

# journal of

# **Adolescent and Youth Psychological Studies**

www.jayps.iranmehr.ac.ir

Summer (September) 2023, Volume 4, Issue 6, 8-19

# A research synthesis of effective components of depression treatment to develop a web-based package

Ali. Fathi<sup>1</sup>, Roya. Koochak Entezar\*<sup>2</sup> & Fatemeh. Golshani<sup>3</sup>

- 1. PhD student in General Psychology, Central Tehran Branch, Islamic Azad University, Tehran, Iran
- 2. \*Corresponding Author: Assistant Professor, Department of Psychology, Central Tehran Branch, Islamic Azad University, Tehran, Iran
- 3. Assistant Professor, Department of Psychology, Central Tehran Branch, Islamic Azad University, Tehran, Iran

#### **ARTICLE INFORMATION**

#### **ABSTRACT**

#### Article type

Original research

Pages: 8-19

Corresponding Author's Info Email:

Royakentezar@yahoo.com

### **Article history:**

Received: 2022/08/18
Revised: 2022/12/11
Accepted: 2022/12/18
Published online: 2023/08/27

# **Keywords:**

Depression, Intervention, Research synthesis, Thematic Analysis, Web-based Application. Background and Aim: Treating depression as one of the most common mental disorders has always been a challenge. The aim of this study was to thematically analyze depression and find related topics in order to develop a web-based treatment package. In this research, depression and its treatment have been studied from different aspects. Methods: In order to achieve this qualitative research goal, research synthesis and thematic analysis techniques have been used. After analyzing related articles, 114 Persian and English articles indexed in reliable scientific databases were targeted. Results: The results of the study showed that depression treatment contains eighteen sub-themes which are classified into 4 main themes. Sub-themes such as "behavior modification and adjustment, reward, behavioral activation, improvement of sleep quality" were categorized as behavioral components of depression. Another major theme was the cognitive component, which included problem solving skill, changing inefficient schemas, reducing rumination, challenging negative beliefs, decision-making skill, reducing selfcriticism, fixing cognitive errors and mindfulness skill. Another main theme was related to the emotional component, which included three themes of strengthening of internal motivation, self-compassion and emotion regulation skill. Finally, the communication component was identified as the last main theme and included three components of empathy skill, effective communication skill and assertiveness skill. Conclusion: Based on the results of the thematic (theme) analysis that was done on 114 scientific research articles with the topic of depression, 4 main themes with 18 secondary primary themes were obtained to prepare the structure and content of depression intervention software.



This work is published under CC BY-NC 4.0 license.

© 2023 The Authors.

#### **How to Cite This Article:**

Fathi, A., Koochak Entezar, R., & Golshani, F. (2023). A research synthesis of effective components of depression treatment to develop a web-based package. *jayps*, 4(6): 8-19.

# Introduction

Depression is one of the most debilitating psychiatric disorders. Such a disorder affects every person. The main characteristic of depressive disorders is that people feel boredom or sadness (Zetel, 2007). Two of the main symptoms of depression are sadness or depressed mood and decreased interest and pleasure in most activities. Other symptoms include hypersomnia, insomnia or excessive weight loss or gain, feelings of guilt worthlessness, fatigue, inability concentrate. difficulty making decisions, psychomotor slowness or restlessness, and recurrent thoughts about death or suicide. (Leahy, 2012). People who have symptoms of depression suffer from common physical diseases more than others. And even while performing the task, their efficiency decreases due to inability to concentrate, low efficiency and inability to organize things. Unfortunately, 76% of people with moderate depression and 61% of people with severe depression are never treated (Leahy, 2012). By accurately identifying depression and its intervening factors, it is challenged to find efficient and effective methods to reduce or eliminate it. Although research into psychopathology may seem interesting and valuable, it will not help those who suffer unless it leads to a practical path. Therefore, the general approach in this research was to obtain a precise definition of the behavioral, cognitive and emotional symptoms of depression in order to summarize the results and formulate a treatment package for people seeking treatment.

Behavioral models of depression are rooted in the operant conditioning model of Frost (1973). According to this model, depression is a chain of loss, reduction or absence of rewards and inability to obtain rewards. In behavioral models, depression is considered according to the type of relationship between the person and the environment. Or in other words, depression is the result of lack of access to reinforcers or lack of dependence between individual behaviors and reinforcers. Therefore, based on this point of view, depression is not considered an endogenous phenomenon, but rather a part of the relationship between a person and the environment (Zetel, 2007). According to social learning theory, depressed behavior is learned observation, imitation reinforcement. In the cognitive models of

depression, the cognitive, motivational and physical symptoms of depression are either created through the increase of distortions or are perpetuated through the bias of distortions and thinking styles. Aaron T. Beck and his colleagues believe that a depressed person suffers from a negative attitude about himself, the world, and the future. In other words, the patient believes that "I am a loser", "there is nothing worthwhile in this experience" and "the future is full of failure" (Beck & Alford, 2008). Seligman et al. (1978) believed that depression is caused by self-criticism and helplessness as a result of specific patterns of expectations or attributions that a person creates to justify his failure. Depression is the result of a person's tendency to attribute failure to internal and stable traits (for example, inability) instead of attributing it to internal but unstable traits (for example, not trying). Seligman's learned helplessness model was later modified to the hopelessness model of depression by Abramson et al. (1989). According to the hopelessness model, specific symptoms of depression (such as lack of energy, lack of purposeful behaviors, low self-esteem, suicidal thoughts, and sadness) are partly the result of people's specific interpretations of unpleasant events (Abramson et al., 1989). Hoeksma (1991) emphasizes the style of thinking instead of focusing on the content of thoughts. He believes that people who ruminate are immersed in their thoughts. Repetition of negative thoughts provides the ground that thoughts get trapped in the person's mind, access to negative content of thoughts increases, self-efficacy decreases, and the number of solutions and creative problem solving is limited. A ruminating thinking style increases the likelihood of depression. Wells (2009) proposed the metacognitive model of rumination depression. Depressed and ruminators focus on thoughts associated with negative emotions and believe that rumination will help them solve their problems. This is while they evaluate their rumination uncontrollable. Thus, rumination leads to depressive behavior (avoidance), depressive thoughts ("this is so disappointing"), and low (anxiety). Other cognitive models consider depression to be caused by an inability to use selfish or self-loving thinking, excessive focus, and passivity (Leahy, 2012). Levinson et al. (1984) consider maladaptive interpersonal behaviors as the main cause of depression.

Kellerman et al. (1984) also believe that depression is caused by inappropriate performance in interpersonal relationships, such as interpersonal conflicts and termination of valued relationships. According to this model, communication problems during childhood, such as the loss of parents, and the like, as well as current interpersonal problems, such as marital conflicts, accelerate or intensify depression. As mentioned, different approaches consider different factors involved in the creation and continuation of depression, and for this reason, we see a wide variety of treatment methods and techniques.

#### Method

The method used in this research is research synthesis and it seeks to combine the findings of researches that are common in answering the research question. The research approach is qualitative and based on the meta-combination of theoretical frameworks and previous researches, which is accompanied by the analysis of the theme and then the meta-combination of the analyzes performed. The studied society, the scientific articles and documents are indexed and related in databases related to the subject of depression and its treatment, quantitatively or qualitatively, and have been published since 1980. The samples have been selected with a purposeful method and have progressed to the point of information saturation. In this way, the text of each of the articles was briefly studied once in order to get a general impression and its relation to the research topic, and then these units were analyzed and coded. As the unit of registration, instead of word, sentence or paragraph or the whole text was considered. By reading the entire text, wherever a topic related to depression was mentioned, it was recorded under the title of key sentences in the table and assigned a code. Coding of semantic units continued until the saturation limit was reached, i.e. when no new codes were obtained, and after the completion of the analysis units process, these codes were categorized based on the similarity or affinity they had with each other. Finally, secondary and main themes were extracted from the qualitative data.

# **Implementation**

After the purposeful selection of documents and their screening, the final samples were selected. The steps of this analysis include the initial determination of the definitions of each of the concepts and structures of the research subject and applying these definitions to each paragraph of the specialized texts determined for analysis. The process of doing this includes initial coding, creating classes and subclasses, and extracting meaning. Primary coding means checking the headings, sub-headings and main points of the text and placing them in arbitrary classes. After initial coding, the obtained classes are reduced in more general classes. In other words, classes are classified. The purpose of reclassifying the obtained classes is to reduce the number of classes by grouping common classes together. The purpose of carrying out this process is the initial classification and re-classification of these classes and gaining meaning from the studied phenomenon and its description in order to increase our understanding of that phenomenon. In this research, based on the relevance of the selected sources to the research topic, the source was selected purposefully until the study reached saturation. In this way, the dimensions and components of the proposed model of the current research were obtained, and after the proposed model was compiled using the qualitative method, it was internally validated using the opinion of experts.

# **Results**

In order to ensure the initial assurance of the evaluation result of each theme, two criteria were also examined separately. The first criterion was the existence of at least five studies related to the effect or relationship of that theme with depression, and the second criterion was the existence of at least a 5-year period of related research for that theme. In conclusion, after reviewing and analyzing the mentioned sources, 76 English studies and 38 Persian studies were included in the theme classification table.

Inductive thematic analysis led to the results that can be seen in detail in the table below.

Table 1. Thematic analysis results of factors and processes related to depression and web-base therapy				
Main themes	Sub themes	Primary code (concept)		
Behavioral	Correcting and adjusting behavior			
component	(deficiencies and excesses of behavior)	Reducing passive behaviors		
		Increasing self-care behaviors		
		Reducing self-harming behaviors and negative addiction		

		Increase physical activity
		Improving and correcting nutrition
		Exercise
		Increase positive behaviors
		Reducing physical, verbal and passive aggressive behaviors
	Reward	Self-rewarding
		Reward-oriented assignments
		Positive feedback
		Improve the ability to earn rewards
		Reward search
		Create an amplifier
	Activation of effective and enjoyable behaviors	Activity planning
		Activity timing
	Improving health and sleep quality	Sleep restriction
		Changing sleeping pills
		Regulating sleeping hours
		Avoiding daily sleep
		Sleep cycle regulation
		Limiting the use of stimulants
Cognitive	Problem solving skills	explaining the problem
component		Conceptualizing the problem
		Assess obstacles
		Finding a solution
		Choose a solution
		Implementation of the solution
	Modifying inefficient schemas	Creating adaptive schemas
		Identifying and challenging schemas - schema
		failure  Identifying and challenging schemas - schemas of
		failure and shame
		Identifying and challenging schemas - schema of
		social isolation
		Identifying and challenging schemas - schema of worthlessness
		Identifying and challenging schemas - schema of mistrust
		Identifying and challenging schemas - Vulnerability schema
		Identifying and Challenging Schemas - Rigorous Criteria Schema

	Reduce rumination	Accepting disturbing thoughts
		Tolerance of uncertainty
		Tolerating internal conflict
		Acceptance of reality
		Returning attention
	Correcting negative beliefs	Changing the negative documentary style
		Strengthening spiritual beliefs
		Set new values
	Decision making skills	Accepting doubts and avoiding reassurance
		Analysis of advantages and disadvantages
	Reducing self-criticism	Extreme perfectionism
	reducing sen enticism	The right to make mistakes
		Admitting a mistake
		Challenge with strict standards
	Challenges with cognitive errors	Cognitive restructuring
		Identifying and challenging cognitive errors - labeling
		Identifying and challenging cognitive errors - regret
		Identifying and challenging cognitive errors - negative predictions
		Identifying and challenging cognitive errors - personalization
		Identifying and challenging cognitive errors - bipolar thinking
		Identifying and challenging cognitive errors - catastrophizing
		Identifying and challenging cognitive errors - overgeneralization
	Mindfulness skill	Focus on daily activities
		Avoid distractions
		Being in the moment
		Observation of current thoughts and feelings
		Awareness of bodily sensations
Emotional	Strengthening internal motivation	setting goals
component	zazagarzanig merinai monvanon	Creating goal-related behavioral habits
		Motivating
		Cultivating a sense of mastery
		Discovery or production of meaning
	Self-compassion	Positive self-talk

		Self-responsibility
		Strengthen self-confidence
		own charter
	Emotion regulation skills	Identifying and naming emotions
		Emotional validation
		Strengthen emotional intelligence
		Management of emotions - anger and stress and
		Challenge with suffering and despair
Communication	The skill of empathy	Intimacy
component		Understanding
		social support
		Responsibility in the relationship
	Effective communication skills	Interaction
		Reward others
		Speaking and listening skills
		Connecting and establishing a relationship
		Emotional kindness
		Attention
		Cooperation
	Daring skills	show emotions
		Self-esteem and self-esteem
		express need
		Assertive behavior
		Bold behavior
		Assertive

A total of 18 primary themes were identified, which were classified into 4 main themes. One of the main themes identified was the behavioral component, which included four primary themes; Modifying and adjusting behavior, rewarding, activating effective and enjoyable behaviors and improving sleep quality and hygiene. This theme shows the role of behavioral problems or the absence of certain behaviors in increasing the risk of depression. Another main theme expressed the cognitive component, which included 8 primary themes; problem-solving skills, correcting ineffective schemas, reducing rumination, correcting negative beliefs, decision-making skills, reducing self-criticism, challenging cognitive errors and mindfulness skills. This main theme received the most primary themes. Due to the fact that the themes identified in terms of theoretical foundations and its functional aspect were related to the cognitive ability and performance of people, they were named as cognitive components. Another main theme was related to the emotional component, which included three themes of strengthening internal motivation, self-compassion, and regulation skills. Emotional ability emotional arousal were among the reasons that caused these themes to be included in the component. Finally, emotional communication component was identified as another main theme, which included three

components of empathy skills, effective communication skills, and daring skills.

# **Conclusion**

The purpose of the present study was to analyze the topic of depression and find related themes in order to develop a web-based treatment package. Based on the results of the thematic analysis on 114 scientific research articles on depression, 4 main themes with 18 primary subthemes were obtained to prepare the structure and content of depression intervention software. The first main theme identified was the behavioral component, which included four primary themes; Modifying and adjusting behavior, rewarding, activating effective and enjoyable behaviors and improving sleep quality and hygiene. The behavioral model of depression emphasizes the predictability and control of outcomes related to behavior. Depression is often the result of passive, repetitive, and unrewarding behavior. The goal of behavioral therapy is to gradually increase the intensity and frequency of rewarding behaviors. In this approach, the main emphasis is on better behavior, not better feeling (Levinson et al., 1984).

Modification and adjustment of behavior: Although depression has distinct underlying behavioral factors, behavioral deficits and excesses generally and majorly include those behaviors that the depressed person repeatedly repeats or behaviors that the depressed person often does not have a plan to do. This category, as it was proposed in the first behavioral theorizing about depression, is referred to as silence (behavioral treasure tends to weakness reinforcement insufficient to disproportionate effort). Costello (1972)suggests that sufficient reinforcers may exist in the environment and the individual may still be able to benefit from them, but for some reason they have lost their ability as reinforcers.

Reward: The theoretical model of self-control emphasizes the biases in self-evaluation and self-rewarding processes. Depressed people selectively pay attention to negative aspects of themselves and the world. Self-evaluation is based on biased criteria, criteria that are very difficult to achieve, so that rewards are rarely awarded. Using scientific evidence, Rosensky et al. (1977) found that depressed and non-depressed individuals motivate themselves differently.

Activation of effective and enjoyable behaviors: This technique is used for activities that are pleasant for a depressed person and can lead to rewards, but he does not take action on them by himself. Rewards can be intrinsic (such as pleasure or a sense of mastery and success) or extrinsic (such as social attention). Increasing rewards helps to improve one's emotions. Also, another result will be the reduction of depressing thoughts through the patient's focus on other activities (Beck et al., 1979).

Improving the quality and health of sleep: One of the most common consequences of depression is insomnia and oversleeping. Insomnia is highly correlated with depression and can be treated with sleep hygiene, cognitive therapy for insomnia, or sleep restriction therapy. Excessive sleepiness in these patients can also be treated by planning activities, using alarm clocks, changing the use of drugs that make the patient drowsy, etc. (Leahy, 2012).

Another main theme expressed the cognitive component, which included 8 primary themes; problem-solving skills, correcting ineffective reducing rumination, schemas, correcting negative beliefs, decision-making reducing self-criticism, challenging cognitive errors and mindfulness skills. This main theme received the most primary themes. Due to the fact that the themes identified in terms of theoretical foundations and its functional aspect were related to the cognitive ability and performance of people, they were named as components. In the cognitive treatment of depression, the focus is on selfthoughts, dysfunctional assumptions fundamental beliefs or schemas, conceptualization of the problem, and the relationship of the three intellectual levels to ineffective coping strategies, and current relationships (Leahy, 2012).

Problem solving skills: Depressed patients provide fewer alternative solutions than non-depressed people, and the alternative solutions they provide are less effective than those produced by non-depressed people (Marx et al., 1992). Desorilla considers the root of depression to be the lack of problem-solving skills, which lead to continuity and ordinary and trivial problems and contribute to despair (Desorilla, 2009). The problem solving technique is very useful to help a depressed person get rid of activities that seem difficult

and exhausting. By developing problem-solving skills, a person can be helped to see their failures as solvable problems, rather than factors that disturb the joys of life. For this reason, it is necessary to help them in identifying the problem, gathering information, brainstorming about possible solutions, prioritizing solutions, choosing a solution and implementing the chosen solution, evaluating the results of implementing the solution and modifying it if necessary (Leahy, 2012).

Modifying dysfunctional schemas: Schemas (sometimes called core beliefs) are also considered as a model for understanding mental disorders (Yang et al., 2003). Mental disorders are associated with unique fundamental beliefs about self and others that lead to the formation of specific coping styles. For example, people fundamental beliefs about who have irresponsibility or laziness may compensation by setting very high standards for themselves and others, and if they fail to achieve desired goals, it leads to their vulnerability to depression (Leahy, 2012). Certain dimensions of the Young Schema Ouestionnaire, which include shame. deficiency, poor self-regulation, failure to achieve, and social isolation, are related to depression (McBride et al., 2007).

Reducing rumination: Wells proposed the metacognitive model of rumination and depression. Depressed ruminators focus on thoughts associated with negative emotions and believe that rumination will help them solve their problems. This is while they evaluate their rumination as uncontrollable. Therefore, rumination leads to depressive behavior and low mood. These dysfunctional reactions in turn intensify rumination (Wells, 2006).

Correction of negative beliefs: among the main elements in Beck's cognitive theory regarding mood disorders, the existence of negative self-thoughts is. It is because of their sudden presence that they are obviously triggered by events (and not necessarily guided thought). They seem immediate and often justified, meaning that Fardain often accepts these thoughts as fact without analysis. As a result of these thoughts, mood is disturbed and more thoughts and ideas fill the mind, which causes a downward spiral of depression (Clarke et al., 1997).

Decision-making skills: lack of motivation, frustration and self-criticism usually lead to

difficulty in making decisions. Depressed people are usually afraid to make a decision that will lead to failure. A failure that is not accepted from the perspective of these patients. Of course, not making a decision is itself a decision (Leahy, 2012).

Reducing self-criticism: One form of selfcriticism is the feeling of inadequacy. This type of self-criticism is usually related to frustration and feelings of inferiority. Another form of selfcriticism is related to self-hatred. (Gilbert, 2009) Many depressed patients blame themselves for having depression and express such statements about themselves: "I shouldn't be depressed" or "I should be able to solve my problems on my own". The patient is caught in a cognitive loop. On the one hand, "I am depressed because I constantly blame myself for being depressed" and on the other hand, "I must blame myself because I am depressed." Another clinical feature of depressed people is extreme selfcritical thoughts, "I'm a loser" or "I'm a failure", which is considered as the basis and perpetuation of other symptoms of depression, such as rumination and hopelessness (Leahy, 2010).

Challenge with cognitive errors: according to Beck's cognitive theory, one of the elements in the field of mood disorders is regular logical errors in the thinking of depressed people. Several logical errors have been identified so far, such as: optional inference, extreme generalization, selective abstraction, magnification, minimization, personalization, bipolar thinking (Clark et al., 1997).

Mindfulness skills: In mild depression, a person ruminates on negative issues and often experiences feelings such as boredom, irritability, and anger, while feeling sorry for himself and desperately needing reassurance from others. People who experience mild depression are preoccupied with the past and are pessimistic about the future (Clark et al., 1997). Mindfulness means paying attention to the present in a specific, purposeful and non-(Kabat-Zinn, judgmental way 1990). Mindfulness means being in the moment with whatever is happening now, without judgment and without commenting on what is happening. That is, pure experience without explanation (Segal et al., 2002). When we are mindful, we accept the flow of each moment as it comes and goes (Linehan, 2014). Obviously, by being present in the present moment, a conscious

person keeps his mind safe from regrets about the past and pessimism about the future.

Another main theme was related to the emotional component, which included three themes of strengthening internal motivation, self-compassion, and emotion regulation skills. Emotional ability and emotional arousal were among the reasons that caused these themes to be included in the emotional component. Brown and Harris (1987) emphasize the experience of despair and state that the events related to the loss of a person disappoint and the vulnerability factors lower his self-esteem. The pain and suffering resulting from this extreme response to lack takes the pathological form of depression and the cycle continues. Aloy and Abramson (1995) also mentioned hopelessness as the main factor in the occurrence of depression. Depression occurs following the loss of an important source of personal value and self-esteem, and this is when a person is caught in a cycle of self-control where there is no response to break the gap between the actual existing state and the desired state. As a result, the individual is caught in a persistent pattern of "self-focused attention" that increases negative self-deprecation and feelings worthlessness, functional inadequacies, and a depressive self-focused style (Pyschensky & From Greenberg, 1991). a dialectical constructivist perspective, depression involves an emotional disturbance of the "self" and involves the loss of a sense of vitality and the ability to organize in a flexible way. Instead of experiencing themselves as strong, lively and happy, depressed people consider themselves as weak, damaged and deserving of blame and react to problems with very low self-esteem. Due to the activation of emotional memories related to great calamities, failures, irritations, or being neglected, he is organized as hopeless, helpless, incompetent, and insecure. These general memories originate from people's previous life experiences and are often related to their formative years. When these memories are these emotion-based organizations reduce people's capacity both in terms of processing and regulating their emotional experience (Greenberg & Watson, 2005).

Strengthening intrinsic motivation: Depressed patients often complain of lack of motivation and believe that "I have no motivation to do

anything and I can't do anything on my own." In general, to help these patients, we should help them identify their goals and create a better life (valuable life). The main focus of this method is on the goals, choice and ability to bear some adversities along with creating correct behavioral habits that bring the patient closer to his goals (Leahy, 2012).

Self-compassion: Cultivating compassion and kindness towards oneself and others as a way to promote well-being has been considered in Eastern traditions for thousands of years (Leighton, 2003). The Dalai Lama (1995) has defined compassion as being sensitive to one's own and others' pain and suffering along with a deep commitment to trying to resolve it. Neff (2003), one of the pioneers of research on selfcompassion, has introduced three main components for this purpose: Being open and aware of your personal pain and suffering, being kind to yourself and not self-judgmental, being aware of sharing your experiences of pain and suffering with others instead of feeling ashamed and alone. The feeling of being cared for, accepted, and having a sense of belonging and dependence on others is essential for our physiological maturity and well-being (Siegel, 2007). These cases are related to specific types of positive affect that cause well-being and the neuro-hormonal profile of increased endorphins and oxytocin (Gilbert, 2009).

Emotion regulation skill: emotion regulation is a process through which people can influence what emotions they have, as well as the time and manner of experiencing emotions. Faced with stressful events, people use different emotion regulation strategies to regulate their emotions (Thompson, 2007). In general, emotion regulation is a structure that is thought to have a great impact on mental and physical health and plays an important role in adapting to stressful life events. Smith and Arrigo (2009) state that strong emotion regulation has important implications for health, especially among people with chronic illnesses. In a way, it can be said that emotion regulation is a special form of self-regulation (Theis & Bretslavsky, 2000). Emotion regulation training can improve their mental health by making people aware of positive and negative emotions and accepting and coping effectively with them (Dimeff & Komer, 2007). In emotion regulation training, exercises and skills are emphasized,

the use of which leads to the acceptance of emotional problems, the development of a healthy lifestyle, the opposite action against negative emotions, which ultimately leads to the facilitation of changes. Also, teaching emotion regulation by encouraging them to consider short-term and long-term goals, doing enjoyable daily activities and exercises to deal with anger, guilt, etc. can provide them with effective coping strategies (Linehan, 2000).

Finally, the communication component was identified as the last main theme and included components: empathy, effective communication skills, and daring skills. According to Kevin's interpersonal reward model, depressed people are trapped in a vicious circle. In such a way that at first they start to praise and complain about everyone and everything so that they can get the attention and confidence of others. After attracting the attention of others, they continue to do this in order to receive more attention, unaware that continuing this action will lead to their rejection by others, which in turn will reduce the reward and social support and confirm the evidence of these people's negative self-concept. . Since depression increases complaining, help-seeking, and reassurance-seeking, others find these behaviors annoying and either avoid depressed people or punish them with their criticisms. These negative reactions by others lead to further depression and perpetuation of the cycle. As a result, behavioral models that emphasize the interpersonal nature of depression focus on reducing patient complaints and complaints and increasing positive interpersonal behaviors (for rewarding others instead complaining). The interpersonal theory of depression is not considered a cognitive behavioral approach and is based on Hari Stack Sullivan's social psychoanalytic model of psychopathology.

Empathy skill: Clark et al. (2009) believe that depressed people have less empathy and altruistic motivation. Extensive researches that have been conducted in the field of empathy indicate that empathy as an important capacity to show consistent and efficient behavior in social interactions, has a significant role in connection with psychological disorders and their treatment methods. According to Vazen, Piotrowski and Valkenburg, empathy is one of the important emotional abilities and plays an important role in the development of mental

health and optimal performance. Empathy has a multidimensional structure, consisting emotional and cognitive dimensions. In their early studies, researchers have emphasized empathy, mainly on its emotional nature, and defined it as observed emotional responses to the perceived emotion of others. Emotional empathy is related to certain emotional arousals that are experienced in the face of people's misfortunes and experiences that have already occurred. While cognitive empathy is related to the mental understanding of another person's misfortune without having previous experience. In general, it can be said that empathy is the fundamental capacity of people that helps to regulate relationships, support joint activities and group cohesion.

Effective communication skills: Depression is usually associated with deficits or problems in social behavior. For this purpose, it is necessary to consider social skills such as appropriate interactions, grooming, speaking and listening skills, the ability to reward others, responsibility in relationships and the desire to punish or blame others (Leahy et al., 2012). When there is a problem in communication, this problem should be looked for in two sources of information, i.e. the sender and the receiver of the message (Gourney, 1977). It is very important to teach communication skills in patients whose relationships are in trouble. It is necessary to teach the patient active listening skills and effective speaking skills such as correcting sentences and expressing emotions Epstein, 1990). (Bakum Effective communication skills help patients develop new relationships. Strengthen current relationships and deal with conflict situations. In particular, Linehan (2014) emphasizes skillfully achieving goals, building relationships, and ending destructive and mediocre relationships.

Boldness: Bold behavior refers to the behavior that a person displays to protect his rights in front of others. Expressing desires and wishes, expressing feelings and opinions, rejecting requests that one does not want to do, asking others and not allowing others to take advantage of them are examples of bold behaviors (Spiegler, 2010). There is a high negative correlation between self-expression and depression. In fact, self-expression is a positive feature, despite which a person is led to a healthy personality without complexes, and on the other hand, lack of boldness and

determination leads a person to depression. An indecisive person is never satisfied with himself and makes life difficult for himself (Moin et al., 2006).

Among the limitations of the research, we can point out the impossibility of closely monitoring learning people's and exercises. impossibility of extending the results to patients with severe depression, and the lack of attention to the background of people's depression and their personality type. In conclusion, in order to fill the gap between the initial contact and the initiation of psychotherapy, it is suggested to use web-based depression intervention as the main treatment or complementary treatment during the waiting periods. At the same time, in deprived and remote areas where mental health services are not available, the use of such software can be very effective. Also, with its development in other areas of mental health and the treatment of other disorders, including anxiety, obsession, etc., a wider range of treatment seekers can be covered. Another important point was the possibility of using 24hour support services and a space to exchange experiences in the application environment so that people with depression can go through the treatment steps with higher motivation and create a dynamic, positive and effective atmosphere for themselves and others by sharing their positive experiences.

# **Conflict of Interest**

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

# References

- Azad-Khaneghah, P., Neubauer, N., Miguel Cruz, A., & Liu, L. (2020). Mobile health app usability and quality rating scales: a systematic review. Disability and Rehabilitation: Assistive Technology, 0(0).
- Berk,M; Sarris,J.; Coulson,C.E. & Jaka,F.N. (2013). Lifestyle management of unipolar depression. Acta Psychiatrica Scandinavica.
- Brettschneider, C.; Djadran, H.; Härter, M.; Löwe, B.; Riedel-Heller, S. & König, H.-H. (2015). Cost-Utility Analyses of Cognitive-Behavioral Therapy of Depression: A Systematic Review. Psychotherapy and psychosomatics. 84(1).
- Deady, Mark; Kay-Lambkin, Frances.; Teesson, Maree & Mills, Katherine. (2014). Developing an integrated, Internet-based selfhelp programme for young people with depression and alcohol use problems

- Diedrich, A., Grant, M., Hofmann, S. G., Hiller, W., & Berking, M. (2014). Self-compassion as an emotion regulation strategy in major depressive disorder. Behaviour research and therapy, 58, 43-51.
- Donker, T., Petrie, K., Proudfoot, J., Clarke, J., Birch, M.-R., & Christensen, H. (2013). Smartphones for smarter delivery of mental health programs: A systematic review. Journal of Medical Internet Research, 15(11).
- Francis, J., Cross, D., Schultz, A., Armstrong, D., Nguyen, R., & Branch-smith, C. (2020). and wellbeing in young people with cystic fibrosis.
- Hoffmann, F., Banzhaf, C., Kanske, P., Gärtner, M., Bermpohl, F., & Singer, T. (2016). Empathy in depression: egocentric and altercentric biases and the role of alexithymia. Journal of Affective Disorders, 199, 23-29.
- Krieger, T., Altenstein, D., Baettig, I., Doerig, N., & Holtforth, M. G. (2013). Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. Behavior therapy, 44(3), 501-513.
- Leahy, Robert L. (2012). Treatment plans and interventions for depression and anxiety disorders, 2nd Ed. New York: Guilford Press.
- Lipschitz J, Miller CJ, Hogan TP et al (2019) Adoption of mobile apps fordepression and anxiety: cross-sectional survey study on patient interest andbarriers to engagement. JMIR Ment Health 6(1):e11334.
- O'Connor, L. E., Berry, J. W., Weiss, J., & Gilbert, P. (2002). Guilt, fear, submission, and empathy in depression. Journal of affective disorders, 71(1-3), 19-27.
- Proudfoot, J., Clarke, J., Birch, M.-R., Whitton, A.E., Parker, G., Manicavasagar, V.,Hadzi-Pavlovic, D., 2013. Impact of a mobile phone and web program on symptomand functional outcomes for people with mild-to-moderate depression, anxiety andstress: a randomised controlled trial. BMC Psychiatry 13(1).
- Rubeis, G. (2020). E-mental health applications for depression: an evidence-based ethical analysis. European Archives of Psychiatry and Clinical Neuroscience.
- Rupke, S. J., Blecke, D., & Renfrow, M. (2006). Cognitive therapy for depression. American Family Physician, 73(1), 83-86.
- Sadock BJ, Sadock VA. Kaplan & Sadock's (2007). Synopsis of Psychiatry/ Behavioral

- Sciences/ Clinical psychiatry. 10 The Ed. Philadelphia: Lippincott Williams & Willkins.
- Sadock V, Kaplan H. Translated by Rezaee F. Synopsis of Psychiatry Behavioral Sciences. 1 st Edition, Arjmand: Tehran, 2008.
- Till Beiwinkel, Tabea Eißing, Nils-Torge Telle, Elisabeth Siegmund-Schultze & Wulf Rössler, (2017), Effectiveness of a Web-Based Intervention in Reducing Depression and Sickness Absence: Randomized Controlled Trial. Journal of medical internet research.
- Todder, D., Caliskan, S., & Baune, B. T. (2006). Night locomotor activity and quality of sleep in quetiapine-treated patients with depression. Journal of clinical psychopharmacology, 26(6), 638-642.
- R. & Mc Ghee, E.M. (2004). The effectiveness of Web-based vs. non-Web based interventions:
   A meta-analysis of behavioral change outcomes. Journal of Medical Internet Res.

- Whitfield, G.; Hinshelwood R; Pashely, A; Campsie, L & Williams, C. (2006). The impact of a novel computerized CBT CD Rom (overcoming depression) offered to patients referred to clinical psychology. Behavior Cognitive Psychotherapy. 34.
- Wright, J.H.; Wright, A.S. Albano A.M.; Basco, M.R.; Goldsmith, L.J.; Raffield T. & Otto, M.W. (2005). Computer-assisted cognitive therapy for depression: Maintaining efficacy while reducing therapist time. Am J Psychiatry. 162.
- Zuroff, D. C., Koestner, R., Moskowitz, D. S., McBride, C., Marshall, M., & Bagby, M. R. (2007). Autonomous motivation for therapy: A new common factor in brief treatments for depression. Psychotherapy Research, 17(2), 137-147.