

## reality therapy-based group counseling on the quality of life of women of childbearing age coronavirus epidemics

### Abstract

The coronavirus spread crisis that affected the quality of life (QOL) of women at reproductive age. Counseling could do away with many of their problems. Hence, the purpose of the study was to examine the effect of Reality Therapy Group Counseling (RTGC) on the QOL of women at reproductive age during the coronavirus epidemic. The study was a clinical trial with a control group conducted in Arak in 2021. Seventy women admitted to five health centers were selected according to the inclusion and exclusion criteria and were randomly divided into two experimental and control groups. The experimental group received reality therapy counseling sessions (8 sessions of 90 minutes twice a week), and no interventions were made in the control group. The data was collected by the personal information form and the World Health Organization (WHO) QOL questionnaire, filed out by the participants before and 4 weeks after the intervention.

Significant differences were seen between the intervention and control groups in QOL variables ( $P < 0.05$ ). Based on the findings, one can state that RTGC on women at reproductive age during the coronavirus epidemic could increase the QOL and help clinicians and is thus recommended to them, given its emphasis on internal control, improving communication, and effective satisfaction of needs.

**Keywords:** reality therapy, quality of life, coronavirus, group counseling, women

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### Introduction

Among the problems and crises affecting all the countries of the world is the spread of the Coronavirus (Covid-19). The WHO has declared the spread of this virus as an epidemic. It is similar to the SARS virus and the MERS coronavirus. It was first reported in Wuhan, China, in 2019 and was recognized as a virus shared between humans and animals that could affect people's QOL. [1-2] According to the definition of the WHO, QOL includes people's understanding of their position in life in terms of culture, the value system in which they live, and their goals, expectations, standards, and priorities (2018). [3] QOL has various aspects, including physical, psychological, social, and cognitive health; therefore, the QOL can examine issues beyond the function and biological complications and measure the results. [4]

The outbreak of the virus affects other aspects of health, including mental health, and endangers the quality of life of all sections of society, especially women of reproductive age. Besides the threat to physical health [5] because of the unpredictability of the complications, the uncertainty in its recovery and recurrence, and the change in the natural process governing the society, including the limitation of social relations and long periods of staying at home and the uncertainty whether life will return to normal affects other dimensions of health, including mental health, and endangers

the QOL of all sections of society, especially women of reproductive age. [5-6] Women at the reproductive age are more vulnerable to external stressful stimuli given their biological condition, emotionally and hormonally, and this stressful period results in the occurrence of psychological problems such as stress, anxiety, fear, depression, expressing anger, frustration, impatience, [7-8] sexual dysfunction, [9] and an increase in alcohol consumption. [10] It must be noted that most of these women are responsible for social responsibility, taking care of their children and sometimes even caring for their elderly parents, besides the primary responsibility of housework. [11] During the corona epidemic, 41% of women preferred to stay at home and avoid social responsibility, [12] 11% were fired from the workplace, [13] and then there was an increase in poverty and unemployment [14] which increased psychological problems and affected their QOL. In the meantime, finding a method to enhance the QOL of these women and have a healthy family is necessary so that besides being practical, without side effects, cheap and available, it can affect different aspects of life in similar conditions. [15] Using psychotherapy methods is very important. Hence, one of the approaches of psychological treatments that have received attention in recent years is reality therapy, which is one of the counseling and psychotherapy approaches based on the choice and control theory. Reality therapy considers the cause of

psychological problems in the choices and lack of responsibility of the individual in satisfying their needs and helps people to fulfill their basic needs through better choices. [16-17] Reality therapy suggests internal control instead of external control. The approach believes that the individual only has control over his behavior and others cannot control his behavior and everything that is done, except for a few exceptions, is the individual's choice. Hence, the main element in this theory is choice and responsibility. Reality therapy is a style of counseling and psychotherapy established in 1960 by William Glasser. He argues that humans do not suffer from physical illness but rather from social and environmental conditions. He summarizes mental illnesses in three terms: right and wrong, responsibility, and reality. [18-19] Studies have revealed that reality therapy is effective in helping reduce psychological disorders symptoms, increase responsibility, [20] and helps people select ways that help them achieve their needs, desires, and values. The four components of QOL - physical health, mental health, social relations, and environmental health - could be damaged during the crisis. These four components could correspond to the four dimensions, feeling, thinking, performance, and physiological, addressed in reality therapy and can be corrected and treated favorably. Reality therapy helps people create a better world. [21-22] Individuals could select a healthy, unhealthy way of life for themselves. This lifestyle affects the health and well-being, and QOL of a person. There is a need for interventions to enhance the QOL. [23-24] Hence, the study was carried out to determine the effect of RTGC on bettering the QOL of women at reproductive age during the coronavirus epidemic. It is hoped that the findings of the present study could be used to enhance the QOL of women.

**Methods**

The current study was an educational intervention (educational trial) with a pre-test and post-test design, with follow-up after one month to examine the effect of RTGC on improving the QOL of women at reproductive age during the coronavirus epidemic in 2021 among the women admitted to health centers in Arak. The sample size was determined using the formula “determining the sample size for the comparison of two independent groups” with a confidence interval of 95% and a

test power of 80%. The sample size was determined as 32 people in each group and a total of 64 people and was considered as 35 people in each group considering the 10% sample drop. [25]

After approving the project and receiving the code of ethics, the first five centers were selected from among all the centers as a multi-stage cluster sampling. In the next stage, 70 women of reproductive age were randomly selected from among these five clusters according to the target population of each of the centers.

Using the random block method, the participants were divided into two groups of 35 people (intervention and control). The quadruple block method was carried out with random permutations of A and B. The intervention group was assigned letter A and the control group B. The inclusion criteria were women aged 18 to 35, married, non-pregnant, not using psychiatric drugs, minimum education in reading and writing, fluent in Persian and Iranian language, not having marital conflict, no mental illness, no infertility problem and having children, no mourning in the last six months and being media literate. The exclusion criteria were using tobacco and addictive substances, participation in a training course or any other similar intervention, an unfortunate accident during the study (such as divorce and death of relatives), failure to attend more than one session, and unwillingness to continue. The women were included in the study after submitting a written consent form. Prior to the intervention, the participants of both groups were asked to fill out the shortened form of the WHO’s QOL questionnaire. Later on, the intervention group received one and a half hour reality therapy sessions during 8 sessions that were attended twice weekly through the virtual space (sky room) as lectures and questions and answers based on the developed protocol of reality therapy (the implementation program of this intervention in Table 1 is presented). The control group received no intervention. One month after the end of the sessions, the WHO’s QOL questionnaire was given to the participants of both groups to complete, then the pre-test and post-test results were compared (a training session was held for the control group at the end of the course and after the test to comply with ethical points and to appreciate this group).

**Table 1. Objectives of reality therapy counseling sessions**

The first session	The purpose and establishment of therapeutic communication, familiarizing group members with the concept of reality therapy and the rules and regulations of the group
The second session	Knowing one’s primary needs, how to fulfill them, the effect of basic needs in life, and their ability to choose the best way to achieve them.
The third session	Recognizing efficient and ineffective behaviors, explaining why and how we behave.
The fourth session	Explaining what changes will help them to make better choices, and training to raise awareness for better choices.

The fifth session	Explain that all their behavior is a general behavior and their current choice. Description of the qualitative world of the real world, specific images of their desired world, and how to change the qualitative world.
The sixth session	Discussing successful and unsuccessful communication, teaching the significance of correct communication, identifying the improving and damaging factors of interpersonal communication
The seventh session	Familiarity with emotions and their recognition, learning emotion regulation skills
The eighth session	Consolidating what is known and new knowledge

### Data collection tool

The data collection tool was a questionnaire with two parts - the first part was about the personal and social characteristics of women (age, education level of the wife, education level of the husband, economic status, occupation of the wife, occupation of the husband, place of residence, and the number of children). The second part was the WHO's QOL Questionnaire (WHOQOL-BRIEF). The questionnaire was introduced in 2002 by the WHO, where the QOL is considered in 6 dimensions. The short form of this scale has 26 questions that evaluate four areas of people's QOL. These aspects are physical health (7 questions), mental health (6 questions), environmental health (8 questions), and social relations (3 questions).

Furthermore, two additional questions exist to examine people's apparent QOL and general health. These two questions belong to none of the areas and assess the health status and QOL. In each area, a score equivalent to 0-100 is given, with 0 as the worst and 100 as the best state. They have reported a reliability coefficient of 0.7 and a validity of 0.83.

[25]

**Table 2. Comparing the average age of women and the number of children in the studied women in the intervention and control groups (N=70)**

Variable	Intervention group		Control group		Independent t-test results	
	Mean	Std. Deviation	Mean	Std. Deviation	t	P
age	30.60	3.13	30.94	3.46	-.43	.66
children	1.45	.61	1.54	.74	-.52	.59

The education level of most of the women was secondary education (48.6), and the husband's secondary education (45.7). Most women were homemakers 77.1, and most of the husbands were self-employed (52.9). The highest income level was average (54.3), and most women's residences were private homes (60.0).

The Chi-square test results revealed no significant differences between the two test and control groups regarding women's

**Table 3. Descriptive statistics of all women studied in the intervention and control groups (N=70)**

Variable	Group	Number	Intervention group	Number	Control group	Percent	P
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### Results

Kolmogorov Smirnov test results indicate the normal distribution of the study data. Thus, the statistical tests for data analysis are parametric. The demographic characteristics of the subjects were analyzed using chi-square and independent t-tests. ( $P < 0.05$ ) was considered as a significant level.

The mean and standard deviation of the age (years) of women in the intervention group is 30.60 (3.13) and 30.94 (3.46) in the control group. The mean and standard deviation of the number of children in the intervention group is 1.45 (0.61) and 1.54 (0.74) in the control group. The independent t-test revealed no significant differences between the two groups regarding age and number of children. The two groups were homogeneous regarding age and the number of children ( $p > 0.05$ ) Table 2.

education, women's occupation, husband's occupation, income level, and place of residence. Fisher's exact test\* indicated no significant differences between the two groups regarding the husband's education level, and the two groups were homogeneous regarding the husband's education level ( $p > 0.05$ ) Table 3.

Female education level	Primary. edu	9	69.2%	4	30.8%	18.6	.22
	Secondary. Edu	17	50%	17	50%	48.6	
	Higher. edu	9	39.1%	4	60.9%	41.4	
Husband's education level	Primary. edu	6	66.7%	3	33.3%	12.9	.45*
	Secondary. Edu	14	43.8%	18	56.3%	45.7	
	Higher. edu	15	51.7%	14	48.3%	41.4	
Woman's job	homemakers	29	53.7%	25	46.3%	77.1	.25
	employee	6	37.5%	10	62.5%	22.9	
husband's job	self-employed	20	45.9%	17	45.9%	52.9	.47
	government job	15	45.5%	18	54.5%	47.1	
Income level	Low	11	52.4%	10	47.6%	30.0	.25
	average	21	55.3%	17	44.7%	54.3	
	High	3	27.3%	8	72.7%	15.7	
place of residence	Rent House	13	46.4%	15	53.6%	40.0	.62
	private homes	22	52.4%	20	47.6%	60.0	
	Government House	0	0	0	0	0	

Mean QOL scores were analyzed in two intervention and control groups with independent t-tests and paired t-tests.

Independent t-tests showed no significant differences between the intervention and control groups in the mean physical health quality, mental health quality, social communication quality, and environmental health scores before the intervention ( $p>0.05$ ). According to the independent t-test, there was a significant difference in the mean physical quality, mental health quality, social communication quality score, and environmental health scores between the intervention group and the control group after the intervention ( $p<0.05$ ).

The mean physical health quality score after the intervention in the intervention group ( $55.00\pm 7.10$ ) was higher than the control group ( $54.60\pm 10.81$ ); the mean mental health quality score after the intervention in the intervention group ( $7.85\pm 6.72$ ) was higher than the control group ( $55.47\pm 13.25$ ). The mean score of the quality of social communication after the intervention in the intervention group ( $64.53\pm 9.55$ ) was higher than the control group ( $58.33\pm 14.00$ ). The mean environmental health quality score after the intervention in the intervention group ( $62.32\pm 8.64$ ) was higher than the control group ( $58.21\pm 10.55$ ). Hence, RTGC was effective in physical health, mental health, social communication, and environmental health.

According to the paired t-test \*\*, there was a significant difference in the mean physical health quality, mental health quality, social communication quality, and environmental

**Table 4. Comparing the effectiveness of group counseling based on reality therapy on the overall score of quality of life and four areas of quality of life (physical health quality, mental health quality, social communication quality, and environmental health) before and one month after the intervention in the test and control groups.**

Variable	group	Before intervention		After the intervention		p**
		Mean	Std. Deviation	Mean	Std. Deviation	
physical health quality	intervention	50.62	13.77	55.00	7.10	0.01
	Control	53.78	13.11	54.60	10.81	0.44
p*		0.33		0.89		

health scores in the intervention group before and after the intervention ( $p<0.05$ ). Furthermore, the paired t-test showed no significant differences in the mean physical health quality, mental health quality, social communication quality, and environmental health scores in the control group before and after the intervention ( $p>0.05$ ).

Based on the independent t-test\*, there was a significant difference in the mean overall QOL score between the two intervention and control groups before the intervention ( $p<0.05$ ), and based on the independent t-test\*, there were no significant differences in the average overall QOL score between the two intervention and control groups after the intervention ( $p>0.05$ ). According to covariance analysis, after controlling the overall QOL score prior to the intervention, there was still a significant difference between the intervention and control groups ( $p<0.05$ ).

The mean overall QOL score after the intervention group intervention ( $63.22\pm 12.10$ ) was higher than the control group ( $61.43\pm 18.28$ ); hence, RTGC was influential in the overall QOL.

According to paired t-test \*\* in the intervention group, there was a significant difference in the average overall QOL score before and after the intervention ( $p<0.05$ ). Additionally, there were no significant differences in the mean score of QOL prior to and following the intervention in the control group ( $p>0.05$ ) according to the paired t-test Table 4.

mental health quality	intervention	51.43	15.19	60.72		
					7.85	.0001
	Control	55.71	13.56	55.47		
					13.25	0.82
P*		0.22		0.04		
social communication quality	intervention	53.80	16.08	64.53		
					9.55	.0001
	Control	61.19	14.98	58.33		
					14.00	.097
P*		.051		.035		
Environmental health quality	intervention	54.28	17.17	62.32		
					8.64	.0001
	Control	59.20	11.37	58.21		
					10.55	0.40
P*		.164		.079		
Overall quality of life score	intervention	51.43	19.83	63.22		
					12.10	.0001
	Control	63.57	18.03	61.43		
					18.28	0.37
P*		.009		.63		

\* Independent Samples Test

\*\* Paired Samples Test

### Conclusion

The study findings indicated that reality therapy significantly enhances the QOL women at the reproductive age during the coronavirus epidemic and betters all aspects of the QOL

(physical, mental, social, and environmental health spheres) that continued after one month. The participants receiving the reality therapy intervention, particularly in the mental health aspect, indicated a statistically significant improvement in scores compared to the participants in the control group. Overall, the findings support this hypothesis that reality therapy intervention helps reduce psychological disorders' symptoms and enhances women's QOL.

The mean score of the quality of physical and mental health, as well as social relations and environmental health between the intervention and control groups, did not show significant differences prior to the intervention. After the intervention, the mean score of the quality of physical and mental health, social relations, and environmental health between the intervention and the control groups is significantly different. There were no significant differences in the mean QOL score after the intervention in the control group compared to before the intervention. The study results are similar to other studies. In Moshirian's study, to examine group reality therapy counseling on the QOL of aggressive people, the intervention group received ten sessions of one-and-a-half-hour reality therapy counseling, and the control group did not receive any intervention. Covariance analysis revealed betterment in the QOL in the intervention group. [26]

Elahi Nejad et al. indicated that RTGC improves the QOL of women with breast cancer and decreases the symptoms, and these therapeutic effects were maintained in the follow-up. [21]

Nameni et al. examined the effect of RTGC on the QOL and psychological adjustment of women heads of households and reported the results of the study as favorable. [27] The study findings showed the need of women at reproductive age for counseling in crisis conditions and the effect of reality therapy counseling. This counseling helps women to control their lives more effectively by changing their choices and experiencing more favorable emotions and physiological changes in crises by selecting a different behavior, as the beginning of physical and mental health is in accepting the absolute reality of life. [28]

In the present study, people judged the rightness or wrongness of their actions in the face of the corona epidemic in reality therapy. When people concluded that their current behavior in self-care is unsuitable for satisfying their needs, they also concluded that they should select the desired behavior and accept the responsibility for its consequences. The criterion of this judgment was the usefulness of their actions in satisfying their basic needs and that they should plan for new behaviors if they found their current actions ineffective in satisfying their basic needs. This behavior leads them to their health goals and adheres to them. [29] During reality therapy, members were helped to search for their health needs in the context of the reality of their lives, not denying reality. [30] As in the studies on health, QOL is a measure of the effectiveness of health

programs, and improving the QOL is an essential goal of healthcare programs. [26] These could be a practical guide for researchers during crises like the coronavirus epidemic that results in a decline in the QOL of women, especially in improving people's psychological problems. Such problems will become an opportunity for transforming health into different dimensions and creating appropriate interventions to solve women's health problems if adequately managed. Among the limitations of the study were the application of the quarantine law, the lack of necessary access, and the lack of media literacy of some women. The present study was carried out only with the participation of women, which was one of the limitations of the design and prevented the generalization of the study results to their spouses. It is suggested to conduct studies on married couples since it can obtain more accurate results of individual and interpersonal problems of these couples. It seems that incorporating the principles and techniques of this theory, along with common training in group counseling sessions in health centers, is helpful in enhancing women's QOL.

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#### **Conflict of interest**

None.

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#### **Ethics statement**

This study with the code of ethics with the number (IR.ARAKMU.REC.1400.296) from the Arak University of Medical Sciences was approved.

#### **References**

1. Liu Y, Gayle AA, Wilder-Smith A, Rocklöv J. The reproductive number of COVID-19 is higher compared to SARS coronavirus. *Journal of travel medicine*. 2020. <https://doi.org/10.32598/sija.2020.3.110>.
2. Daneshfar Z, Jahanian Sadatmahalleh S, Youseflu S, Bahri Khomami M, Kazemnejad A. Influential factors on quality of life in married Iranian women during the COVID-19 pandemic in 2020: a path analysis. *BMC women's health*. 2021;21(1):1-8. <https://doi.org/10.1186/s12905-020-01114-2>.
3. World Health Organization. WHOQOL:Measuring Quality of Life: Introducing the WHOQOL Instruments [Internet]. 2018.
4. Naghizadeh S, Mirghafourvand M. Relationship of fear of COVID-19 and pregnancy-related quality of life during the COVID-19 pandemic. *Archives of psychiatric nursing*.

- 2021;35(4):364-8.  
<https://doi.org/10.1016/j.apnu.2021.05.006>.
5. Cao W, Fang Z, Hou G, Han M, Xu X, Dong J, et al. The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry research*. 2020;287:112934.
  6. Kaya Senol D, Polat F. Effects of the pandemic on women's reproductive health protective attitudes: a Turkish sample. *Reproductive Health*. 2022;19(1):1-9. <https://doi.org/10.1186/s12978-022-01412-y>.
  7. Schiavi MC, Spina V, Zullo MA, Colagiovanni V, Luffarelli P, Rago R, et al. Love in the time of COVID-19: sexual function and quality of life analysis during the social distancing measures in a group of Italian reproductive-age women. *The journal of sexual medicine*. 2020;17(8):1407-13.
  8. Sediri S, Zgueb Y, Ouanes S, Ouali U, Bourgou S, Jomli R, et al. Women's mental health: acute impact of COVID-19 pandemic on domestic violence. *Archives of women's mental health*. 2020;23:749-56.
  9. Roesch E, Amin A, Gupta J, García-Moreno C. Violence against women during covid-19 pandemic restrictions. *British Medical Journal Publishing Group*; 2020.
  10. Viero A, Barbara G, Montisci M, Kustermann K, Cattaneo C. Violence against women in the Covid-19 pandemic: A review of the literature and a call for shared strategies to tackle health and social emergencies. *Forensic science international*. 2021;319:110650.
  11. Almeida M, Shrestha AD, Stojanac D, Miller LJ. The impact of the COVID-19 pandemic on women's mental health. *Archives of women's mental health*. 2020;23:741-8.
  12. Power K. The COVID-19 pandemic has increased the care burden of women and families. *Sustainability: Science, Practice and Policy*. 2020;16(1):67-73. <https://doi.org/10.1080/15487733.2020.1776561>.
  13. Connor J, Madhavan S, Mokashi M, Amanuel H, Johnson NR, Pace LE, et al. Health risks and outcomes that disproportionately affect women during the Covid-19 pandemic: A review. *Social science & medicine*. 2020;266:113364.
  14. Chitiga M, Henseler M, Mabugu RE, Maisonnave H. How COVID-19 pandemic worsens the economic situation of women in South Africa. *The European Journal of Development Research*. 2022;34(3):1627-44. <https://doi.org/10.057/s41287-021-00441-w>.
  15. Nasrabad Sofla S, Zarei E. The effectiveness of reality therapy on quality of life, mental health and happiness of parents of children with disabilities. *Health Research Journal*. 2018;3(2):95-100.
  16. Mohammadi M, Akbari Torkestani N, Mehrabi Rezveh F. Effectiveness of group counseling based on reality therapy on sexual satisfaction in women. *Journal of Mazandaran University of Medical Sciences*. 2017;27(155):27-36.
  17. Stutey DM, Wubbolding RE. Reality play therapy: A case example. *International Journal of Play Therapy*. 2018;27(1):1.
  18. Aghae H, Nasery FM, Sanei A. Effectiveness of Reality Therapy on Postpartum Depression and Post-Traumatic Stress Disorder Symptoms in Women with Normal Childbirth. 2020.
  19. Shahmanesh N. Comparison of Shafiabady's multi-axial pattern With Glasser's Reality Therapy on teachers' burnout *Quarterly of Counseling Culture and Psychotherapy*. 2017:165-84.
  20. Jalambadani Z, Borji A. Effectiveness of mindfulness-based art therapy on healthy quality of life in women with breast cancer. *Asia-Pacific Journal of Oncology Nursing*. 2019;6(2):193-7.
  21. Elahi Nejad S, Makvand Hosseini S, Sabahi P. Comparing the effectiveness of reality therapy and neurofeedback training on improving the quality of life in women with breast cancer. *Neuropsychology*. 2020;6(1):63-82.
  22. Moridi H, Kajbaf MB, Mahmoodi A. The Effect of Islamic-Ianian Reality Therapy on Couples' Marital Satisfaction, Life Satisfaction, and Communication Skills *Shiraz. Knowledge & Research in Applied Psychology*. 2020;21(2):13-21. <https://doi.org/10.30486/jsrp.2019.1875513.1986>.
  23. Adeba A, Tamiru D, Belachew T. Healthy Lifestyle Education effect on Health-Related Quality of Life among Middle-Aged Urban Residents of West Ethiopia: Quasi-Experimental Study. *Health Sciences*. 2021;10(8):69-77.
  24. Soleimani Z, Baezzat F. The Effectiveness of Reality Therapy Group Counseling on Academic Self-Concept in Students with Specific Learning Disorder. *Journal of Psychological Achievements*. 2019;26(2):219-42. <https://doi.org/10.22055/psy.2019.4759.1990>.
  25. Nasiri F, Keshavarz Z, Davazdahemami M, Karimkhani Zandi S, Nasiri M. The effectiveness of religious-spiritual psychotherapy on the quality of life of women with breast cancer. *Journal of Babol University of Medical Sciences*. 2019;21(1):67-73.
  26. Moshirian FSM, Aghamohammadian, S. H. R., Sepehri, S. Z. . The Effectiveness of Group Reality Therapy Based on Choice Theory on Quality of Life in People with Aggression. 2017. <http://dx.doi.org/10.21859/ijpn-05017>.
  27. Nameni E, Heydari H, Fatoorchi S. The Effectiveness of Combining Reality Therapy and Logo Therapy Approaches on the Quality of life and Psychological Adjustment of Female Householders. *Applied Psychological Research Quarterly*.

2019;201(9):10.

<https://doi.org/22059/JAPR.2019.258509.643001>.

28. Yao Y-W, Chen P-R, Chiang-shan RL, Hare TA, Li S, Zhang J-T, et al. Combined reality therapy and mindfulness meditation decrease intertemporal decisional impulsivity in young adults with Internet gaming disorder. *Computers in Human Behavior*. 2017;68:210-6.

29. Rosidi R, Sutoyo A, Purwanto E. Effectiveness of reality therapy group counseling to increase the self-esteem of students. *Jurnal Bimbingan Konseling*. 2018;7(1):12-6. <https://doi.org/0.15294/jubk.v7i1.21582>.

30. Mirsafi RS, Akbari Torkestani N, Noroozi E, Moslemi A. The Effect of Group Counseling Based on Reality Therapy on Women's Self Efficacy in Breast Self-examination: An Educational Intervention. *Iranian Quarterly Journal of Breast Disease*. 2021;14(2):64-75. <http://dx.doi.org/10.30699/ijbd.14.2.64>.