




## Assessing the Effect of Acceptance and Commitment Therapy on the Mental Health and Job Satisfaction of Hospital Staff

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### Quantitative Study

#### Abstract

**Background:** The mental health and job satisfaction of an organization's members are two of the most essential factors in its progress. The present research was conducted with the aim to assess the effect of acceptance and commitment therapy (ACT) on the mental health and job satisfaction of hospital staff.

**Methods:** The current semi-experimental study was performed with a pretest-posttest design and a control group in 2022. The statistical population included the medical personnel of Baghdad Hospital, Iraq. Using a simple random sampling method, 140 people were chosen as a statistical sample and divided into two experimental and control groups. A demographic characteristics questionnaire, and the General Health Questionnaire (GHQ; Goldberg, 1972) and Job Descriptive Index (JDI; Smith et al., 1969) were utilized for data collection. The data analyses were performed utilizing analysis of covariance (ANCOVA) in SPSS software.

**Results:** The results showed that ACT was effective on job satisfaction ( $F = 7.76$ ;  $P < 0.001$ ) and mental health subscales including physical symptoms ( $F = 9.42$ ;  $P < 0.001$ ), anxiety ( $F = 16.84$ ;  $P < 0.001$ ), social dysfunction ( $F = 10.34$ ;  $P < 0.001$ ), and depression ( $F = 10.64$ ;  $P < 0.001$ ).

**Conclusion:** It can be concluded that ACT improved hospital treatment staff's mental health and job satisfaction. As a result, special consideration should be given to issues concerning the mental health of treatment personnel such as doctors and nurses. Psychological interventions can be very effective in this regard.

**Keywords:** Acceptance and commitment therapy; Mental health; Job satisfaction

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## **Introduction**

Every organization requires different resources to achieve its goals, and without a doubt, the most essential resource in any organization is the people who work there (Tyrberg, Carlbring, & Lundgren, 2017). Mental health and job satisfaction are two factors that influence organizational efficiency. In hospital environments, evaluating patients, caring for and providing ways to maintain and protect patients and the injured, and making correct decisions require a suitable level of mental health and job satisfaction, and can significantly impact the quality of health services (Joharifard, Nouri, Hazrati, & Fekryan-Arani, 2022).

The mental health of a society is one of the axes of evaluating that society's health. Without a doubt, mental health is critical to the dynamism and efficiency of any organization. Hospital treatment personnel come from various socioeconomic backgrounds and treat a wide range of patients (Welsch & LaVan, 1981). As a result, the maintenance of their mental health is crucial to the maintenance of the health of the society. In hospital working conditions, people's performance and efficiency are harmed, which is frequently accompanied by pressure and worry. Tension or anxiety is caused by the interaction of various stressful factors and, more importantly, how they perceive this phenomenon (Mirshekar, Hashemi, Mehrabzadeh Honarmand, & Arshadi, 2019).

Mental health positively impacts executive behaviors in the workplace, which can affect the organization's performance. The mental health maintenance of healthcare centers' staff and hospital employees, including doctors and nurses, is essential because their physical and mental health directly impacts patients' health (Barker & McCracken, 2014). Doctors and nurses working in health centers and hospitals face a variety of injuries and risks, including physical, chemical, ergonomic, safety, and psychological hazards (Abdollah, Sadeghi, Roohafza, Tavakoli, Dadras, & Kouchakzadeh, 2020). Tension, work pressure, a heavy workload, seeing people injured due to accidents and terrible events, and other factors can all contribute to psychological problems. These issues reduce job satisfaction and increase absenteeism to the point where it may jeopardize people's ability to work (Abow, Razak, Abulkassim, Adnan, Rahi, & Fadhil, 2022).

Job satisfaction refers to the positive feelings and attitudes people have toward their jobs, and if this satisfaction fades, a person may leave his/her job. Job satisfaction is among the most essential factors in an organization's success (Happell, Martin & Pinikahana, 2003). Pursuant to surveys, increasing job satisfaction increases a person's creativity and productivity, while decreasing work motivation and absenteeism. Job satisfaction is a good emotional state finding from an individual's understanding of work conditions. Dissatisfaction with one's job can be the source of complaints about poor performance, poor product quality, difficulties caused by a lack of motivation, and other issues (Etemadinezhad, Seyyed, Jamshid, & Zinat, 2018).

Some studies regard job satisfaction as a psychological factor, referring to it as a type of emotional adaptation to the job and utilization manners, in which the requested job provides the requested pleasure for the person and the person is satisfied with their job (Axenova, 2022). If, on the other hand, the expected job does not give the desired satisfaction and pleasure, the individual begins to condemn his/her job and attempts to change it. Job satisfaction is a phenomenon that extends beyond the boundaries of the organization, and its effects extend into a person's private life outside of the organization (Mark & Smith, 2012). Employees develop various states as a result of their work. Employees who are satisfied with their work

are further motivated and interested in their duties. In contrast, employees who are dissatisfied with their jobs are less interested in and committed to performing tasks. Job satisfaction is the fundamental condition of a person's presence and cooperation with the formation, and this is because job satisfaction plays an essential role in increasing productivity, commitment to the formation, ensuring bodily and mental health, accelerating the learning of new job skills, and expanding the individual's morale (Weng, Huang, Tsai, Chang, Lin, & Lee, 2010).

Job satisfaction among hospital employees is a critical issue for healthcare organizations. According to Bethay, Wilson, and Moyer (2009), job dissatisfaction is one of the most influential factors in leaving the medical profession. According to previous researches, factors such as nurses' level of education, shift work, job description, and creativity and innovation in the workplace can all affect their job satisfaction (Gorgulu & Akilli, 2017). In the long run, failure to address the issue of medical staff's job satisfaction disrupts the organizational system, resulting in rebellion, a decrease in the sense of responsibility, and eventually, leaving the service (Tahan & Sabriyan, 2023). Job satisfaction among treatment personnel is an essential factor that contributes to the improvement of their services.

One aspect of job satisfaction that is frequently overlooked is its connection to employees' mental health (Shahmoradi, Ghorbani, & Sotoodeh Asl, 2021). The mental strain caused by job dissatisfaction can predispose individuals to diseases such as heart attacks. One of the essential dimensions in work environments is to pay attention to employees' mental health. The general public spends most of their time in the work environment; therefore, the conditions can affect their mental health (Gaudiano et al., 2020).

According to studies, the family environment, the quality of married life, and perceived family support can influence work environment variables such as job stress and burnout, reducing their effects and moderating job satisfaction and innovation (Yanchus, Periard, Moore, Carle, & Osatuke, 2015). Furthermore, research findings have revealed that family conflicts can be brought into the workplace, lowering employee motivation and negatively impacting the organization's services. Unfavorable organizational conditions, high employee stress, and work pressure exacerbate these effects (Mirzavandi, 2020).

Work environment improvement is regarded as one of the most critical dimensions of human resource development and improvement. In this regard, economic, service, educational, and industrial institutions have, in recent decades, paid attention to attracting physical and mental health workers to increase productivity (Habibian, Sadri, & Nazmiyeh, 2018). As a result, management requires calculated and correct information to make the right decisions in employee productivity prevention and elimination. Many organizations have benefited from research in this field in the form of increased job satisfaction, improved communication, improved employee attitudes toward the organization and job, determination of training needs, recognition of employee needs, and planning and tracking of changes (Prudenzi, Graham, Flaxman, Wilding, Day, & O'Connor, 2022).

The medical staff in hospitals have a close relationship with all kinds of patients, and due to the nature of their job, they are constantly exposed to anxiety, depression, etc. Therefore, examining the treatment staff's mental health and job satisfaction is very important. The present research was conducted with the aim to assess the effect of acceptance and commitment therapy (ACT) on the mental health and job satisfaction of hospital personnel.

Methods

The current semi-experimental study was performed with a pretest-posttest design and a control group in 2022. The statistical population included the medical staff at Baghdad Hospital, Iraq. Using a simple random sampling method, 140 people were chosen as a statistical sample and separated into two experimental and control groups (70 per group). The content of the acceptance and commitment intervention presented in the experimental group for 8 weekly 90-minute sessions is presented in table 1. The control group however did not receive therapy. The study inclusion criteria included willingness to participate in the research and not receiving a similar intervention the prior year. Absence from more than 2 sessions and failure to complete the questionnaires were the exclusion criteria. To comply with ethical principles, the participants' identities were concealed. A demographic characteristics questionnaire, the General Health Questionnaire (GHQ; Goldberg), and the Job Descriptive Index (JDI) were used for data collection.

The GHQ (Goldberg, 1972) assesses a person's mental health status over the previous 4 weeks and consists of 28 questions scored on a 4-point Likert scale. Physical symptoms, anxiety, social functioning and depression are covered in this questionnaire. The Cronbach's alpha method yielded a reliability of 0.84 for the questionnaire, and the content validity of the index was equal to 0.72 in the current research.

The JDI (Smith et al., 1969) is one of the most reliable and widely used tools for assessing job satisfaction. Respondents to this index provide their opinions on each of the 5 aspects of their job, including work itself, supervision, pay, promotions, and coworkers, by answering short questions.

Table 1. The content of the acceptance and commitment intervention sessions

Table with 2 columns: Session and Description. It lists 8 sessions detailing the content of the acceptance and commitment intervention, such as explaining group counseling rules, training on controlling problems, and presenting manuals about the function of emotions.

The items of the index are scored on a 5-point Likert scale. In the current research, the reliability of the JDI was evaluated using Cronbach's alpha, which was 0.79, and the content validity of the index was equal to 0.72.

Following data collection, descriptive statistics methods such as frequency, percentage, mean, and standard deviation were utilized to explain the data, and analysis of covariance (ANCOVA) was used to test the research hypothesis. The intended analyses were performed in SPSS software (version 23; IBM Corp., Armonk, NY, USA), and the statistical significance level of the results was less than 0.05.

## Results

Table 2 shows the findings of the demographic variables of the hospital staff. The experimental group had a mean age of  $34.63 \pm 7.19$  years, and the control group had a mean age of  $33.42 \pm 7.31$  years. As can be seen in table 2, 86 (61.4%) of the participants were women, 88 (62.9%) were nurses, 54 (38.6%) had less than 5 years of work experience, 93 (66.4%) were married, 83 (59.3%) had an insufficient monthly income, and 89 (63.6%) worked overtime. The findings presented in table 2 show no significant difference in the demographic characteristics between the study groups.

The experimental and control groups completed the necessary questionnaires during the pretest stage. After the therapy sessions in the experimental group concluded, both groups took part in the posttest stage. Table 3 separately indicates the pretest and posttest means of mental health subscales and job satisfaction variables for the experimental and control groups. The pretest and posttest findings of the control group did not change significantly ( $P > 0.05$ ), as shown in table 3. However, the posttest means for mental health subscales and job satisfaction in the experimental group reduced and increased significantly, respectively ( $P < 0.001$ ). Moreover, there was no significant difference between the findings of the groups in the pretest phase ( $P > 0.05$ ). In contrast, there was a significant difference between the study groups in the posttest phase ( $P < 0.001$ ). Thus, it can be concluded that ACT has improved mental health and job satisfaction.

The Kolmogorov-Smirnov test was utilized to examine the assumption of normal distribution of variables. Table 4 displays the outcomes of this assumption. Given that the significance level is higher than 0.05, the assumption of normality of the variables' distribution is met.

**Table 2.** Demographic characteristics of the hospital staff

Variable		Experimental group [n (%)]	Control group [n (%)]	P-value
Gender	Male	28 (40)	26 (37.1)	0.43
	Female	42 (60)	44 (62.9)	
Organizational position	Paramedic	20 (28.6)	16 (22.9)	0.18
	Nurse	43 (61.4)	45 (64.2)	
	Doctor	7 (10.0)	9 (12.9)	
Work experience (year)	< 5	25 (35.7)	29 (41.4)	0.61
	5-10	12 (17.1)	13 (18.6)	
	10-15	15 (21.4)	11 (15.7)	
	> 15	18 (25.8)	17 (24.3)	
Marital status	Single	22 (31.4)	25 (35.7)	0.24
	Married	48 (68.6)	45 (64.3)	
Monthly income	Sufficient	26 (37.1)	31 (44.3)	0.28
	Insufficient	44 (62.9)	39 (55.7)	
Working overtime	Yes	27 (38.6)	24 (34.3)	0.56
	No	43 (61.4)	46 (65.7)	

**Table 3.** Mean (SD) of the mental health subscales and job satisfaction in the pretest and posttest

Variable	Stage	Experimental group (mean ± SD)	Control group (mean ± SD)	P-value
Physical symptoms	Pre-test	10.36 ± 1.79	10.14 ± 1.68	0.310
	Post-test	7.11 ± 2.18	9.83 ± 1.52	< 0.001
Anxiety	Pre-test	10.17 ± 1.65	10.05 ± 1.83	0.590
	Post-test	7.92 ± 1.96	10.13 ± 1.77	< 0.001
Social dysfunction	Pre-test	13.04 ± 1.76	12.73 ± 1.54	0.460
	Post-test	10.64 ± 1.89	12.58 ± 1.72	< 0.001
Depression	Pre-test	11.70 ± 2.19	11.42 ± 1.96	0.370
	Post-test	8.92 ± 1.63	11.32 ± 1.84	< 0.001
Job satisfaction	Pre-test	136.72 ± 32.16	136.24 ± 32.47	0.390
	Post-test	152.64 ± 35.43	137.06 ± 33.28	< 0.001

SD: Standard deviation

Levene's test showed the homogeneity of mental health and job satisfaction variances ( $F = 1.73$ ;  $P = 0.34$ ). The Box's M test findings illustrated the homogeneity of the variance-covariance matrix ( $F = 1.89$ ;  $P = 0.16$ ).

Table 4 shows the findings of ANCOVA examining the impact of the acceptance and commitment intervention on the mental health subscales and job satisfaction variables. The results presented in table 4 show that removing the effect of the pretest variable confirms the research hypothesis of a significant difference in mental health subscales such as physical symptoms, anxiety, social dysfunction, and depression in the experimental group compared to the control group ( $P < 0.001$ ). Table 4 also shows that, after the intervention, the job satisfaction of the hospital staff in the experimental group increased significantly ( $P < 0.001$ ).

### Discussion

The current research was conducted with the aim to assess the effect of ACT on the mental health and job satisfaction of hospital personnel. The results showed that the mentioned method significantly enhances hospital staff's mental health and job satisfaction. These results are consistent with that of numerous studies conducted in this field (Zarvijani, Moghaddam, & Parchebafieh, 2021; Han et al., 2022; El-Ashry, Elhay, Taha, Salem, & El-Sayed, 2023) and inconsistent with those by Reeve, Tickle, and Moghaddam (2018) and Montaner, Tarrega, Pulgarin, and Moix (2022).

Numerous pieces of evidence point to the importance of acceptance in improving mental health (Mohammadi, 2022). The present research discussed the impact of acceptance in the therapeutic approach of acceptance therapy and its effectiveness in changing the level of mental health of hospital staff.

**Table 4.** Analysis of covariance findings for acceptance and commitment intervention on mental health subscales and job satisfaction

Variable	Source of variation	SS	df	MS	F	P-value
Physical symptoms	Group	46.17	1	46.17	9.42	< 0.001
	Error	127.48	26	4.90		
Anxiety	Group	39.74	1	39.74	16.84	< 0.001
	Error	61.45	26	2.36		
Social dysfunction	Group	32.68	1	32.68	10.34	< 0.001
	Error	82.09	26	3.16		
Depression	Group	24.37	1	24.37	10.64	< 0.001
	Error	59.41	26	2.29		
Job satisfaction	Group	174.15	1	174.15	7.76	< 0.001
	Error	964.68	43	22.43		

SS: Sum of squares; df: Degree of freedom; MS: Mean square

The findings revealed that treatment based on acceptance and commitment positively affected the mental health of the treatment staff. This therapeutic intervention emphasizes accepting more awareness, focusing on the present moment, and involvement and participation in activities consistent with personal values. Several studies have shown that ACT significantly reduces pain and improves mental health in patients compared to conventional medical therapies (Tyrberg et al., 2017).

Acceptance consists of two essential components: acceptance and participation in activities. According to studies, people's mental health is directly related to the number of daily activities they engage in (Gaupp, Walter, Bader, Benoy, & Lang, 2020). Furthermore, clinical studies highlight the importance of acceptance strategies for improving quality of life (QOL) and mental health in pain (Towey-Swift, Lauvrud, & Whittington, 2023). Various studies have demonstrated the significance of psychological acceptance, particularly in terms of psychological functions (Fatehinia, Fattah Moghadam, & Ashktorab, 2021). People who report having a higher tendency to have harmful psychological experiences, emotional experiences, unfavorable thoughts, and memories illustrate better social, physical, and emotional performance (Top, Akdere, & Tarcan, 2015).

Furthermore, the findings revealed that acceptance and commitment improve the job satisfaction of hospital treatment staff (Brown, Hooper, James, Scott, Bodger, & John, 2020). Non-judgment and flexibility can be beneficial in increasing satisfaction and decreasing problems. Indeed, a person with cognitive and emotional behavioral flexibility will have higher job satisfaction. ACT involves nonjudgmental acceptance, being present in the moment, coping with internal experiences without avoiding, suppressing, or attempting to change them, and improving and regulating emotions through mechanisms such as vulnerability to negative emotions. As a result, people require strategies to maintain their adaptability and ability to cope. ACT assists people in not feeling damaged or hopeless, and giving their life meaning and value. Therapists can also detach themselves from unpleasant reactions, memories, and reviews by substituting themselves as the context during resolution.

The current study's limitation is that it was only conducted in one hospital, so it cannot be fully generalized to other hospitals and other treatment staff with different cultural backgrounds and welfare levels in different societies. Another limitation of the current study is the need for more follow-up. It is suggested that other psychological interventions be used and compared to the current research results in future studies.

It is suggested that educational and executive planners, as well as managers of medical services, consider acceptance and commitment skills training to improve the mental health and job satisfaction of the treatment staff, and thus, increase their knowledge, improve their abilities, and improve their mental health. It can also assist treatment staff in acquiring job skills, and improving their mental health, and personal and social job satisfaction. The findings of these studies explain why many local and national societies have identified factors influencing mental health and job satisfaction, designed treatment programs, and promoted the necessary abilities in people. To avoid generalizing the results of an experimental group to the whole society, it is suggested that this research be conducted on other groups of people. It is also recommended that this approach be investigated further in educational studies to learn more about the impacts of acceptance and commitment, with the main goals of strengthening psychological flexibility, increasing psychological adaptation, and



preventing the occurrence of multiple disorders.

## Conclusion

The current study's findings revealed that utilizing ACT improved hospital treatment staff's mental health and job satisfaction. Given the significant impact of ACT on people's mental health and job satisfaction, this intervention can be used as an appropriate alternative or as an effective supplement to other psychiatry-related medicinal methods.

## Conflict of Interests

Authors have no conflict of interests.

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