Original Research

Predicting Happiness in the Blind in Isfahan Based on the Source of Control, Resilience and Mindfulness

Maryam Lali Dahaghi[1*]

1. Master's Degree in Rehabilitation Counseling, Khomeini Shahr Azad University, Esfahan, Iran. **Orcid:** 0009-0004-0857-3230

***Corresponding Author:** Maryam Lali Dahaghi. Master's Degree in Rehabilitation Counseling, Khomeini Shahr Azad University, Esfahan, Iran. **Email:** laly.maryam1982@gmail.com

Abstract

Background: The aim of this study was to predict happiness in the blind in Isfahan based on the source of control, resilience and mindfulness.

Methods: The research was descriptive and correlational. The statistical population included all blind people aged 20 to 50 years under the auspices of the Welfare Organization of Isfahan. 200 people were selected by available and purpose-based methods. Research data were collected using the Oxford Happiness Questionnaire (Argil, 2002), the Control Source Questionnaire (Rutter, 1996), the Resilience Questionnaire (Connor and Davidson, 2003) and the Mindfulness Questionnaire (Bayer et al., 2004). Statistical data were analyzed by descriptive statistics (mean and standard deviation), correlation coefficient and multivariate regression with SPSS-26.

Results: The results showed that there is a significant relationship between internal and external source of control, resilience and each of its subscales including perception of individual competence, trust in individual instincts, positive acceptance of change, source of control and spiritual effects with happiness in the blind (05 / 0> P). There is a significant relationship between mindfulness and each of its subscales including observation, descriptiveness, action with mindfulness and unconditional acceptance with happiness in the blind (P <0.05).

Conclusion: Also, the results of regression analysis showed that predictor variables together could explain 36% of happiness changes.

Keywords: Happiness, Source of Control, Resilience, Mindfulness, Blind.

Submitted: 4 Feb 2024, Revised: 22 March 2024 , Accepted: 25 Apr 2024

Introduction

Usually, societies has little information about blind people. Some people think that there are many sensorimotor, behavioral and cognitive differences between normal and blind people, but the truth is that the difference between these two groups is only about seeing and not seeing [1]. There are different definitions of blindness. Visual impairment is often used synonymously with visual disability. Also, in the definition of this disorder, words such as visually impaired, visually unable, blind, visually weak, and visually damaged are used. Basic definitions of blindness are divided into two categories: educational blindness and legal blindness. Therefore, a person is called legally blind if he has a vision of less than 20/200 in his superior eye and his field of vision is less than 20 degrees. But what is important about blind people that is often ignored in studies, is their psychological structures, including happiness [2]. Blindness can be associated with more stress to adapt to life, increase psychological pressure, cause severe psychological problems and reduce happiness; Therefore, for happiness in the lives of blind people, it must be considered separate from their other problems. Seligman (2002) [3] considered happiness as the main subject of the positive psychology approach and divided it into five components: positive excitement (life of pleasure section), engaging or committed life (enthusiasm for life), meaningful life (meaningful life), positive relationships with others and doing work or succeeding in completing work (or achievement) [3]. According to the positivist approach, the absence or deficiency of emotions and positive characteristics in life can cause all kinds of damage and psychological problems [4]. Meanwhile, vision loss has a great impact on a person's ability to perform daily activities and experience various emotions, including his happiness [2]. The source of control and the level of resilience are among the psychological structures that can be affected in the lives of blind. Source of control refers to the difference in beliefs with which people control their life events in everyday life. Therefore, the source of control is divided into two categories, external and internal. People with an external source of control believe that their behavior is guided by fate and luck and other external conditions, while people with an internal source of control believe that their behavior is controlled through their own efforts and personal decisions. With increasing problems and difficulty in vision, the external source of control often overcomes [5]. Resilience is an important protective factors in this context [6]. Resilience increases the ability to tolerate and adapt to life crises and overcome them. Also, it prevents psychological problems among teenagers and young people and protects them from the psychological effects of problematic events [7]. The concept of resilience is based on the theory that although some people face many risk factors and diseases and disabilities, and the probability of an issue occurring to them is high, they do not suffer from that issue. The ability of mindfulness in blind people is similar to their sighted counterparts. Although mindfulness is based on the five senses, the complete absence of one sense cannot disrupt its functions, and with the compensatory role of other senses, mindfulness is achieved. Mindfulness includes a receptive and non-judgmental awareness of current events [8]. Mindful people perceive internal and external events freely and without distortion and have a great ability to face a wide range of thoughts, emotions and experiences (both pleasant and unpleasant) [9]. One of the reasons for the increase in psychological and medical research on mindfulness is that it can define new dimensions of the mind-body relationship. In the field of the relationship between research variables, various studies have been conducted, for example, Campos et al. (2016) [10] showed that the effect of the supervisor on observations, mindfulness, and autonomy jointly have a direct effect on the relationship between happiness and mindfulness. Rahmani, Ajil Chi and Zareian (2016) [8] showed that the relationship between mindfulness and

cognitive abilities was positive and significant except for the two components of inhibitory control and selective attention and planning in other components. Also, mindfulness could predict 0.43% of the variance of blind people's cognitive abilities. Sadoughi and Hesampour (2015) [11] showed that blind and partially sighted men had significantly higher scores in the mental happiness variable compared to women, but no significant difference was observed between blind men and women in terms of mindfulness. In general, blindness is a serious condition that can destroy mental balance, and according to Adler's opinion, these people always feel some kind of deficiency in themselves due to their vision deficiency and always experience some degree of avoidance and fear in their relationships with others. On the other hand, most of the studies in recent years, both inside the country and abroad, have been conducted regarding happiness and other positive psychological constructs in healthy adults and adolescents. Unfortunately, the results obtained from such studies in healthy people cannot be generalized to the blind; Therefore, causal cognitive theories as well as therapeutic and academic should be investigated in this class of society independently and acknowledging cultural diversity. Acknowledging the above, the present study is conducted with the aim of predicting happiness in the blind based on the source of control, resilience and mindfulness.

Methods

The current research is a descriptive and correlational study. Since the purpose of the current research is to explain happiness based on the source of control, resilience and mindfulness, the research is field and descriptive. The statistical population of the present study included all blind people with the age ranging from 20 to 50 years under the support of the welfare organization of Isfahan, numbering 317 people. In this research, 200 people were selected from blind people ageing from 20 to 50 in Isfahan who were under the support of the welfare organization, based on the entry and exit criteria. The criteria for entering the project included blind adults between 20 and 50 years old, not participating in similar research programs at the time of the study, and willingness and informed consent to participate in the research. The criteria for exiting the plan included not answering one or more questions of a questionnaire and not completing the questionnaires, falling behind or being diagnosed with psychological disorders.

Research tools

A. Oxford Happiness Questionnaire: It has 29 items and measures individual happiness. This test was created in 1989 by Michael Argyle based on Beck's Depression Questionnaire (1976). The highest score that the subject can get in this scale is 87, which indicates the highest level of happiness, and the lowest score of this scale is 0, which proves that the subject is dissatisfied with life. The normal score of this test is between 40 and 42. The reliability and validity of this questionnaire in Farsi was measured by Hadinejad and Zarei (2008). The correlation coefficient of this questionnaire was used with the NEO five personality test questionnaire and the results showed a significant correlation with the dimensions of the Oxford happiness questionnaire (in the range of 0.52 to 0.76). The reliability of this questionnaire showed a correlation coefficient of 0.78 in a 4-week interval. Cronbach's alpha for the total index of happiness depression questionnaire was 0.84 in the test phase and 0.87 in the retest phase.

B. Rutter's Control Perception Questionnaire: This scale was compiled by Rutter (1966) [12] and based on social learning theory to evaluate the generalized expectations of the individual, in the field of internal or external control. This scale is a questionnaire of 29 questions, each question has two sentences in the form of A and B, one of which is the internal control scale, and the other is the external control scale. 6 out of 29 questions are neutral, which are used to keep the purpose of the questionnaire hidden from the subject. The scoring of this scale is by counting the internal control answers of 23 questions, where a score of

9 or higher is a sign of external control source, and a score less than 9 is a sign of internal control source [13]. The reliability coefficient of Rutter's scale has been obtained by using the ballad method of about 0.81. In another study, reliability coefficients were calculated using Cronbach's alpha method, and the coefficients for internal control were 0.81 and external control were 0.91 [14].

C. Resilience Questionnaire: This questionnaire, which was created by Connor and Davidson (2003) [4], has 25 questions and measures resilience in a five-point Likert scale. Each statement is scored based on a Likert scale between (0=completely false) to (4=always true) and the range of total scores is between 0 to 100. The results of studies related to the psychometric characteristics of this questionnaire in normal and patient samples have confirmed its validity and reliability.

D. Kentucky Mindfulness Skills Questionnaire: This questionnaire was compiled by Beer, Smith and Allen (2004) [8] and has 39 questions and includes four components of mindfulness: observation, description without labels, functioning with awareness and acceptance without judgment. Its internal consistency (alpha coefficient) between 0.76 and 0.91 for four components was reported by Beer et al. (2004) [10].

In order to carry out the research, the researcher went to the centers for the affairs of the blind in the welfare of Isfahan, located on Apadana St. and Shamsabadi St., and the State University and Azad University of Khorasgan. After illustrating the blind affairs authorities of the aforementioned institutions, the questionnaires were given to the qualified people who were there for personal and administrative affairs and were willing to fill one. Questionnaires were implemented on sample people with the help of the officials of the centers and in order to appreciate the cooperation of the subjects, it was decided that after completing the project, if they want or need, they will use the consulting services of Isfahan University for free.

For the purpose of analysis, the data were used using descriptive statistics methods (mean and standard deviation), correlation coefficient and multivariate regression with simultaneous entry method while observing statistical assumptions in regression theories. All analyzes were done with the help of SPSS version 26 statistical software.

Results

The tables show that there is a significant relationship ($P<0.05$) between the total source of control and each of its two dimensions, i.e. internal and external source of control, with happiness, between resilience and its subscales with happiness, and between mindfulness and its subscales with happiness among the blind.

As can be seen in table 3, the determination coefficient and the adjusted determination coefficient and the estimated criterion error in the source of control are 0.292, 0.330, and 5.411, respectively, in resilience are 198. 0, 0.200, and 3.900, respectively, and in mindfulness, they are 0.216, 0.152, and 2.725, respectively.

Data analyses show that predictor variables (resilience, mindfulness and source of control) have been able to predict and explain happiness among the blind. Beta value is 0.39 for resilience, 0.41 for mindfulness and 0.28 for source of control and is significant at the level ($P=0.001$). Also, predictor variables (resilience, mindfulness and source of control) have been able to explain together 0.36% of the variance related to happiness ($P<0.001$).

Discussion

The first finding of the research is that there is a significant relationship between the overall source of control and each of its two dimensions, i.e. internal and external source of control, with happiness among the blind ($P<0.05$). This finding was consistent with the research (Peten, 2010; Yasminejad, 2012) [16, 15]. It is worth mentioning that people who have an external source of control attribute success to luck, but those who have an internal source of control attribute success to their abilities. Therefore, their awareness that their thoughts control their actions

effectively affects their beliefs and motivation and makes these people have high happiness [17]. Also, people with an external source of control, who believe that their behaviors and abilities have no effect on the reinforcements they receive, often place little value on any efforts to improve their circumstances. In this way, it can be said that people with an internal source of control, due to understanding their role in how they see life and accepting responsibility for the consequences of their actions, can have higher happiness and are more efficient and persistent compared to people with an external source of control. In addition, compared to people with an external source of control, they try to collect more information from their surroundings and try to control the consequences of their actions and deeds. In general, according to the results of the present research, it can be said that people with an external source of control, because of having external proof, have less happiness compared to people with an internal source of control. People who have an internal source of control have higher self-confidence, self-efficacy and problem-solving ability. This causes these people to have a more positive self-image and this ultimately causes them to have higher happiness [18].

The second finding of the research showed that there is a significant relationship between resilience and its subscales with happiness among the blind ($P<0.05$). This result is in line with these research (Garboski, 2010; Bernat, 2009) [19, 20]. In explaining these findings, Khazaei Parsa (2016) [21] believes that resilient people have a sense of efficiency and self-confidence that allows them to overcome life's challenges successfully. These people feel less hopeless and lonely and have the skill to look at the problem as a problem that they can dig into, change, tolerate, or solve in other ways, and the same thing along with their high tolerance against problems makes them have a positive and happy outlook on life. In general, resilience increases a person's favorable and effective coping, makes his life orientation positive, and as a result, increases his happiness. In fact, happiness is one of the characteristics of resilient people. The problems and issues of life are faced with a positive view and with optimism, and this positive attitude increases their tolerance in the face of problems. Such people have goals and plans for their future and life is meaningful for them; and because of their happiness and many positive beliefs, after failure, they do not get discouraged and increase their efforts [22]. According to Erse, Simmons, Stein et al. (2008) [23], people who have high resilience often return to their normal state after stressful encounters by creating positive emotions in themselves. Resilient people go through stressful events without their mental health decreasing and suffering from mental illness. Also, it seems that in some cases, despite the difficult experiences they have gone through, they progress, become successful, and find higher happiness in themselves. Waff, Frederickson, and Taylor, (2008) [24] considered resilience to reduce anxiety and depression. According to them, resilient people can overcome the effects of unfortunate events and maintain their mental health. As a result, increasing the level of endurance leads to the reduction of emotional problems and the emergence of happiness in the individual.

The third finding of the research showed that there is a significant relationship between mindfulness and its subscales and happiness among the blind ($P<0.05$). The results of Ahmadvand et al.'s research (2013) [25] show that increasing mindfulness is associated with increasing psychological well-being, agreement, openness, ability to solve problems, ability to compromise, and emotional functioning. Also, increasing mindfulness is associated with reducing anxiety and depression[26]. In the explanation of the current research, it can be said that mindfulness helps people to respond to events with reflection and thinking instead of involuntary response [25].

Conclusion

Mindful people, in the present, perceive events with less discomfort. In other words, mindfulness

leads to encouraging people to focus attention on neutral stimuli and purposeful awareness on the body and mind, mental occupation. It leaves them with threatening thoughts and worries about performance and takes their minds out of automatic mode.

Awareness moderates emotions without judgment and increases awareness of mental and physical emotions and helps to clearly see and accept emotions as they happen and ultimately leads to people's feeling of happiness. [26] In this research, there was no possibility and opportunity for a comparative study between blind people and other people with special needs. In this research, self-report tools (questionnaires) were used, and this can cause fatigue of the subjects and reduce their accuracy and to some extent distort the answers. It is suggested that in future studies, a wider community including blind people and other people with special needs should be selected and investigated. It is suggested that in future researches, in addition to happiness, other positive psychological constructs such as optimism, hope, spirituality, etc., should be studied and investigated in the blind.

Acknowledgment:

The authors know their duty to express their gratitude and thanks to all those who somehow played a role in this research.

Funding:

None

Authors Contributions:

MLD conceptualized the study objectives and design. MLD are infectious disease specialists who contributed to data collection from patients along with

Ethical Consideration:

None

References

[1]. Razavi, Abdul Hamid; Kazemi, Sultan Ali; Mohammadi, Mohammad. (2013). Investigating the relationship between personality traits and coping styles with social anxiety in blind and normal students of universities in Fars province. Quarterly Journal of Psychology of Exceptional People, Volume 1, Number 4, 109-13.

[2]. Hyderabadi, Zahra., Nawabinejad, Shekoh., Delawar, Ali., and Shafiabadi, Abdullah. (2013). The effectiveness of positivity training on increasing the happiness and hardiness of mothers with blind children. Exceptional people quarterly. 4(16):112-96. [3]. Seligman, M. E. P. & Csikszentmihalyi, M. (2002). Positive psychology: An introduction. American Psychologist, 55, 5-14.

[3]. Seligman, M. E. P. & Csikszentmihalyi, M. (2002). Positive psychology: An introduction. American Psychologist, 55, 5-14.

[4]. Rashid, T., & Seligman, M. E. P. (2013). Positive psychotherapy: A treatment manual. New York: Oxford University Press.

[5]. Voils, C., Steffens, D., Bosworth, H., & Flint, E. (2005). Social Support and Source of control as Predictors of Adherence to Antidepressant Medication in an Elderly Population. The American Journal of Geriatric Psychiatry. 13(2):157-165.

[6]. Aregu, L., Darnhofer, I., Tegegne, A., Hoekstra, D., & Wurzinger, M. (2016). The impact of gender-blindness on social-ecological resilience: The case of a communal pasture in the highlands of Ethiopia. Ambio. 45(Suppl 3):287-296

[7]. Wald, H. S., Bachner, Y. G., & Urkin, J. (2016). Promoting resiliency for interprofessional faculty and senior medical students: Outcomes of a workshop using mind-body medicine and interactive reflective writing. Med Teach. 38(5):525-8.

[8]. Rahmani, Jamid, Ajil Chi, Behzad.; Zareian, Akbar. (2016). The relationship between mindfulness and cognitive abilities in blind sports veterans. Journal of veteran medicine. 9(2):54-67.

[9]. Zhang, J. X., Liu, X. H., & Zhao, D. (2015). Mindfulness-based stress reduction for chronic insomnia in adults older than 75 years: a randomized, controlled, single-blind clinical trial. Explore (NY). 11(3):180-5.

[10].DanielCamposa,AusiàsCebollaahS,oledadQueroah,JuanaBretón&LópezahCristinaB,otellaahJoaquim,SolerbcdJavierG,arcía-Campayoe,MarceloDemarzof ,Rosa María Bañosg(2016). Meditation and happiness: Mindfulness and self-compassion may mediate the meditation–happiness relationship. Personality and Individual Differences Volume 93 Pages 80-85

[11]. Sadouqi, Milad; Hosampour, Farzaneh. (2015). The relationship between mindfulness and happiness in blind and visually impaired people. The second national conference of the sighted community and blind citizens. Kashan

[12]. Rotter JB. Generalized expectancies of internal versus external control of Reinforcement. Psychological Monogrphs. 1966

[13]. Barzegar Bafroei, Fazel; Salehpour, Mustafa; Friday imam, Seyyed Mohammad Reza. (2013). Investigating the relationship between source of control and self-esteem with creativity in high school students in Ardakan city, School Psychology Quarterly, Volume 3, Number 4, Page 21-6

[14]. Ashuri, Jamal; Safarian, Mohammad Reza; Yousefi, Nurullah. (2013). The relationship between religious orientation, optimism and spiritual intelligence with the spiritual health of Quran teachers. Psychology and Religion, Volume 7, Number 2, 125-136

[15]. Patten DM. An analysis of the impact of locus-ofcontrol on internal auditor spiritual well-being. Managerial Auditing Journal. 2010; 20(9): 1016-29.

[16]. Yaseminejad P, Farzin Yasemi A. [The relationship between attachment style and source of control with spiritual well-being in married student university]. Proceedings of the forth National Seminar on Mental Health of students, Gilan University. 2012. [Persian]

[17]. Bahrami, Fatemeh (2008). The effect of teaching metacognitive strategies on the source of control. PhD thesis, Allameh Tabatabai University.

[18]. Cassidy T .Long C.(2010). Problem-Solving style, stress and psychological illness: development of a multifactorial measure. British Journal of clinical psychology; 35, 265-77.

[19]. Garbowski, M. A. (2010). Transformational leadership and the dispositional effects of hope, optimism and resilience on governmental leaders.For the Ph.D. Dissertation, Regent University, United States,Virginia, proquest, 122 pages: AAT 3425737.

[20]. Bernat, F. P. (2009). Youth resilience: Can schools enhance youth factors for hope, optimism, and success?. Women & Criminal Justice, 19(3), 251-266.

[21]. Khazaei Parsa, Fatemeh (2006). Resilience, capacity to overcome difficulties, stubborn persistence and self-improvement. University of Tehran: Student Counseling Center.

[22]. Collins, S. (2007). Social workers, resilience, positive emotion and optimism. Practice: Social Work in Action, 19(4), 255-269.

[23]. Arce, E., Simmons, A. W., Stein, M. B., Winkielman, P., Hitchcock, C., & Paulus, M. P. (2008). Association between individual differences in self-reported emotional resilience and the affective perception of neutral faces. Journal of Af ective Disorders, 2(4), 120-131.

[24]. Waugh, C. E., Fredrickson. B. L., & Taylor, S, F. (2008). Adapting to life's slings and arrows: Individual differences in resilience when recovering from an anticipated threat. Journal ofResearch in Personality, 3(5), 250- 267.

[25]. Ahmadvand, Zahra; Heydari Nesab, Leila; Shayiri, Mohammad Reza (2012). Explanation of psychological well-being based on the components of mindfulness, scientific research quarterly of health psychology, number 2

[26]. Birami, Mansour; Mohadi, Yazdan; Kazemi Rezaei, Seyyed Vali; Esmaili, Sudabah. (2013). The effect of cognitive therapy based on mindfulness in reducing pathological worry and anxiety symptoms of students with generalized anxiety disorder. Rehabilitation research in nursing, second period, number 1

Tables:

Table 1: Mean and standard deviation of happiness scores in the blind

SD	Mean	Variables	
3.17	23.08	Positive affection	
2.84	19.44	Satisfaction	**Happiness**
7.96	42.52	Overall score	
2.23	22.39	Internal control source	
3.71	31.86	External control source	**Control source**
8.11	54.22	Overall score	
2.63	19.16	Individual competence	
4.19	24.89	Trusting instincts	
3.86	22.00	Positive acceptance of change	
2.77	19.56	Control	**Resilience**
7.45	25.89	Spiritual influences	
13.17	104.06	Overall score	
3.77	18.63	Observation	
5.64	20.79	Description	
2.96	17.55	Acting with mindfulness	
4.18	19.27	Unconditional acceptance	**Mindfulness**
10.48	76.24	Overall score	

Table 2: The results of Pearson's correlation coefficient between the source of control and happiness in the blind

P-value	Criterion variable/happiness	Predictor variables
0.011	0.417**	Internal control source
0.002	0.322**	External control source
0.007	0.519**	Total control source
0.002	0.195**	Individual competence
0.003	0.138**	Trusting instincts
0.012	0.211**	Positive acceptance of change
0.001	0.305**	Control
0.000	0.289**	Spiritual effects
0.001	0.641**	Resilience
0.006	0.119**	Observation
0.001	0.099**	Description
0.004	0.103**	Acting with mindfulness
0.001	0.117**	Unconditional acceptance
0.001	0.477**	Mindfulness

Table 3: Summary results of the regression analysis model of source of control, resilience and mindfulness with happiness

Estimated error SD	Modified R	Determination coefficient	Correlation coefficient	Model
5.411	0.330	0.292	0.296	Control source
3.900	0.200	0.198	0.205	Resilience
2.725	0.192	0.216	0.230	Mindfulness

Table 4: The results of multivariate regression analysis of happiness based on the source of control in the blind

P-value	F	T	Standard coefficients	Non-standard coefficients		Model	
			B	Error criterion N	B		
0.004	204.258	44.614	-	0.910	230.62	Constant	1
		7.213	0.255	0.024	0.888	Control source	
0.002	123.664	31.055	-	0.643	196.42	Constant	2
		4.819	0.307	0.019	0.635	Resilience	
0.004	90.531	28.974	-	0.438	165.23	Constant	3
		3.226	0.291	0.021	0.584	Mindfulness	

Table 5: Table of coefficients (indices) of multivariate regression analysis of predicting happiness based on source of control, resilience and mindfulness

P	t value	R^2 square	Constant value	Standard β	Predictor variable	Criterion variable
0.002	2.13	0.363	49.60	0.39	Resilience	Happiness
0.001	4.22			0.41	Mindfulness	
0.000	1.18			0.28	Control source	