	0.999
Most significant error root	0.675	5.657	8.000	67.000	0.000	0.403	45.254	0.999

The above table shows all the MANOVA tests (Pilay effect $F=0.403$, Wilks's lambda $F=0.597$, Hotelling effect $F=0.675$, the most significant error root $F=0.675$) at the (0.001) level. Therefore, P is significant. Based on this, it can be said that there is a significant difference in at least one of the subscales of mindfulness,

assertiveness and inhibition skills, and behavioral activation in boys with single parents and without parents. In order to understand this difference, a one-way analysis of variance was performed in the text of MANOVA, the results of which are included in the following table.

Table 4. The results of the one-way variance analysis in the text of MANOVA on the difference in the scores of the subscales of mindfulness, assertiveness skills, and behavioral inhibition and activation

Variable	Sum of squares	DF	Mean of squares	F	P	Squared Eta	Effect size	Power test
Assertiveness	466.867	1	466.867	5.161	0.026	0.065	5.161	0.611
Observation	23.862	1	23.862	4.622	0.035	0.059	4.622	0.564
Description	25.179	1	25.179	2.734	0.102	0.036	2.734	0.372
Action with awareness	1.107	1	1.107	0.055	0.815	0.001	0.055	0.056
Non-judgment	111.167	1	111.167	7.447	0.008	0.091	7.447	0.768
Non-reaction	11.380	1	11.380	0.678	0.413	0.009	0.678	0.128
Behavioral activation	281.253	1	281.253	8.273	0.005	0.101	8.273	0.810
Behavioral inhibition	335.559	1	335.559	8.020	0.006	0.098	8.020	0.798

The results of this test indicate that there is a difference between assertiveness and observation, non-judgment, from the variable dimensions of mindfulness and also in behavioral activation/behavioral inhibition in two groups in boys with single parents and without parents according to one-way analysis of variance. In the text of MANOVA, there is a significant difference in the level ($P<0.001$).

The contents of the above table also show that there is no significant difference in other areas of mindfulness, such as non-reaction, description,

and action with awareness, in two groups of boys with single parents and without parents.

Discussion

This research was conducted to compare mindfulness, assertiveness and inhibition skills, and behavioral activation in 15-year-old single-parent and parentless boys in Gorgan city.

A significant difference was observed in the three variables in the two research groups. The results of the research data show a significant difference in the two studied groups in mindfulness and assertiveness skills.

According to the research findings, it shows that single-parent boys in assertiveness, behavioral activation/behavioral inhibition have better conditions and preparation according to the obtained averages, which can explain the role and existence of only one parent in the growth process of the individual, who also have better characteristics and abilities following people without parents. Hasanzadeh et al., in research titled the relationship between personality dimensions, family communication patterns, and daring behavior in college students, concluded that family communication orientation is a positive and meaningful predictor, conformity orientation is a negative and meaningful predictor of behavior (13).

Also, the results of the research showed that the average behavioral activation and inhibition system in boys without parents is lower than the group of boys with single parents. This finding is consistent with another research on the significant positive relationship between the behavioral inhibition system and anxiety problems of people. Perhaps this result can be explained in this way according to Gray's point of view if the behavioral inhibition system is ineffective, a person's inhibition is damaged when faced with the symptoms of punishment and non-reward so that the person may suffer from symptoms of psychological disorders (27).

In explaining the components of mindfulness, according to the result obtained that the subscale of observation and non-judgment is different in two groups, it can also be the result of behavioral and perspective feedback on parents' existence to their children.

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In general, this kind of argument showed that the presence of only one parent in the developmental process of adolescents plays a decisive role in less tendency towards psychological problems and facilitates individuals towards inner normality, which is consistent with the individual's mental views, personality traits and individual-social adaptation of single-parent and two-parent teenagers in Isfahan city concluded that single-parent and two-parent students have no significant difference in terms of personality traits and individual-social adaptation (1).

Conclusion

The results of the research data show a significant difference in the two studied groups in mindfulness and assertiveness skills.

Furthermore, the research findings show that in the group of single-parent boys, in the assertiveness variable, behavioral activation/behavioral inhibition has better conditions and preparation according to the obtained averages, which can explain the role and existence of only one parent in the development process of the individual, which also has better characteristics and capabilities following people without parents.

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