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#### **ABSTRACT**

**Background**: The present study aims to use structural model in explaining the effect of unconditional self-acceptance, the quality of thematic relationships, and the hope for employment regarding the life quality of blind and visually impaired students based on the mediating role of the sense of agency.

**Methods**: This study used descriptive research method of correlation type, which was carried out by structural equations. The statistical population for the current study comprised blind and partially sighted individuals between the ages of 12 and 35 who were members of the Blind Association of Khuzestan Province in 2022 and had received a university education ranging from associate to doctoral level. Targeted face sampling was employed, and the research tools utilized included the following questionnaires: the life quality of the blind and visually impaired (2000), unconditional self-acceptance (2001), the quality of subjective relationships (1985), employment hope (2007), and the sense of agency for individuals with visual impairments (2007). The data was analyzed using descriptive statistics and structural equation modeling (SEM).

**Results**: The mean age and standard deviation of the 233 subjects (132 women and 101 men) in the current research were 27.09 and 5.13, respectively. 183 (78.5%) of the participants were single, and 50 (21.5%) were married. coefficient of determination ( $R^2$ ) for quality of life was equal to 0.58 (P = 0.001,  $\beta = 0.358$ ). The sense of agency mediates the effect of quality of the subject relationships regarding life quality of the blind graduates in a negative way, and the effect of hope for employment ( $\beta = 0.303$ , P = 0.001) and unconditional acceptance ( $\beta = 0.254$ , P = 0.001) on their life quality in a positive and meaningful way.

**Conclusion**: The sense of agency mediates the relationship between self-acceptance, subject relationships and hope for employment on the quality of life of blind and visually impaired graduates.

**Keywords**: Hope for Employment, Unconditional Self-acceptance, Sense of Agency, Quality of Subject Relationships, Quality of Life

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# Introduction

One of the most crucial organs for humans is vision. At any age, the loss of this sense may be followed by both main and secondary symptoms and issues (1). Though each of us perceives the world differently, there are similar threads that enable us to think about the foundations of our knowledge of things. Having a sense of sight is one of these threads. An individual with vision loss experiences very distinct perceptions. A person with poor eyesight can see the world around, but with some social and mental difficulties (2). Blind people struggle with social skills because they lack one of their fundamental perceptions, and this problem can make them more anxious (3); they are more fearful of their future and have a more negative attitude toward themselves, which has a negative effect on their self-concept and selfesteem (4). This lowers their standard of living (5). In general, vision impairment lowers the quality of life because it restricts everyday activities (6).

It is crucial to look into the quality of life for blind and physically impaired individuals. People's perceptions of their capacities for performing social, emotional, and physical tasks, as well as their cerebral comprehension of their sense of wellbeing and contentment with life, make up their quality of life (7). Practically speaking, quality of life refers to behavioral success or the capacity for multitasking and having enough time to complete tasks (8). Studies have shown a direct relationship between vision and a person's quality of life, and that people with significant visual disabilities have more mobility, social, and mental constraints (9, 10).

Unconditional personal acceptance can improve life quality starting in puberty (11). Not criticizing yourself is a necessary part of acceptance (12). Regarding the relationship between physical wellbeing and self-acceptance, it is undeniably true that when interacting with other people, one's body image is the first quality assessed. The ability to embrace oneself has a significant impact on avoiding depression (13). According to Popov, Radanovi, and Biro (14), there is a connection between mental wellness and self-acceptance. Self-

acceptance also had the strongest positive relationship with optimism, and social and healthy personality development (15).

The quality of object relations is one of the elements affecting how well people can run their lives. The phrase "quality of object" was first used by Freud in the context of early mother-child interactions. This term, when used in conjunction relationships, denotes with interpersonal relationships and the interior imprints of previous relationships that influence a person's present encounters with others (16). According to Cassidy (17), children's attachment experiences mold their identity, and many personality disorders, as well as weaknesses and inabilities of the ego, are brought on by lack of nurturing care or security in child's attachment.

Future employment prospects are one of the variables influencing the life quality of blind people with university degrees (18). This view holds that human conduct is entirely intentional (19); routes taken to achieve objectives and the agent are the three major variables in this theory. The motivation and desire of people to attempt to achieve attainable objectives are what is referred to as the agent (20). This theory states that the process of establishing professional goals, having ideas, plans, and the desire to accomplish objectives are affected by optimism for work, which is described as a positive motivational condition (21). It is worth noting that other factors, such as the person's interest in his job, the amount of time assigned to perform work activities, social status, and the facilities available in the society related to the job are also considered in the variable of hope for employment, in addition to having a job and income (22). Compared to nondisabled people, university-educated people with disabilities encounter more socioeconomic difficulties, disparities, speech and physical obstacles to employment, as well as higher levels of tension and worse health conditions. Therefore, people with physical mobility impairments have a more prominent position at work as a method for compensating the physical and social deficiencies of people with disabilities, rebuilding their everyday

life (26) (23), and enhancing their quality of life (27) (24).

On the contrary, a sense of control is a significant psychological factor related to the quality of life for blind and partially sighted people (25). The ability to control one's ideas, feelings, and actions gives one a sense of agency, which has a positive impact on how well people perform, how they feel, what they choose, and how much work they put into something (26). Accordingly, the feeling of autonomy may have a mediating effect on the lives of the blind or partially sighted individuals (26). According to Jang and Jean (27), a person's evaluation of her or her skills is the first step in developing a sense of agency and later, selfesteem, which refers to an initial sensation of selfacceptance and value. However, some studies demonstrated that age and gender have no bearing on the life quality or the object of relations, etc. (28). Based on the above-mentioned research, the answer to the question is, "Does the structural model of unconditional self-acceptance, the quality of subject relationships and hope for employment have a good fit on the quality of life of blind and visually impaired students based on the mediating role of a sense of agency?"

### **Methods**

The correlation type, also known as structural equation method, is used in a descriptive research. The statistical population included all the blind and partially sighted people between 12 and 35 who with university degrees (associate to doctorate degrees); they were members of the Blind Society of Khuzestan Province in 2022. In the initial stage, the union of the blind and partially sighted in seven towns of Khuzestan should be contacted for information on the number of subjects after receiving the required licenses from the welfare organization of the province (Ahvaz, Abadan, Khorramshahr, Behbahan, Omidiyeh, Dezful, and Mahshahr cities). Targeted sampling method was used. and the inclusion requirements satisfaction with research participation, a doctor's or rehabilitation center's report of visual impairment, being in the age range of 21-35,

having at least an associate degree, and being unemployed. Dissatisfaction with the continuation of the collaboration, failure to finish the surveys, or a distorted response form was among the exclusion criteria. The number of research variables and the statistical model of path analysis were used to determine sample size. The number of factors was determined based on the number of direct paths, the number of exogenous variables, and the number of error variances. To avoid information being distorted by potential subject loss, a sample size of 233 people was examined, taking into account Klein's (1998) suggestion, For a given number of variables, a sample size of 160 people would be appropriate.

After obtaining the required permits, finding the sample members, arranging with the appropriate authorities, and a prior planning, the researcher showed up where the subjects were working to observe the ethical standards in the study. In addition, the subjects were ensured of the confidentiality of the information, the questionnaires, and the reasons for their selection in the sample. Since the questionnaires were anonymous, the participants gave their consent to cooperate with the researcher and respond to the questionnaires and scales. They were then examined with the assistance of a companion and began to finish the surveys after the researcher had given them the required instructions.

#### **Tools**

Quality of Life of the Blind and Visually Impaired Questionnaire

The "VQOL Core Items" or "Impact of Vision Impairment (IVI)" questionnaire was used to create the blind study's quality of life evaluation. The main items of the "Vision Specific Quality of Life" (VQOL) questionnaire by Frost et al. were included in this questionnaire, designed in 2000 at "Royal Victorian Eye and Ear" hospital in Australia (2000). This questionnaire evaluates five facets of life quality for people with vision impairments: emotional (questions 1-13), social (questions 14-12), self-care (questions 22-30), leisure (31-83), and mobility (questions 39-64). The questions are

evaluated according to the following criteria: never, less frequently, sometimes, often, and always. On a scale of 0 to 4, positive questions were graded from right to left and negative questions were graded from left to right (VI, 2002). Accordingly, a score of 31 indicates a poor quality of life, 14-26, a moderately desirable quality of life, 27-39, a desirable quality of life, and 40-52, a completely desirable quality of life. Moreover, regarding selfcare, 0-9 indicates a poor quality of life, 10-18 shows a moderately desirable quality of life, 19-27 demonstrates a desirable quality of life, and 28-36 suggests a completely desirable quality of life. Furthermore, in terms of social, leisure, and movement, 0-8 indicates a poor quality of life; 9-16, a moderately positive quality of life, 17-24 a positive quality of life; and 23-25 signifies a very excellent quality of life. A score of 0-46 indicates a poor general quality of life, 92-47, a somewhat positive quality of life, 93-138, a positive quality of life, and 184-139 reveals an entirely positive quality of life. The calculated correlation coefficient was 0.98. The correlation between the life quality of the blind and partially sighted and rehabilitation services were also found to be 0.89 by Sarabandi et al. (29).

### Unconditional self-acceptance questionnaire

and Chamberlain Haaga created the unconditional self-acceptance questionnaire in 2001. This questionnaire, with 20 items and 2 subscales measuring unconditional and conditional self-acceptance, is appropriate for people aged 14 and older. Since the unconditional self-acceptance questionnaire was translated by Kalantari (30) in Iran, Likert scale could be used, with 1 being totally untrue and 7 being always true. A high score on this measure shows unconditional selfacceptance for 8 of the items, including 2, 3, 5, 6, 8, 11, 16, and 18, while the order of the other 10 items (1, 4, 7, 9, 10, 12, 13, 14, 15, and 19) is reversed. Consequently, a lower score denotes conditional self-acceptance (from 11 to 77). Cronbach's alpha of 0.72, stated by Chamberlin and Haga (1002) as the internal consistency of the questionnaire, was at an acceptable level. By splitting the test into two halves and using the Spearman-Brown categorization technique, its reliability was calculated at 0.36. (30). By comparing the results of this questionnaire with those of the Rosenberg Self-Esteem Questionnaire, Chamberlain and Haga (2001) determined its parallel validity. Their correlation value was 0.73. The root mean square error of the approximation index from the confirmatory factor analysis was 0.09, the relative fit and goodness of fit indices were 0.59 and 0.59, respectively, and other indicators also had appropriate values, indicating a satisfactory fit of the model with the data (15).

# Quality of object relations questionnaire

The objective of this questionnaire, developed by Bell, Becker, and Billington in 1985, is to evaluate performance (the quality of object relations and reality testing). This questionnaire covers four factors of alienation, insecure attachment, egocentricity, and social incompetence for object relations and four factors for reality distortion, the uncertainty of perception, and hallucinations and delusions for a reality test. Form B of this test includes 54 items which only assess the quality of object relations used in this study; a higher score denotes a worse situation. Bell et al. (1965 and 1986) used Cronbach's alpha method to figure out the reliability between 0.69 and 0.87 and verified the validity of the test's structure and content. The test-retest reliability coefficients were obtained between 0.36 and 0.46, and the construct and content validity were confirmed in Iran by Hadinejad, Tabatabaian, and Dehghani (31); all the subscales and credit index had good internal consistency (using Cronbach's alpha method) and adequate retest reliability.

### Hope for employment questionnaire

This two-item questionnaire, developed by Qureshi Rad (32), aims to assess the degree of job optimism and the variables influencing it (interest in the educational field, income, social status, time, and facilities available in society). The Likert scale is used for grading. The choices and scores for each choice are shown in the chart below. The total

number for each question should be calculated to obtain the questionnaire's overall result. The rating will be between 2 and 1. Respondents with better scores anticipate having more job opportunities, and vice versa. The questionnaire was used on a set of 2 to 3 individuals to determine its reliability, and its Cronbach's alpha coefficient was 0.78.

Sense of agency for people with visual impairments questionnaire

By utilizing Hiltin and Elder's paradigm, Farahani, Yarmohamedian, Malakpour, and Abedi (2016) developed a sense of agency questionnaire for individuals with visual impairments (2007). This questionnaire investigates the feeling of agency using theoretical underpinnings and a conceptual model. Three components self-efficacy, optimism, and purposefulness—were considered as their subscales. The questionnaire was originally 33 questions; after factor analysis, three questions

were removed and 30 questions were left. It was also discovered during the exploratory factor analysis that KMO was 0.197, and values above 0.7 demonstrated the appropriateness of the sample for factor analysis.

### **Results**

The mean age and standard deviation of the 233 subjects (132 women and 101 men) in the current research were 27.09 and 5.13, respectively. 183 (78.5%) of the participants were single, and 50 (21.5%) were married. Table 1 shows mean, standard deviation, and correlation coefficients between the qualities of the object of relations, unconditional self-acceptance, hope for employment, components of sense of agency (self-efficacy, optimism and purposefulness) and quality of life (emotional, socialself-care, leisure and movement).

Table 1. Mean, standard deviation, and correlation matrix of research variables

	Research variables	1	2	3	4	5	6	7	8	9	10	11
2.Unconditional acceptance 3.Hope for employment 4. Sense of agency - self-efficacy 5. Sense of agency - optimism 6. Sense of agency - purposefulness 7. Quality of life emotional dimension 9. Quality of life self-care dimension 10. Quality of life - leisure dimension 11. Quality of life - mobility	- •											
acceptance 3. Hope for employment 4. Sense of agency - self-efficacy 5. Sense of agency - optimism 6. Sense of agency - purposefulness 7. Quality of life emotional dimension 8. Quality of life - self-care dimension 9. Quality of life - self-care dimension 10. Quality of life - leisure dimension 11. Quality of life - mobility dimension Mean 22.09 81.08  0.24**  0.33**  0.44**  0.33**  0.44**  0.30**  0.36**  0.36**  0.36**  0.36**  0.36**  0.36**  0.31**  0.32**  0.31**  0.32**  0.32**  0.33**  0.41**  0.32**  0.33**  0.35**  0.38**  0.36**  0.36**  0.36**  0.36**  0.36**  0.36**  0.36**  0.31**  0.36**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.36**  0.31**  0.42**  0.44**  0.57**  -  -  -  -  -  -  -  -  -  -  -  -	•											
employment 4. Sense of agency - self-efficacy 5. Sense of agency - optimism 6. Sense of agency - purposefulness 7. Quality of life - emotional dimension 8. Quality of life - self-care dimension 10. Quality of life - leisure dimension 11. Quality of life - mobility 12. Cape -		-0.22**	-									
- self-efficacy 5. Sense of agency – optimism 6. Sense of agency – purposefulness 7. Quality of life – emotional dimension 8. Quality of life – self-care dimension 10. Quality of life – leisure 0.28** 0.24** 0.26** 0.31** 0.32** 0.36** 0.36** 0.36** 0.32** 0.35** 0.35** 0.36** 0.36** 0.32** 0.35** 0.35** 0.36		-0.26**	0.24**	-								
5. Sense of agency – optimism 6. Sense of agency – purposefulness 7. Quality of life – emotional dimension 8. Quality of life – self-care dimension 10. Quality of life – leisure — 0.28**		-0.31**	0.33**	0.44**	-							
6. Sense of agency – purposefulness 7. Quality of life - emotional dimension 8. Quality of life - social dimension 9. Quality of life – self-care dimension 10. Quality of life – leisure dimension 11. Quality of life – mobility 0.28** 0.30** 0.30** 0.29** 0.34** 0.34** 0.33** 0.34** 0.35** 0.34** 0.35**		0.44**	0.39**	0.36**	0.64**	-						
7. Quality of life - emotional dimension 8. Quality of life - social dimension 9. Quality of life - self-care dimension 10. Quality of life - leisure dimension 11. Quality of life - mobility dimension 12. Quality of life - dimension 13. Quality of life - leisure dimension 14. Quality of life - dimension 15. Quality of life - leisure dimension 16. Quality of life - leisure dimension 17. Quality of life - leisure dimension 18. Quality of life - leisure dimension 19. Quality of life - leisure dimension 11. Quality of life - leisure dimension 12. Quality of life - leisure dimension 13. Quality of life - leisure dimension 14. Quality of life - leisure dimension 15. Quality of life - leisure dimension 16. Quality of life - leisure dimension 17. Quality of life - leisure dimension 18. Quality of life - leisure dimension dimension dimension dimension 19. Quality of life - leisure dimension d	6. Sense of agency	0.30**	0.46**	0.20**	0.22**	0.31**	-					
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8. Quality of life - social dimension 9. Quality of life - self-care dimension 10. Quality of life - leisure 11. Quality of life - mobility 0.28** 0.30** 0.31** 0.41** 0.42** 0.43** 0.43** 0.27** 0.56** 0.49** 0.49** 0.59** 0.59** 0.44** 0.57** 0.57** 0.56** 0.49** 0.44** 0.57** 0.44** 0.57** 0.44** 0.57** 0.44** 0.57** 0.45** 0.46** 0.47** 0.62** 0.48** 0.28** 0.28** 0.28** 0.28** 0.28** 0.30** 0.29** 0.34** 0.33** 0.27** 0.45** 0.46** 0.46** 0.47** 0.62** 0.62** 0.62** 0.65** 0.66** 0.	emotional	0.39**	0.31**	0.31**	0.32**	0.40**	0.36**	-				
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dimension 10. Quality of life - leisure												
10. Quality of life - leisure		0.32**	0.32**	0.33**	0.35**	0.38**	0.26**	0.49**	0.59**	-		
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11. Quality of life - mobility 0.28** 0.30** 0.29** 0.34** 0.33** 0.27** 0.45** 0.46** 0.47** 0.62** dimension Mean 22.09 81.08 60.03 33.85 21.34 29.20 23.88 15.79 18.59 16.65 1		0.28**	0.24**	0.26**	0.31**	0.36**	0.31**	0.42**	0.44**	0.57**	-	
- mobility 0.28** 0.30** 0.29** 0.34** 0.33** 0.27** 0.45** 0.46** 0.47** 0.62** dimension Mean 22.09 81.08 60.03 33.85 21.34 29.20 23.88 15.79 18.59 16.65 1												
dimension Mean 22.09 81.08 60.03 33.85 21.34 29.20 23.88 15.79 18.59 16.65 1		n 20**	0.20**	0.20**	0.24**	0.22**	0.27**	0.45**	0.46**	0.47**	0.62**	
Mean 22.09 81.08 60.03 33.85 21.34 29.20 23.88 15.79 18.59 16.65 1	•	0.28	0.50***	0.29	0.54***	0.55***	0.27	0.45	0.40	0.47	0.02	-
		22.00	81 N8	60.03	33 85	21.34	20.20	23.88	15.70	18 50	16.65	14.36
Standard deviation 6.00 10.17 12.54 6.55 5.25 6.16 6.10 4.07 5.70 4.97												5.14
	Sandard de viation	0.00	10.17	12.54	0.55	5.25	0.10	0.10	7.07	5.70	7.71	3.17

The correlation coefficients between the variables are shown in Table 1. They indicate that the direction of the correlation between the variables was consistent with predictions and study field theories. As shown in Table 2, the assumption of collinearity was investigated by examining the

variance inflation factor (VIF) values and the tolerance coefficient of the predictor variables, while the assumption of normality of data distribution was investigated by analyzing the skewness and kurtosis values.

Table 2. Results of investigating the assumptions of normality and collinearity

	Assumption	of normality	Collinearity assumption			
Variable	Skewness	Kurtosis	Tolerance coefficient	Variance inflation		
Quality of object of relations	-0.03	-0.14	0.79	1.27		
Unconditional acceptance	0.47	0.30	0.67	1.50		
Hope for employment	-0.37	-0.57	0.73	1.37		
Sense of agency - self-efficacy	-0.84	-0.67	0.52	1.93		
Sense of agency – optimism	-1.01	-0.17	0.50	2.02		
Sense of agency – purposefulness	-1.27	-0.22	0.75	1.33		
Quality of life - emotional dimension	-0.20	0.27	-	-		
Quality of life - social dimension	-0.27	0.07	-	-		
Quality of life – self-care dimension	-0.02	0.32	-	-		
Quality of life – leisure dimension	-0.01	0.45	-	-		
Quality of life - mobility dimension	-0.53	0.39	-	-		

According to Table 2, all the study factors have skewness and kurtosis values between +2 and -2. This result demonstrates that the data related to the study variables were distributed normally. Furthermore, Table 2 demonstrates that all predictor variables have tolerance factor values of higher than 0.1 and variance inflation factors of lower than 10. Accordingly, the data were kept along with the collinearity assumption.

The data relating to "Mahalanobis distance" was examined to determine whether the assumption of normal distribution of multivariate data was established or not. The information related to the Mehlenobais distance had skewness and kurtosis 0.89 and values 0.32, respectively. Consequently, the values of none of the skewness and elongation indices of those grades were outside the range of  $\pm$  2. Therefore, the assumption of normal distribution of multivariate data was valid. Finally, findings revealed that

assumption of homogeneity of variances was also established. Homogeneity of variances was evaluated by analyzing scatter diagram of the normalized error variances.

### Model analysis

Figure  $\boldsymbol{A}$ ) Measurement model: 1 demonstrates that the two variablesthe quality of life and a sense of agencywere latent variables in the current research model. The sense of agency was assumed to be measured by indicators of selfefficacy, optimism, and purposefulness in the measurement model, and the variable of quality of life was supposed to be measured by indicators of emotional, social, self-care, leisure, and mobility. Maximum likelihood (ML) estimation, AMOS 26.0 software, and confirmatory factor analysis were used to evaluate the measurement model's fit. The measurement model and the structural model's fit scores are displayed in Table 3.

Table 3. Fit indices of the initial and modified measurement model and structural model

Fitness indicators	Measurei	nent model	Structural model	Cutoff noint	
Fitness indicators	Primary Modified		Structural model	Cutoff point	
Chi-square	67.32	40.02	83.34	-	
Model's degree of freedom	19	18	36	=	
$X^2/df$	3.54	2.22	2.32	< 3	
GFI	0.9333	0.959	0.939	< 0.090	
AGFI	0.873	0.918	0.888	< 0.850	
CFI	0.929	0.968	0.948	< 0.90	
RMSEA	0.105	0.073	0.075	< 0.08	

Table 3 demonstrates that other fit indices acquired from the confirmatory factor analysis, except for the RMSEA fit index, supported the measurement model's acceptable fit of collected data ( $\chi^2/df = 3.54$ , CFI = 0.929, GFI = 0.933, AGFI = 0.873 and RMSEA = 0.105). Due to the significant role played by RMSEA fit index in the model fit, modification indices were evaluated. Accordingly, the quality of life model was modified, and the fit indices were enhanced by establishing a covariance between the errors of leisure and mobility ( $\chi^2/df = 2.22$ , CFI = 0.968, GFI = 0.959, AGFI = 0.918 and RMSEA = 0.073). In the measurement model, sense of agency had the maximum factor load for optimism ( $\beta = 0.847$ ), and the minimum factor load for objective ( $\beta$  = 0.390). Thus, given that the factor loadings of all indicators were larger than 0.32, they all possessed the required capacity to measure the two latent variables.

**B**) Structural model: Following the assessment of the fit, in the second stage, the fit indices of the structural model were calculated and evaluated. According to the structural model, the degree of the object of relations, hope for employment, and unconditional self-acceptance impacted the blind or visually impaired students both directly and through the mediation of a sense of agency. The fit indices received from the analysis supported the structural model's acceptable fit with the collected data, as shown in Table 3. The structural model was evaluated using the structural equation modeling technique ( $\chi^2/df = 2.32$ , CFI = 0.948, GFI = 0.939, AGFI = 0.888 and RMSEA = 0.075). Table 4 illustrates the path coefficients in the structural model.

Table 4. Direct and indirect path coefficients among research variables in the structural model

Impact	Path	b	S.E	β	p
Direct impacts	Sense of agency → hope for employment	0.160	0.034	0.322	0.001
	Sense of agency $\rightarrow$ quality of the object of relations	-0.198	0.041	-0.282	0.001
	Sense of agency → unconditional self-acceptance	0.145	0.026	0.388	0.001
	Sense of agency → quality of life	0.481	0.207	0.528	0.001
	Quality of life → hope for employment	0.060	0.050	0.133	0.283
	Quality of life → quality of object of relations	-0.134	0.052	-0.209	0.038
	Quality of life → unconditional acceptance	0.017	0.036	0.049	0.656
Indirect	Quality of life → hope for employment	0.077	0.039	0.170	0.001
	Quality of life →quality of object of relations	-0.095	0.050	-0.149	0.001
	Quality of life → unconditional acceptance	0.070	0.035	0.205	0.001
Total impacts	Quality of life → hope for employment	0.137	0.032	0.303	0.001
	Quality of life $\rightarrow$ quality of object of relations	-0.230	0.041	-0.358	0.001
	Quality of life → unconditional acceptance	0.086	0.025	0.254	0.001

As shown, there was a significant negative relationship between the total path coefficient, the quality of object of relations, and the quality of life (P = 0.001,  $\beta$  = 0.358). In addition, there was a significant positive relationship in the total path coefficient between hope for employment ( $\beta$  =

0.303, P = 0.001) on the one hand and unconditional self-acceptance ( $\beta = 0.254$ , P = 0.001) and quality of life, on the other. The results indicated that there was a significant positive relationship between the path coefficient, the sense of agency, and quality of life (P = 0.001,  $\beta = 0.528$ ). There was a significant negative relationship in the indirect path coefficient between the quality of object of relations and the quality of life (P = 0.001,  $\beta = 0.149$ ). There was a significant positive relationship in the indirect path coefficient between hope for employment ( $\beta = 0.170$ , P = 0.001), unconditional self-acceptance ( $\beta = 0.001$ ), unconditional self-acceptance ( $\beta = 0.001$ )

0.205, P = 0.001), and quality of life. Accordingly, the degree to which blind and low-vision students experienced positive and significant improvements in their life quality was mediated positively and significantly by their hope for employment and unconditional acceptance, and negatively by their sense of agency.

Figure 1 shows the structural model regarding the effect of unconditional self-acceptance, the quality of object of relations, and hope for employment on life quality of blind and visually impaired students based on the sense of agency.

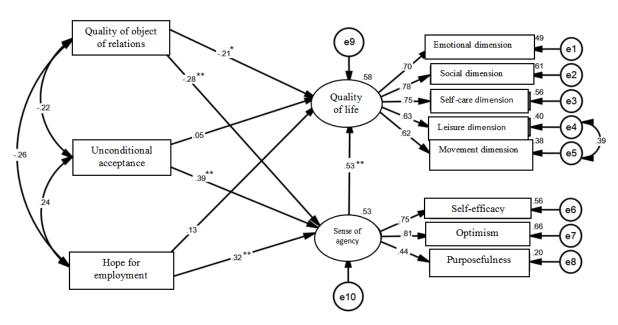


Figure 1. Standard parameters in the structural model

Figure 1 demonstrates that 0.58 is the value of the total squared multiple correlations ( $R^2$ ) for quality of life

### Discussion

This study investigated the effect of unconditional self-acceptance, the quality of object of relations, and hope for employment on life quality of the blind and visually impaired students through structural model; it was based on the mediating role of sense of agency. 58% of the variance in the life quality of the blind and low-vision students could be accounted for by unconditional self-acceptance, the quality of object

of relations, hope for employment, and a sense of agency. The results in line with results obtained by Senra (33), Caputo et al. (34), Ejiakor et al. (6), and Jafari Sultanabadi, (18).

According to Patino, Varma, and Azen, the quality of life decreases as a result of visual field defects; the impact of these defects on various aspects of a person's life, particularly movement and self-care, is inevitable (35). Despite having many talents, such people lack the fundamental skills needed to deal with life's difficulties, leaving them open to daily challenges. Blindness is a severe condition that can disrupt a person's mental equilibrium and general organizational

structure, but, it does not necessarily ruin a person's personality. Instead, a person's mindset can impact the way her personality is organized. Because some people have a negative mindset towards blindness, some blind people are more likely to experience melancholy and other mental issues (36). Due to the loss of one of their sensory perceptions, people with vision impairment feel helpless and incapable of carrying out duties. They consequently experience failure depression. Strengthening some variables regarding the quality of life can be effective in their healthy living because they consider life quality to be compromised due to their internal conflict between the need for independence and the need for help from others (24). Research conducted in southeast of Nigeria by Ejiakor, Achigbu, Onyia et al. (6) revealed that occupation and educational level had a significant impact on the experimental group's quality of life but not on the control groups. It is suggested that regulations be implemented to improve the quality of life for the visually impaired through rehabilitation and societal integration. In a study titled "Mental health and life expectancy of blind women in comparison with sighted women", Fathi, Behari, Aghdasi, and Livarjani (37) found that despite poor mental health of blind people, there was no difference in life expectancy between the blind and sighted; the life expectancy was the same due to the growth of friendship circles, family, and social networks.

The ability to adjust to new circumstances is facilitated by internal strength, which effectively reduces depressive symptoms self-efficacy in handling enhances conditions (14). To overcome difficult life events like an injury or a persistent disease, inner strength is necessary for self-development through a transformational process. The restoration of the normality of life (during and after a challenging event) is the result of and a component of human interior strength (21) which includes grief, sorrow, worry and search, connection, dedication, and movement. Man's philosophical and spiritual aspects are thought to be impacted by his psychological health, which can be reinforced by his unconditional acceptance.

A subset of psychology known as positive psychology has recently emphasized the strengths and talents of the individual and holds that psychology should aim to enhance the individuals' quality of life by enabling them to realize their potential (36). According to Habibah and Sucipto (38), people with visual impairments experience a variety of psychiatric problems; including difficulty adjusting to their surroundings, worry about their future careers and romantic relationships, chronic stress from being others. dependent on lack of financial independence, and disapproval of others or themselves. Regular meetings, monthly social gatherings, and building strong interpersonal connections serve to establish various forms of support. Alternative remedies for all types of psychiatric issues can be found in such social support for blind people who understand blindness. Jameel and Shamim (39) studied the relationship between self-confidence and body image of physically disabled children; 50 boys and 50 girls who were visually disabled participated. According to the study, selfconfidence and physical image satisfaction were positively correlated. Both groups of students were equally satisfied with their appearances. This had some restrictions as well. Lack of participants in a particular age group was one of the limitations; As a result, a group with a wider age range had to be used. Using convenience sampling was another drawback in the current research, making it challenging to generalize the findings to other groups. People who were blind or partially sighted found the questionnaire and measurement instruments challenging to use. The design and normalization of measuring tools for people with visual impairments, as well as the design, editing, and execution of contracts specifically for people with visual impairments need to be addressed. Future research should consider using larger groups in a particular age range. In future studies, it is recommended to use qualitative research techniques to examine

blindness and vision impairment-related problems in larger detail and depth.

### **Conclusion**

Since there is very little formal social support for the disabled in Iranian culture, attempts should be made to preserve private social support. Family is one of the most important providers of informal social support. Among peers, people typically have more in common and understand one another better, which results in social and psychological support for people with disabilities. Building a trusting relationship with peers facilitates request for help and lessons the pain. Therefore, to improve the social health of the disabled, it is important to expand the areas of informal social support by teaching confidence markers like honesty, openness, and collaboration.

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### **Conflict of interest**

The authors declared no conflict of interest.

#### **Authors' contributions**

F. A, S. S; chose the topic, designed the study and defined the concepts. Literature search was done by all authors, F. A; collected and analyzed the data, R. H; drafted the manuscript .All authors discussed the results and participated in editing the final manuscript.

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