

Research Paper: The Effectiveness of Group Training of Choice Theory on Quality of Life and Hope in Blind People



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ABSTRACT

Objectives: Choice theory is rooted in psychological concepts like self-concept, successful identity, and quality of the world. This theory could be useful for people seeking for hope and a better life. The purpose of this research was to investigate the effectiveness of group training of choice theory on life quality and hope in blind people.

Methods: The statistical population of this research includes all the blind members of the Asaye Sefid Charity of Tehran in 2015. The research sample included 30 blind people from the Asaye Sefid Charity, selected via simple random sampling. The data in this study have been collected using the Life Quality questionnaire of the World Health Organization (the brief 26-question form) and the Snyder Hope questionnaire. Data analysis was performed by covariance analysis.

Results: The results indicate that the training of choice theory concepts affected the quality of life ($F=22.5, P<0.001$) and on hope ($F=35.17, P<0.001$). Therefore, it seems that the training of choice theory concepts could improve the quality of life and hope for blind people.

Discussion: The choice theory concepts have positive effects on people with visual impairments. In addition, the findings of this research suggest that mental health professionals can use this psychological intervention for improving the life satisfaction and hope in those blind people.

1. Introduction

Vision impairment is the main sensory disability. According to the World Health Organization (WHO), nearly 38 million people around the world are blind, and about 110 million people in the world have severe visual impairment. Furthermore, over 90%

of all the visually impaired people live in developing countries [1, 2]. Visual impairment can cause many changes in the way people live and lead to the emergence of some problems in psychological and social compatibility [3]. People with vision impairments experience low self-concept and hope in their life. Therefore, these psychological factors have an impact on the life satisfaction of visually impaired persons [1].

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Currently, there is little consensus on the concept of quality of life. However, if the commonalities of these definitions are to be considered, quality of life can be summed up as better living conditions in which balance, coherence, utility, and equity are institutionalized, or the necessary conditions for living with health, safety, comfort, peace, security, vitality, and beauty have emerged [4]. On the other hand, research evidence revealed that the degree of disappointment and hopelessness is much higher in people with physical disabilities than the normal population and that those who use more effective coping styles have a higher psychological well-being and a higher life expectancy [5].

Hope is a tool that provides the ability to design passages to desired goals in spite of obstacles and creates the motivating factor for using these passages in an individual. Hope has a positive correlation with positive affection and self-worth, whereas it has a negative correlation with depression, anxiety and burnout [6]. In recent studies, hope has been considered as a psychological strong point that can greatly contribute to nurturing mental health [7]. Hope facilitates crossing important obstacles and deep abysses along the path. Hope gives a person the courage to face his/her own circumstances and find the capacity to overcome those [7].

The reality-therapeutic approach is based on the choice theory developed by William Glasser. According to the choice theory, every human being has five essential needs including surviving, love and belonging, power, freedom, and fun. The theory contends that each person can feel empowerment, trust, self-esteem, and ultimately a sense of happiness only when he/she is able to effectively achieve his/her basic needs [8]. It seems that teaching and training the concepts of choice theory in choosing responsive ways to meet needs and a realistic view of the aspirations and abilities are effective as to how to achieve prosperity, happiness, and success [9].

In general, the principles presented briefly in the reality-therapeutic approach suggest that human beings be viewed as a being with inherent self-determination. Even in those who are physically and psychologically restricted, their lifestyle and performance make it clear what they want to do in the future [6]. People with visual impairment have a lower quality of life in terms of mobility, emotional status, and limitation of social activities when compared with healthy people [10]. Disabled people are also marginalized due to depression, low psychological compatibility, and low social support. Many of them lose the meaning of their lives and become frustrated [11].

Given the high number of blind people around the world and the importance of the quality of life and hope in them, applying an effective and appropriate approach seems necessary to improve those parameters. Previous studies indicated that psychological interventions could be effective for people with vision impairments [1-3]. Nonetheless, in Iran, unfortunately, no research has been done to determine the effectiveness of the choice theory on blind people, and this very issue is the incentive of this researcher to undertake this study.

2. Methods

The method of this research is semi-experimental, and its design is of pre-test and post-test type with control group. The statistical population of this study includes all blind members of the Asaye Sefid Charity of Tehran in 2015. The number of blind members of this association was 409 people in 2015. From 409 members that registered in the association, we selected 102 of them by simple sampling randomize to answer the questionnaires, and then we selected 30 of them that had lowest scores in hope and quality of life measurements. The choice theory courses were conducted at the Asaye Sefid Charity. The method of selecting the participants was as follows: after coordination with the officials of the Asaye Sefid Charity, an announcement was made for those blind people who were interested in participating in the choice theory at the White Causal Association. The title of sessions and the description of each session is listed in Table 1.

After registering the blind volunteers and examining their conditions, the course of choice theory was explained to the participants and the blind people were asked to complete Quality of Life and Hope questionnaires. 30 participants were selected and were randomly assigned to experimental and control groups. In addition, in this research, the numbers of male and female participants in the control and experimental group were 8 and 7, respectively. Inclusion criteria in the study were possession of a visual disability card from the Welfare Organization, members of the Asaye Sefid Charity, possess Diploma degree, aged between 20 and 40, and have motivation and interest in attending the training course. Whereas, absence for more than 2 sessions, having physical or psychological disturbances, attending a course, participation in a training course with another consultant at the same time were considered as exclusion criteria.

The data collection tool was a Quality of Life questionnaire. In this study, the Quality of Life Questionnaire (WHO), the brief 26-question form, was used to mea-

sure quality of life. The questionnaire was developed by the WHO in 1989 and has 26 questions that assess the quality of life in four sub-scales: [1] physical health, [2] psychological health, [3] social relations, and [4] environmental health.

The score of all the items are arranged on a scale of 1 to 5 where 1 refers to “not at all” or “very dissatisfied” and it goes on in ascending order as “little” or “slightly dissatisfied”, “moderate” or “no idea”, “high” or “satisfied”, and “very high” or “very satisfied” [12]. Nejat, et al. (2011) reported that cluster correlation values and Cronbach’s alpha in all domains are above 0.7, but in the social relation, Cronbach’s alpha was 0.55. On the other hand, in 83% of cases, the correlation of each question with its main area was higher than other areas [12].

In this research, hope has been studied through Schneider’s hope questionnaire. This questionnaire consists of 12 questions designed by Schneider for people aged 15 and older. It has two subscales of factor thinking and strategic thinking, and a short time period (about 2 to 5 minutes) which is enough to respond to the question. To answer each question, a continuation from “completely disagree” to “totally agree” has been considered. Acceptable psychometric properties have been reported in Iran [13]. Schneider et al. (1991) obtained the range of the reliability of these scales using Cronbach’s alpha for the total score from 0.74 to 0.84, for 6 samples of undergraduate students and 2 samples of psychological patients.

The correlation between the test and the retest was 80% over a period of more than 10 weeks. Also, its validity was 0.85 after 3 weeks, which was reported to be 0.81 for the subscale of factor thinking and 0.84 for the subscale of strategic thinking. The reliability of this scale was 0.76 through Cronbach’s alpha and 0.74 through retest after 1 month. In their research, they reported the internal consistency for the subscales of factor thinking through Cronbach’s alpha as 0.74 and for the subscales of strategic thinking as 0/80 [2].

Intervention

By obtaining a letter of introduction to enter the Asaye Sefid Charity in Tehran, a meeting was held with the relevant authorities and information regarding the research was provided. Then, with the coordination of the Association’s authorities, an announcement was made for those blind people interested in participating in the choice theory at the Asaye Sefid Charity. After registering the volunteers, their conditions were evaluated according to inclusion and exclusion criteria, and eligible individuals

were asked to complete the Quality of Life and Hope questionnaires.

Eventually, 30 people who obtained the lowest scores were selected. Those subjects were randomly divided into experimental and control groups. For the experimental group, the training course on the concepts of the choice theory was held during eight 90-minute sessions over a period of 2 months. But the control group did not receive any training during this period. In the end, members of both groups were asked to complete post-test questionnaires. Summary of training sessions on concepts of the choice theory is presented in the following table.

Descriptive statistics including mean and standard deviation were used to analyze the data and inferential statistics of the covariance analysis test was used to test the research hypotheses. Subsequently, the data were analyzed using the SPSS v.21 software. In order to follow ethical considerations in the present research, the following points have been considered: explaining the research objectives to the authorities of the relevant centers, and obtaining permission and written consent form from them. In addition, the researchers maintained the confidentiality of collected questionnaires and the control group was given a commitment to conduct a course for them on the choice theory after completion of the research period.

3. Results

The results showed that the experimental group consisted of 15 people, of whom 8 were male and 7 were female. These values are the same for the control group. The mean age of the experimental and control groups was 31.86 and 29.6 years, respectively. The study of the marital status of the two groups revealed that in the experimental group there were 13 subjects who were single, 1 divorced, and 1 married. In the control group, there were 13 subjects who were single and 2 married. Thus, it appeared that the two groups were largely similar in terms of marital status.

As shown in Table 2, all descriptive measures calculated for the test group show a significant increase at the post-test stage while no significant changes were seen in the control group. Given the descriptive values for the subscales of the quality of life presented in Table 3, changes in the post-test stage for the experimental group were far more than the control group. This pattern is observed both in minimum and maximum values as well as in the mean. Meanwhile, the standard deviation of the experimental group’s grades decreased in the post-test phase, while no such decrease was observed in the control group.

Table 1. Summary of training sessions on the choice theory

*Sessions	Sessions Objectives
First session	Formation group, members' introduction to each other, explanation about the choice theory and external control
Second session	Explaining the topic of human needs in the choice theory, the discovery of basic needs and their grading
Third session	Familiarizing the group with their desirable world, helping members change their mental image in their desirable world
Forth session	Introducing the group with four constituting components of behavior, explaining how to choose through charter conversations with members
Fifth session	Teaching the psychological viewpoint of internal control and relationship enhancing behaviors
Sixth session	Teaching the chart of the choice theory and comparison location 90 minutes
Seventh session	Teaching the WDEP system (wants, doing, evaluation, and planning) process and self-assessment
Eighth session	Solutions and tips for terminating group: Confronting the feeling of separation, emphasizing the importance of secrecy even after the end of the group, giving positive or negative feedback to each individual member of the group

*All session time were 90 minutes

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The hypothesis that the pre-test and post-test data are normal were examined separately using the Kolmogorov Smirnov test, which confirmed the validity of the hypothesis as the data were shown to be normal ($Z=0.79$, $P=0.55$ for the pre-test, $Z=0.63$, $P=0.82$ for the post-test).

The results of covariance analysis presented in Table 4 show that after adjusting the pre-test effect on post-test scores, the effect of the group on post-test scores of hopefulness is significant at the level of 0.001. Therefore, it can be concluded that the teaching of the concepts of the choice theory is effective on hope for the blind.

The results of covariance analysis for the overall score of the quality of life are presented in Table 4. Prior to this analysis, the assumption of the equality of error variances was investigated using the F-Lone test. Results indicated that this assumption was true ($F=1.6$, $P=0.23$). The hypothesis that the pre-test and post-test data are normal were examined separately using the Kolmogorov-Smirnov test, which indicated that the data were normal

($Z=1.22$, $P=0.1$ for the pre-test and $Z=1.03$, $P=0.23$ for the post-test) and confirms the validity of the hypothesis. According to the results of covariance analysis presented in Table 4, after the adjustment of the pre-test effect on the post-test scores, the effect of the group on the post-test scores of the overall quality of life is significant at the level of 0.001. Therefore, it can be concluded that the teaching of the concepts of the choice theory is effective on the quality of life of the blind.

4. Discussion

This hypothesis was confirmed, and it is concluded that the group training of choice theory is effective on the hope of the blind. The findings that indicated the impact of this intervention of blind people was not found, but, the obtained [14]. The conclusion in this study is consistent with previous findings in other groups of people like female students. In this study, the combination of reality therapy and cognitive group therapy has been shown to be effective in increasing the level of hope. Offering the

Table 2. Descriptive dimensions of hope and quality of life in the pre-test and post-test in terms of group

Variable	Groups	Pre-Test M (SD)	Post-Test M (SD)
Hope	Experimental	55.4(5.2)	48.86(8.2)
	Control	44.1(6.6)	44(7.1)

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Table 3. Descriptive dimensions of the quality of life in pre-test and post-test in terms of group

Variable	Groups	Pre-Test M(SD)	Post-Test M(SD)
Physical health	Experimental	54.14(8.2)	62.13(4.2)
	Control	55.12(1.2)	56.8(3.4)
Psychological health	Experimental	32.17(3.2)	29.16(5.1)
	Control	34.12(5.2)	33.16(4.2)
Social communication	Experimental	32.17(7.2)	45.15(4.5)
	Control	32.17(6.3)	31.19(7.1)
Environmental health	Experimental	50.14(7.1)	56.14(6.1)
	Control	49.02(5.2)	50.1(5.2)

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Psychological and rehabilitation program to people with vision impairments can improve their autonomy, self-concept, and hope [15]. The research evidence indicated the effect of training choice theory psychological constructors on raising hope among other clinical groups like breast cancer patients [16].

In addition, the other hypothesis of the present study was confirmed, and it was concluded that the training of the concepts of the choice theory was effective on the quality of life of the blind people. Although the authors did not find relevant studies in this field, previous studies have shown the efficacy of training on the choice theory in increasing the quality of life among other groups like drug abusers [17], divorced women [18], and orphan children [19].

According to the WHO the quality of life is the individuals' perception of their own position, with respect to the culture and the value system in which they live along with their goals, expectations, and priorities [20]. In the choice theory, it is also believed that people perceive the reality of the surrounding world through their senses, not directly but through the filter of general knowledge and

values. In the training of the choice theory, members of the group were taught to assess their wishes and behaviors at a time of failure and make new plans to improve their quality of life [21].

Given that blind people also experience many failures due to real constraints in the outside world, they can use the doctrine of choice theory to improve their quality of life, and consequently, have more effective choices in their life. In general, the psycho-rehabilitation programs bring the hope and self-management ability in visually impaired people [22], giving them a chance to explore the environment and enjoy the outdoor activities like participating in meetings [23], improving the psychosocial well-being, and making adjustment [24, 25].

The present research faced some limitations. First, the paper-pencil measurement tools and the absence of a questionnaire on the Braille limit the extent of the study. Because of visual impairment of the participants, the questions in the questionnaire were read by the examiner, which could increase the possibility of error in answering questions. Second, the statistical population

Table 4. The results of covariance analysis to study the effect of education on the level of hope in the blind

Variable	Group	SS	df	MS	F	P	Eta Square
Hope	Test 1	659.1	1	659.1	81.50	0.001	0.77
	Test 2	456.3	1	456.3	17.35	0.001	0.81
Quality of life	Test 1	187.44	1	187.44	42.87	0.001	0.62
	Test 2	48.22	1	48.22	5.22	0.001	0.87

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of this study was the blind people of the Asaye Sefid Charity in Tehran by 2015, which limits the possibility of generalizing the results to all blind people.

Finally, the lack of a follow-up phase due to the limited opportunity of the choice theory instructor also contributed to the limitations. Visual impairment can have a negative impact on individuals' psychosocial well-being and the emotional needs of those people are easily neglected. Therefore, the psychological intervention, counseling intervention, and peer support groups are necessary to help them meet their psychological and social needs and make lives better [24]. Thus, the training on the concepts of choice theory can be effective on the quality of life and raise hope among blind people.

5. Conclusion

In summary, the choice theory concepts have positive effects on people with visual impairments. In addition, the findings of this research suggest that mental health professionals can use this psychological intervention for improving the life satisfaction and hope in those blind people.

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Conflict of Interest

The authors declared no conflicts of interest.

References

- [1] Semnani S, khodabakhshi koolae A. [The comparison of the spiritual intelligence and self-concept of blinds and sighted high school girl students in Tehran (Persian)]. *Journal of Research on Religion & Health*. 2017; 3(1):42-52.
- [2] Kalani N, Mosalanejad L, Zabetian H, Abdolahifard S. The effect of group hope therapy integrated with mobile learning on hope and perceived stress levels in MS patients. *Bio-science, Biotechnology Research Asia*. 2015; 12(3):1947-55. doi: 10.13005/bbra/1861
- [3] Bhagotra S, Sharma A, Raina B. Psycho-social adjustments and rehabilitations of the blind. *Social Medicine*. 2008; 10(1):48-52.
- [4] Haj Yosefi A. Quality of life and reformation strategies. *Social Work Journal*. 2000; 8(2):30-8.
- [5] Kennedy P, Marsh N, Lowe R, Grey N, Short E, Rogers B. A longitudinal analysis of psychological impact and coping strategies following spinal cord injury. *British Journal of Health Psychology*. 2000; 5(2):157-72. doi: 10.1348/135910700168838
- [6] Khodabakhshi koolae A, Esmailifar A, Falsafinejad MR. [Comparison of life meaning and hopefulness between spinal cord injuries, blinds, and healthy people in Kerman-Iran (Persian)]. *Iranian Journal of Rehabilitation Nursing*. 2015; 1(3):54-64.
- [7] Feldman DB, Snyder CR. Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life meaning. *Journal of Social and Clinical Psychology*. 2005; 24(3):401-21. doi: 10.1521/jscp.24.3.401.65616
- [8] Glasser W. *Station of the mind: New direction for reality therapy*. New York: HarperCollins; 1981.
- [9] Caterin LC. *The effect of reality therapy based group counseling on the self-esteem*. Charlottesville: University of Virginia; 2008.
- [10] Khodabakhshi Koolae A. [The application of counseling and psychotherapy theories in the rehabilitation of the disabled (Persian)]. Tehran: Danzhe; 2016.
- [11] Finger RP, Kupitz D, Holz F, Ramani R. The impact of the severity of the vision loss on vision-related quality of life in India: An evaluation of the IND-VFQ-33. *Investigative Ophthalmology & Visual Science*. 2011; 52(9):6081-8. doi: 10.1167/iops.11-7388
- [12] Nejat S, Holakouie Naieni K, Mohammad K, Majdzadeh SR. [The World Health Organization quality of Life (WHO-QOL-BREF) questionnaire: Translation and validation study of the Iranian version (Persian)]. *Journal of School of Public Health and Institute of Public Health Research*. 2006; 4(4):1-12.
- [13] Khodabakhshi-Koolae A, Mosalanejad L, Gholami M, Massah O. Effectiveness of group hope therapy on the psychological indicators in women with addicted husbands. *Iranian Journal of Rehabilitation*. 2017; 15(1):15-22.
- [14] Nakhaei F. [Effects of cognitive- Behavioral group therapy and reality therapy on hope, happiness, and sense of guilt on female talaba (Persian)] [MSc. thesis]. Mashhad: Ferdowsi University; 2014.
- [15] Alma MA, Groothoff JW, Melis-Dankers BJM, Post MWM, Suurmeijer TPBM, Van der Mei SF. Effects of a multidisciplinary group rehabilitation programme on participation of the visually impaired elderly: A pilot study. *Disability and Rehabilitation*. 2012; 34(20):1677-85. doi: 10.3109/09638288.2012.656795
- [16] Ebadi P. [The effectiveness of reality therapy on the hope of breast cancer patients (Persian)]. *Breast Cancer*. 2013; 2(6):26-34.
- [17] Najafi S, Nadri F, Sahebi A. [The effectiveness of choice theory in quality of life and resilience of drug users (Persian)]. *Research on Addiction*. 2015; 9(33):135-44.
- [18] Valinezhad Z. [The effectiveness of reality therapy on quality of life in divorced women 18 to 23 years old] [MSc. thesis]. Tehran: Payam Noor University; 2014.
- [19] Eslami R, Hashemian P, Jarahi L, Modarres Gharavi M. [Effectiveness of group reality therapy on happiness and qual-

- ity of life in unsupervised adolescents in Mashhad (Persian)]. *Journal of Mashhad University of Medical Sciences*. 2014; 56(5):300-6.
- [20] Bonomi A, Patrik D, Bushnell D. Validation of the United States' version of the World Health Organization Quality of Life (WHOQOL) instrument. *Journal of Clinical Epidemiology*. 2000; 53(1):1-12.
- [21] Glasser W. Choice theory [A. Sahebi, Persian Trans]. Tehran: Sayeh sokhan; 2010.
- [22] Rees G, Keeffe JE, Hassell J, Larizza M, Lamoureux E. A self-management program for low vision: Program overview and pilot evaluation. *Disability and Rehabilitation*. 2010; 32(10):808-15. doi: 10.3109/09638280903304193
- [23] McGrath C, Sidhu K, Mahl H. Interventions that facilitate the occupational engagement of older adults with age-related vision loss: findings from a scoping review. *Journal of Physical & Occupational Therapy in Geriatrics*. 2017; 35(1):3-19. doi: 10.1080/02703181.2016.1267292
- [24] Nyman SR, Dibb B, Victor CR, Gosney MA. Emotional well-being and adjustment to vision loss in later life: a meta-synthesis of qualitative studies. *Disability and Rehabilitation*. 2012; 34(12):971-81. doi: 10.3109/09638288.2011.626487
- [25] Maleki-Tabar A, Khoshkonesh A, Khodabakhshi-Koolae A. [Comparing the self- concept and social adjustment among blind and healthy male student (Persian)]. *Zahedan Journal of Research in Medical Sciences*. 2012; 13(1):33.

