Designing and validation a model of enhancement motivational training program for female students with depressive symptoms

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ABSTRACT

Background and Aim: Motivation as a psychological structure is effective in the well-being of a person. Accordingly, lack of motivation affects emotional states. The purpose of the current research is to design and validate the motivation training program in student girls with depression symptoms. **Methods:** The present research has been done using a qualitative and quantitative mixed research method. In the qualitative part of the research, semi-structured interview has been used. The study population included 11 female students living in Yazd and purposive sampling method used and sampling continued until data saturation and no new data were available. Based on the analysis of the themes, the pattern of enhancement motivation training program was designed, In the quantitative part of the research, For validation and reliability by the content validity of the educational program template of the CVR (Content Validity Ratio) use. Using purposive sampling method, the proposed model was provided to 24 psychologists and the validity of the data was analyzed. **Results:** The results showed that based on CVR, all 20 main themes in the proposed model were confirmed. **Conclusion:** In general, it can be acknowledged that the model based on strengthening motivation offers a different perspective in the treatment of depressed patients. Paying attention to the theoretical dimensions of this model and its application in treatment is of special importance.

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Introduction

Depression is diagnosed with feelings of sadness, hopelessness, loss of pleasure, lack of motivation, cognitive and behavioral problems (Pizagali, 2014). Depression can be a natural reaction and emotion towards loss, a symptom among the symptoms of various diseases or a disease and disorder itself, and as a disease, especially a type of it called neurotic depression is very common. Basically, depression as a disease is classified into two important components, severe depression whose symptoms are severe and clear, which usually does not cause problems in diagnosis. The second category is neurotic depression, which, although mild, can affect a person's life (Raisian Khairabadi, 2010). Describing the experience of depression is beyond words, for a depressed person time is fixed, time does not move. People imagine themselves in a vacuum and see themselves in a placeless and timeless state, completely indifferent to external changes, surrounded only by their own thoughts and feelings. Depressed people sometimes make efforts to free themselves from these thoughts and feelings, but they are quickly defeated and believe that everything in their life is fixed and they cannot change anything, and it is at this moment that they succumb to the monster of depression. Hopelessness and pessimism are common symptoms of depression (Joyner et al., 2005). Depressive disorder is a severe mental disorder and one of the leading causes of disability worldwide (Zerner et al., 2020). Depression is a common psychological disorder that originates from the complex interaction of cognitive, behavioral and biological factors and symptoms (Thibodeau et al., 2015). Depression is one of the mood disorders that affects brain functions and physiology and affects behavior, and in this regard, it disrupts the individual's performance in all aspects of life. Depression is a common disease worldwide, and it is estimated that 3.8% of the population suffers from this disorder, and its prevalence is higher in women than in men (World Health Organization, 2021). Depression is a threat to mental health, mental health is a very important factor to accept the role in different areas of every person's life. Half of the society of every country is made up of women and their mental health is very important. However, less attention has been paid to women in the field of health (Kluj, 2015, quoted by Shushtri et al., 2017).

One of the psychological structures that plays an important role in mental health is motivation. Motivation is used to describe the forces within the organism to initiate and direct behavior. Motivation also describes the intensity of behavior, and behaviors that are more intense have higher levels of motivation (Petri & Govern, 2012). Motivation makes people change themselves, their life situations and the surrounding environment, and all creatures have motivation. Motivation drives all creatures to work hard to find food, a safe place to sleep, and a mate. Contrary to popular belief, motivation is not static (Finch, 2021). Motivation is the conscious or unconscious internal experiences or processes that give energy and direction to behavior, that is, motivate a person to do something for a specific purpose (Reeve, 2020). Understanding what turns some people on and what doesn't turn others on is complicated. By applying the principles of motivation, a person can make changes in himself (Dekres, 2018); Therefore, in order to understand motivation, it is necessary to explore more about the mindset, and to change any mindset, a plan for conceptualization and learning is needed. The study of motivation is actually the study of psychology itself (Besvik, 2017).

Motivation deals with all types of behavior. The study of motivation can be seen as an attempt to explain the "why" of behavior. When one asks why a certain person or a certain animal does (or stops doing) something, one is actually asking about his motivation. When a director asks an actor to perform a certain behavior (behave in a certain way), the actor may ask, "What is my motivation for doing this?" The actor wants to know the cause of that behavior so that he can perform it correctly. It is difficult to imagine a life without motivation. Without incentives to do things, it is possible to make a decision, but whatever decision is made, there is a psychological process underlying all behaviors. Motivation deals with goal-directed behavior (Reeve, John Marshall, 2018). There are different types of motivation (Harman Jones, and Prins, 2011). Different motivations of people based on the interaction of these needs with environmental conditions, three motivations have been proposed. Internal motivation is a stimulus that is created only

because of the internal pleasure and satisfaction resulting from it and refers to the follow-up and completion of the activity. Extrinsic motivation is a stimulus that is only a means to achieve other goals. Lack of motivation means the lack of desire and enthusiasm in pursuing an activity or goal and through successive failures to achieve those goals (Chowon & Shin, 2019). Students who have high internal motivation enjoy learning more and also They continue their university studies to higher levels and have lower dropout rates than students who start learning to obtain extrinsic rewards (Singh, 2011). Motivation makes a person pay more attention to the positive feedback he receives, and this feedback affects the desired behavior of the person (Zemska, 2023). Cognitive processes can have motivational effects and also be influenced by motivation (Beswick, 2017). Cognition originates from brain structures and thinking system.

Based on brain function, activated brain structures produce specific motivations and emotions, neuroscientists are trying to answer two main questions. (1) How do internal events (thoughts) and external events (environment) activate different brain structures? and (2) how do different brain structures energize, direct, and sustain motivational and emotional states after being activated? After being stimulated, different brain structures produce different motivational and emotional states that help us deal with what is happening and cope with it (adapt ourselves). For example, stimulating one part of the hypothalamus increases hunger, but stimulating another part increases thirst. Increased activity in the prefrontal cortex is essential for empathy. While increasing activity in the (prefrontal) is necessary to overcome temptations (Kalat, 2017). According to the theory, motivation acts as a modulatory system and it affects memory function in terms of attention, perception, and the cognitive control system, and this perceptual enhancement and differentiation is caused by increasing dopamine (Popescu, Zhu, & Po, 2016).). Research results indicate a relationship between aerobic exercise, motivation and depression. Zupaksin, Lachiochenia Navikas (2022), in their research, investigated the effect of physical activity on patients with metabolic disorders and its effect on motivation and depression. In this research, it was shown that doing aerobic activities regularly increased the motivation of social participation, motivation of pleasure, motivation of fitness and reduced the level of depression. In the research (Yang et al., 2021), it was shown that the reduction of motivation is different in patients with psychological disorders, so that patients with schizophrenia and manic-bipolar disorder are similar to each other in the low level of motivation; Bipolar depression and major depression are also similar in terms of motivation. Motivation affects emotional, emotional and mental states, for example, competence is a psychological construct of motivation and is a tool for adapting people to different environments (Elliott, Duke, 2005). Strengthening motivation is effective in people's willingness and persistence to modify their eating style in order to lose weight (Fioravanti et al., 2015). Buckner and Smith's (2009) research, which investigated motivational enhancement to increase people's willingness to use cognitive-behavioral therapy aimed at reducing social anxiety, showed that the group that received motivational enhancement training showed a greater desire to continue psychotherapy sessions. Comparing the effectiveness of couples' motivational enhancement therapy with cognitive-behavioral therapy in pregnant women who were drug users. showed that both treatments were effective in reducing the risk of preterm delivery and reducing relapse (Kimberly et al., 2012). Barzegar and Musa (2015) motivational interview is effective in reducing depression. Barta (2023) patients with high autonomy motivation have a positive attitude towards receiving psychological help.

Researches show that motivation as a psychological structure is effective in a person's well-being. Accordingly, lack of motivation affects emotional states. Also, women and girls are among the more vulnerable groups against depression, both biologically and in terms of external damage that is inflicted on them. However, the issue that is important here is that internal psychological changes can reduce and eliminate these mood states, different treatments are used for depression. In this case, many of these treatments are associated with relapse, and every person will experience depression symptoms again after some time during his life. The subject that has been paid attention to in this research is the analysis of motivation from the point of view of people who have symptoms of depression. Therefore, according to the

mentioned materials, this research is aimed at analyzing motivation in female students with depression and designing and validating an educational model in order to strengthen motivation.

Method

The method of this research is a combination of sequential exploratory type. In this way, the results of the first phase of research (qualitative) have clarified the results of the second phase (quantitative). In the qualitative phase of the research, the statistical population included all female students with depression syndrome in Yazd. Sampling was done in a targeted way. The entry criteria for female undergraduate and graduate students who obtained an average score based on Beck's depression test. The study of the qualitative part was conducted with an interpretive phenomenological approach. Data analysis was performed in the qualitative section using the seven-step Claizian method. To check the reliability, the following methods were used: peer review, researcher bias clarification, participant approval, and rich description. In this study, interviews with 11 female students reached saturation, semi-structured and in-depth interviews were used in this study. After conducting interviews and data analysis, 75 sub-topics and 20 main topics were extracted. Random sampling was done from the statistical population including psychologists and counselors who had experience in clinical work; Then, the educational program along with the expert questionnaire was given to 24 psychologists and psychotherapists with doctorate degrees who had clinical experience to calculate the content validity ratio (CVR) and content validity index (CVI) based on Lawshe's method.

Results

In the qualitative part, there were 11 participants in this research and the age range of the participants was 19 to 29 years old and they had spent at least two semesters of their academic career. Based on the conducted interviews and through coding, classification and interpretation, the responses of the participants were classified into 50 sub-themes and 20 main themes. The main themes include: "competence", "personal development", "dynamism", "vitality", "self-confidence", "self-control", "adaptability", "competence", "happiness", "motivation", "desire", "foresight", "encouragement", "failure", "courage", "independence", "autonomy", "support", "self-efficacy" and "decision making".

Table 1. Primary codes, sub-themes and main themes of the qualitative section		
Initial codes	Sub-theme	Main theme
Boredom/ procrastination/ feeling inadequate	Indifference / inadequacy	Competence
Hope/making change/not despairing/asking what I need to change	Internal changes/discipline/changeability	Individual development
Taking steps towards my goals/ not complicating things/ makes me live	Being active/progress/activity	Dynamic
It excites me / makes me feel good / increases my passion in life / not everything is black anymore	Cheerfulness/ Optimism/ Optimistic about change	Vitality
I give up doing what I do / If I don't succeed in something, I believe that I can try another way / Ability to do things	Being confident/powerful	Self confidence
Leaving my work/jumping from branch to branch/ignoring responsibilities	Controlling emotions/responsible behaviors/tolerating inner insecurity	Continence
I think if I do something I'll fail / I don't see a clear vision / I'm always in chaos	Reviewing goals/insisting on the wrong path	Compatibility
It helps me deal with the fear of being weak / it takes away the numbness / I feel good inside and I think I have value	Overcome the fear of failure/belief in winning	Strength
To be happy/ to be excited/ to be happy/ to lose boredom	Satisfaction and happiness/good mood and loss of numbness/increasing satisfaction and cheerfulness	Happiness
Instigators in the desired direction/starting the engine	Stimulus/activation of behavior	Exciting

They help me focus on myself/follow things I like/try new subjects	Pleasant feeling / creating enthusiasm / feeling of enthusiasm	Desire
Determining purpose/creating meaning in life/searching to discover life	Achieving dreams/Having a goal/Motivating to identify people/Influential in setting goals and planning	Goal oriented
Being approved/Motivation increases in my work/Having energy	Admiration/visibility/positive feedback	Encouragement
Suffering because I couldn't achieve my goals/giving up my whole life/nothing is worth it anymore	Apathy/aggression/despair	Failure
I also have wishes/I like to shout	Expressing needs/following demands	Courage
It makes me less dependent on others/surviving problems/not losing life	Strength/ independence/ stubbornness	Independence
If I don't act according to the wishes of those around me, they will throw stones/ calmer environment	Personal initiative	Autonomy
The emotional attention of the people around me / I think I am valuable to them / Being taken seriously by teachers and important people in my life	Caring/feeling safe/social support	Protection
Achieving success in every part of life/doing something for myself and others/not being a burden to others	Being able/creating a valuable belief	Efficacy
The good things that others do/ the good lives of others	Seeing other people's successes/ modeling	Decision making

24 copies of the educational package were given to 24 experts, professors and consultants and we asked them to evaluate the appropriateness of the sessions as "necessary, useful but not necessary, not necessary". (The training package and the questionnaire provided to the experts are in the appendices section).

CVR values were accepted based on Lauche table. According to Lauche's table, when the number of judges is more than 20, it is acceptable if the CVR is equal to 0.42 or higher. The information in Table 2 shows that CVR was 0.42 or higher in all cases.

Table 2. CVR content validity ratio index score			
Session	Content	N_E	CVR
1	The need to address what motivates participants in life?	19	0.58
2	Necessity to address that which causes interest and desire in the participants?	20	0.67
2	Necessity of explanation about hindsight in participants	20	0.67
2	Need to address what motivates participants?	18	0.50
3	The necessity of learning to tolerate failure (how to face failure to achieve needs and goals)	23	0.92
3	The necessity of training the belief of competence (analyzing what internal and external obstacles there are in reaching this belief in the participants)	22	0.83
4	The necessity of teaching personal development strategies (responsibility, internal order and external order)	19	0.58
4	The necessity of teaching dynamism in life (using training and practice on how to get out of static and stillness in life)	19	0.58
5	The necessity of education and training, how to create the value of vitality (vivaciousness) in life (using exercises in the area of the need for recreation)	21	0.75
5	The necessity of teaching and practicing the value of happiness (comfort) (how to use this value in life)	18	0.50
6	The necessity of teaching and practicing self-control (regulating emotions, identifying emotions and how to respond to them)	20	0.67
6	The necessity of training and practicing the value of adaptability (how a person can perform effectively in interpersonal communication to achieve his needs and goals)	23	0.92

7	The necessity of teaching and practicing the value of courage (awareness of the effect of this value in all aspects of life and how to use this value)	17	0.42
7	The necessity of self-confidence training	24	1/00
8	The necessity of creating the belief of competence (paying attention to how he can achieve the necessary sufficiency in his case)	19	0.58
8	The necessity of teaching autonomy (determining one's destiny, teaching one's role in achieving one's needs and goals)	23	0.92
9	The necessity of training to achieve support and attention to emotions in this case (based on what thoughts and behavior can achieve this need)	19	0.58
9	The necessity of training and practicing self-efficacy belief	21	0.75
10	The need to address the value of independence (addressing how they can achieve this need internally and externally)	21	0.75
10	The necessity of training and practicing decision-making	22	0.83

Based on the results of all the cases raised, it was accepted and the value of the content validity index of the information shows that the CVR was higher than 0.42 in all cases, therefore, the educational program was developed and designed with an acceptable value of the validity index.

Based on the comments and suggestions, if the CVI score is found to be appropriate, the validity of the provided educational package was confirmed, and according to the results of Table 2, the prepared content is approved by the respondents.

Table 3. Content validity Index (CVI)							
Session	Content	Relevant		Clear		Simple	
		N_E	CVI	N_E	CVI	N_E	CVI
1	The need to address what motivates participants in life?	23	0.96	24	1.00	23	0.96
2	Necessity to address that which causes interest and desire in the participants?	24	1.00	23	0.96	23	0.96
2	Necessity of explanation about hindsight in participants	24	1.00	23	0.96	22	0.92
2	Need to address what motivates participants?	23	0.96	22	0.92	23	0.96
3	The necessity of learning to tolerate failure (how to face failure to achieve needs and goals)	23	0.96	23	0.96	22	0.92
3	The necessity of training the belief of competence (analyzing what internal and external obstacles there are in reaching this belief in the participants)	22	0.92	23	0.96	23	0.96
4	The necessity of teaching personal development strategies (responsibility, internal order and external order)	23	0.96	23	0.96	24	1.00
4	The necessity of teaching dynamism in life (using training and practice on how to get out of static and stillness in life)	22	0.92	21	0.88	23	0.96
5	The necessity of education and training, how to create the value of vitality (vivaciousness) in life (using exercises in the area of the need for recreation)	23	0.96	22	0.92	21	0.88
5	The necessity of teaching and practicing the value of happiness (comfort) (how to use this value in life)	22	0.92	24	1.00	22	0.92
6	The necessity of teaching and practicing self-control (regulating emotions, identifying emotions and how to respond to them)	21	0.88	22	0.92	23	0.96
6	The necessity of training and practicing the value of adaptability (how a person can perform effectively in interpersonal communication to achieve his needs and goals)	22	0.92	23	0.96	23	0.96
7	The necessity of teaching and practicing the value of courage (awareness of the effect of this value in all aspects of life and how to use this value)	21	0.88	20	0.83	21	0.88
7	The necessity of self-confidence training	22	0.92	24	1.00	23	0.96
8	The necessity of creating the belief of competence (paying	23	0.96	24	1.00	23	0.96

	attention to how he can achieve the necessary sufficiency in his case)						
8	The necessity of teaching autonomy (determining one's destiny, teaching one's role in achieving one's needs and goals)	22	0.92	23	0.96	22	0.92
9	The necessity of training to achieve support and attention to emotions in this case (based on what thoughts and behavior can achieve this need)	22	0.92	23	0.96	21	0.88
9	The necessity of training and practicing self-efficacy belief	24	1.00	23	0.96	23	0.96
10	The need to address the value of independence (addressing how they can achieve this need internally and externally)	22	0.92	20	0.83	23	0.96
10	The necessity of training and practicing decision-making	22	0.92	21	0.88	23	0.96

As mentioned before, after coding the subjects' interviews and developing a program based on it, the program was given to the therapists along with the experts' questionnaire, and after the corrections mentioned by them, the final program was developed based on their opinion.

Conclusion

The purpose of this study was to develop and validate the educational program to strengthen motivation in female students with depression symptoms. The findings showed that the educational program has sufficient credibility. In the explanation of the research findings, it can be said that the research of strengthening motivation makes a person pay more attention to the positive feedbacks he receives and these feedbacks have an effect on the desired behavior of the person (Zemska, 2023). Also, according to the presented findings, it can be understood that strengthening motivation is effective in the desire and persistence of people to modify their eating style in order to lose weight (Fioravanti et al., 2015), the results are consistent. Lachiochnye Navikas (2022), regularly doing aerobic activities increased the motivation of social participation, motivation of pleasure, motivation of fitness and reduced the level of depression. In the research (Yang et al., 2021), it was shown that motivation affects emotional, emotional and mental states. Studies are consistent with the results. The findings of Buckner and Smith's (2009) research showed that the group that received motivation training showed a greater willingness to continue psychotherapy sessions. Comparing the effectiveness of couples' motivational enhancement therapy with cognitive-behavioral therapy in pregnant women who were drug users. showed that both treatment methods are effective in reducing the risk of preterm birth and reducing substance relapse (Kimberly et al.,

2012). Barzegar and Musa (2015) motivational interview is effective in reducing depression. Research findings show that students who have high internal motivation enjoy learning more. Also, they continue university education to higher levels and have lower dropout rates than students who start learning to obtain extrinsic rewards (Singh, 2011). Barta (2023) patients who have high autonomy motivation have a positive attitude towards receiving psychological help. Motivational therapies have been designed based on experimentation and experience (Cohen, West, & Aiken, 2002; Cook, Campbell, & Shadish, 2002). Accordingly, motivational treatments have sufficient validity, because its effect has been investigated in laboratory and field experiments (Cook et al., 2002). Research has shown that strengthening motivation plays an effective role in the continuation of treatment and change in people.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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