



RESEARCH ARTICLE / ARAŞTIRMA YAZISI

The Mediating Role of Positive Affect in the Relationship between a Sense of Meaning and Life Satisfaction in Individuals with Severe Visual Impairment

Ağır Görme Bozukluğu Olan Bireylerde Anlam Duygusu ile Yaşam Doyumu Arasındaki İlişkide Pozitif Duygulanımın Aracı Rolü

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Abstract:

Visual impairment (VI), a severe reduction in visual sensitivity, is an important public health problem with significant economic and social burdens. VI has been linked to poorer well-being and mental health markers due to activity loss, functional declines, and social isolation. Increasing meaningfulness and positive mood states are critical reservoirs in maintaining well-being. Nevertheless, there are inconsistent findings on the association between the presence of meaning and positive affect, and very limited studies have existed in the context of VI. To fulfill this gap, in this study, we first aimed to examine the relationships among meaning in life dimensions, life satisfaction, and positive and negative affect, and secondly to find out the mediator role of positive affect in the relationship between life satisfaction and the presence of meaning. Thus, 388 individuals with VI (120 female and 268 male) with a mean age of 35.92 ($SD = 11.40$) participated in this study. The Meaning in Life Questionnaire, the Positive and Negative Affect Schedule, and the Satisfaction with Life Scale were administered to all the participants. The mediation test analysis demonstrated that positive affect partially mediated the relationship between a sense of meaning and life satisfaction. This finding suggests that individuals with IV experiencing a sense of meaning are more likely to feel positive, which, in turn, become more satisfied with their lives. Positive affect accounted for 87.4% of the total relation between the presence of meaning and life satisfaction (Frazier et al., 2004). Thus, clinicians can focus on increasing meaning sources in life that would create positive moods to increase life satisfaction in individuals with VI.

Keywords: Visual impairment, well-being, subjective well-being, presence of meaning, positive affect.

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Öz:

Görme duyarlılığında ciddi bir azalma olan görme bozukluğu (GB), önemli ekonomik ve sosyal maliyetleri olan önemli bir halk sağlığı sorunudur. GB, aktivite kaybı, işlevsel düşüşler ve sosyal izolasyon nedeniyle daha zayıf iyi oluş ve zihinsel sağlık belirteçleri ile ilişkilendirilmiştir. Artan anlamlılık ve olumlu duygudurumları, iyi oluşun sürdürülmesinde kritik kaynaklardır. Bununla birlikte, anlamın varlığı ile olumlu duygulanım arasındaki ilişkiye dair tutarsız bulgular vardır ve GB bağlamında çok sınırlı çalışmalar mevcuttur. Bu boşluğu doldurmak için, bu çalışmada ilk olarak yaşam boyutlarında anlam, yaşam doyumu ve olumlu ve olumsuz duygulanım arasındaki ilişkileri incelemek, ikinci olarak da yaşam doyumu ile anlamın varlığı arasındaki ilişkide olumlu duygulanımın aracı rolünü ortaya çıkarmak amaçlanmıştır. Böylece, bu çalışmaya, yaş ortalaması 35.92 (SD = 11.40) ile 388 görme bozukluğu (120 kadın ve 268 erkek) olan birey katılmıştır. Tüm katılımcılara, Yaşamda Anlam Anketi, Pozitif-Negatif Duygu Ölçeği ve Yaşam Doyumu Ölçeği uygulanmıştır. Aracılık testi analizi, pozitif duygulanımın anlam duygusu ile yaşam doyumu arasındaki ilişkiye kısmen aracılık ettiğini göstermiştir. Bu bulgu, anlam duygusu yaşayan GB'li bireylerin olumlu hissetme olasılıklarının daha yüksek olduğunu ve bunun da yaşamlarından daha memnun olduklarını göstermektedir. Olumlu duygulanım, anlamın varlığı ile yaşam doyumu arasındaki toplam ilişkinin %87.4'ünü açıklamıştır (Frazier vd., 2004). Böylece klinisyenler, GB'li bireylerde yaşam doyumunu artırmak için olumlu duygulanım yaratacak yaşamdaki anlam kaynaklarını artırmaya odaklanabilirler.

Anahtar Kelimeler: Görme bozukluğu, iyi oluş, öznel iyi oluş, anlamın varlığı, pozitif duygulanım.

Introduction

Visual impairment (VI) can be briefly defined as a reduction in visual sensitivity that can not be corrected by standard medical treatment, including eyeglasses or lenses. The prevalence of VI has been increasing dramatically due to aging populations (Pezzullo et al., 2018), and recently, ophthalmologic disability accounts for 8.4% of the total disability in the Turkish population (Kıvanç et al., 2016). Primary diseases causing VI, such as congenital or progressive glaucoma, optic nerve diseases, congenital anomalies, cataracts, diabetic retinopathy, and age-related macular degeneration are still much beyond geographic, and socio-demographic conditions (Garcia et al., 2017; van der Aa et al., 2015). VI can lead to irreversible outcomes on people's psychological, educational, interpersonal, and occupational performances (see Frank et al., 2019). Thus, the VI condition profoundly disrupts the quality of life, mental health and well-being in adulthood, which deserves attention for research.

Meaning in life is essential to well-being and mental health (Martela et al., 2018). A sense of meaning refers to having a coherent understanding of people about themselves, the world, harmony, and a personalized mission to succeed (Steger et al., 2006). Recently, along with positive psychology, it conceptually includes two separate dimensions: (1) the presence of meaning and (2) the search for meaning (Steger et al., 2006). The presence of meaning is linked to greater scores on well-being and mental health indicators, including positive affect, hope, optimism, and life satisfaction (Dezutter et al., 2013; Dunn & O'Brien, 2009; Steger et al., 2006; Steger & Kashdan, 2007). On the other hand, the search for meaning or lack of meaning is associated with poorer well-being and mental health markers such as depression, anxiety, traumatic reactions, suicidality, addictions, and less marriage satisfaction (Kleftaras & Psarra, 2012; Öcalan et al., 2024; Park, 2016; Shek et al., 2022; Steger et al., 2009; Venuleo et al., 2020). Research has also shown that individuals with higher meanings in life tend to use more adaptive coping mechanisms (Martos et al., 2010; Miao et al., 2017;

Shiah et al., 2015), which also increases their medical adherence and health behaviors (Homan & Boyatzis, 2010; Steger et al., 2015). Thus, a sense of meaning provides a good resource for maintaining resilience and mental health (Shek et al., 2022). People often build their meaning systems on family and close friends, various religious or spiritual systems, opportunities for personal growth, or some hedonistic/materialistic habits to improve their well-being (Alparslan et al., 2021; Lambert et al., 2010; Schnell, 2009). Very limited qualitative Turkish studies with VI samples have confirmed the importance of meaning in increasing well-being, indicating spending meaningful leisure time, such as in recreational facilities (Gürkan et al., 2021), and self-expanding opportunities, including using library resources (Kazak, 2008) and participating in religious ceremonies (Bucuka, 2021). Hence, one of our goals in this study is to assess the frequency of meaning resources used by individuals with VI.

Subjective well-being (SWB) comprises a tripartite formulation that indicates individual differences in emotional (presence of positive affect; lack of negative affect) and cognitive evaluations (life satisfaction) of one's life (Diener et al., 2018). Life satisfaction and positive affect with a lack of negative affect are relatively robust and distinct predictors of functioning, happiness, and mental health (Diener et al., 2013, 2018). Life satisfaction (LS) refers to how individuals are satisfied with their general life based on their judgments (Diener et al., 2018). Positive affect (PA) refers to various positive mood states such as joy, enthusiasm, excitement, and interest. The frequency and intensity of positive experiences are closely tied to meaningfulness, happiness, life satisfaction, and health-related outcomes such as longevity, a greater immune system, and a lower baseline of cortisol (Diener et al., 2018; Pressman et al., 2019). On the other hand, negative affect (NA), such as hostility, anxiety, and anger play a more critical role in identifying and maintaining psychiatric symptoms (Stanton & Watson, 2014).

A vast of research has demonstrated that VI is consistently linked to poorer mental health, and well-being markers, including loneliness, internet and smartphone addictions, low social support, high-level depression and anxiety, suicidal ideations (Cosh et al., 2021; Frank et al., 2019; Parravano et al., 2021; Park, 2021; Smedema & McKenzie, 2010; van der Aa et al., 2015). Moreover, profound vision loss due to progressive diseases could have a traumatic impact on many adolescents' lives (Garcia et al., 2017), in addition to ordinary developmental transition problems in adolescence (Karsli, 2015). Similarly, Liu et al. (2016) found that older adults with VI reported lower SWB, and the VI condition substantially decreases individuals' well-being and sense of meaning in their lives (Rafaely et al., 2018).

All studies above have supported that individuals with VI are more prone to develop psychiatric problems such as depression, and anxiety due to decreased participation, social isolation and functional declines. Thus, building a meaningful life and increasing the positive mood states of individuals with VI can indicate a protective psychological resource to provide a better adjustment to the difficulties individuals with VI. Nevertheless, there is a gap in the literature on the role of meaning with SWB components in VI context; thus, our first aim is to examine the associations among meaning in life dimensions (presence and search for meaning), positive and negative affect, and life satisfaction in individuals with VI. Secondly, to our knowledge, no study has examined the mediational relation of positive affect with the presence of meaning in the account of life satisfaction in the VI context, at least in the Turkish sample. Very few research with normal populations have revealed inconsistent findings on whether positive mood states predispose individuals to experience more meaningfulness (Hicks et al., 2012) or the opposite, suggesting the presence of meaning increases the sensitivity to experience positive affectivity (Martela et al., 2018). Thus, we secondly aim to examine the possible mediator role of positive affect in the relationship between life satisfaction and the presence of meaning in life in VI sample. We hope that this study will help identify risk groups and make proper adjustments for individuals with VI.

Method

Participants and Procedure

Following the STROBE guideline (Cuschieri, 2019), we recruited 391 participants with VI selected with a nonprobability method using purposive sampling who met two inclusion criteria: (a) older than 18 years, and (b) having a lifelong visual impairment proved with disability health board records taken from the hospitals with ophthalmologic functional disability rate based on

World Health Organization (WHO) criteria. Through a set of questions, we excluded participants who were younger than 18 years old, illiterate, or diagnosed with a neurocognitive and psychotic condition and other sensory impairments such as hearing loss so as not to influence the judgments. Under a different project, some participants were initially recruited during plane trips or visits to Konya, Ankara, and İstanbul airports. The current participants were recruited through snowball sampling gathered in family health centers between April 2023 and December 2023. One of the authors conducted semi-structured face-to-face or telephone interviews with the participants to administer the scales. Informed consent was obtained from all participants by reading the form aloud and guiding them to sign it face-to-face or via email. Ethics approval was obtained from the Human Research Committee of Selcuk University, Konya, Türkiye (Protocol No. 2022-226563), and the research followed the tenets of the Declaration of Helsinki.

For the sample size detection, power analysis calculations for correlational studies indicated that 134 participants were sufficient to measure significance (with power of .95, and an effect size of 0.3 with 95.0% confidence interval) (Faul et al., 2007). We reached 391 participants, and out of 391 participants, we discarded three outlier cases. Thus, the statistical analysis sample consisted of 388 participants with VI (120 women and 268 men). The response ratio exceeded our expectations, supporting that the present study includes adequate sample size (see Faul et al., 2007).

The mean age of the participants was 35.92 ($SD = 11.40$), ranging from 18 to 66 years old. As illustrated in Table 1, most participants were male (69.1%; $N = 268$), approximately half of the participants were married (47.8%, $N = 186$), 34.4% of the participants were graduated from elementary/middle school ($N = 134$), and 29.0% ($N = 113$) were high school degree holders. Approximately half of the participants were working full time as an employee (52.6%, $N = 204$), 16.3% were unemployed ($N = 64$), and 14.7% were retired ($N = 57$). Regarding income level, 47.2% ($N = 183$) of the participants earned moderately, 36.6% ($N = 142$) around minimum wage, and most of the participants lived in an urban (49.2%, $N = 191$) or a middle-sized city (45.6%, $N = 177$). In terms of VI status, 168 (43.3%) participants were severely sighted, 120 (30.9%) had become blind by conditions/diseases, 69 (17.8%) were congenitally blind, and 8% ($N = 31$) had unexplained/other causes. Regarding the question of the most valued meaning sources in life was that 48.2% of the participants ($N = 187$) answered their families and close relationships, and 30.4% ($N = 118$) stated their belief system (religion and spiritual activities).

Table 1. Socio-demographic characteristics of the participants

	N	%
Gender		
Female	120	30.8
Male	268	68.9
Marital status		
Married	186	47.8
Single	149	38.3
Divorced/widowed	53	13.6
Educational Status		
Elementary+Middle School	134	34.4
High school	113	29.0
Some/Community college	60	15.4
Undergraduate	62	15.4
Graduate	19	4.9
Occupational Status		
Employee	204	52.6
Employer	63	16.2
Retired	57	14.7
Unemployed	64	16.5
Family Income		
Below minimum wage	32	8.2
Equal/Around Minimum wage	142	36.6
Moderate wage	183	47.2
Above moderate wage	31	8.0
Current Residence		
Urban/Metropol	191	49.2
Middle size City	177	45.6
Rural/Village/Town	20	5.2
Visual Impairment Status		
Congenital Blindness	69	17.8
Blindness by condition	120	30.9
Severe sighted	168	43.3
Unexplained Causes	31	8.0
Meaning Resources in Their Lives		
Family and Close Relations	187	48.2
Belief System, Religion/Spiritualism	118	30.4
Self-development opportunities (Learning new things etc.)	58	14.9
Hedonistic activities (Playing games & lottery etc.)	25	6.4

Data Collection Tools

Socio-demographic Information Form

A self-constructed form was included to obtain socio-demographic characteristics of the participants including, gender, age, marital, educational and occupational status, and VI status with the most valued meaning resource in their lives.

The Meaning in Life Questionnaire (MLQ)

The MLQ is a questionnaire to measure the degree to which people think that their lives have meaning (presence of meaning) and the degree to which people seek meaning (search for meaning) developed by Steger et al. (2006). It includes 10-item that were rated on a scale of 1 (*absolutely untrue*) to 7 (*absolutely true*). The Cronbach's alpha coefficients were calculated as .86 for MLQ-P and .87 for MLQ-S (Steger et al., 2006). The MLQ scores have displayed good psychometric properties in various studies (García-Alandete et al., 2023; Pezirkianidis et al., 2016). The Turkish adaptation of the MLQ was conducted by Dursun (2012), indicating that Cronbach's alpha values were .83 for MLQ-P and .87 for MLQ-S. In this study, Cronbach's alpha coefficients were found to be .91 for MLQ-P and .93 for MLQ-S.

Subjective Well-being (SWB)

SWB was assessed using two scales: the Satisfaction with Life Scale (SWLS) (Diener et al., 1985) and the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988). The SWLS assesses the total life satisfaction score and includes 5 items, the values of which are evaluated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). The scale's internal consistency was reported as .87 (Diener et al., 1985). The SWLS is demonstrated to be a valid and reliable scale (Diener et al., 2013; Pavot & Diener, 2008). Turkish adaptation shows good reliability coefficients reporting as .89 (Köker, 1991). PANAS consists of two 10-item mood adjectives with a 5-point Likert type (1 = *very slightly/not at all*, 5 = *extremely*) to measure the degree of PA and NA. Internal consistency reliability values were calculated as .88 and .87 for PA and NA, respectively (Watson et al., 1988). The PANAS has shown evidence of good reliability and validity in different studies (Carvalho et al. 2013; Terraciano, 2003). Turkish adaptation was performed by Gençöz (2000), indicating the Cronbach alpha values as .83 for PA and .86 for NA. In the present study, Cronbach's alpha coefficients were calculated to be .94 for SWLS and .93 for PA, and .95 for NA.

Data Analysis

Descriptive statistics for categorical variables, and Pearson product moment analysis were calculated to examine the associations of the variables. Due to determination of the indirect effect of positive affect on the relationship between life satisfaction and presence of meaning, a series of multiple regression analyses were run with a mediation model strategy developed by Baron and Kenny (1986) and see Kenny et al., (2003) following with Sobel's significance test (1982). According to Baron and Kenny (1986) and Kenny et al. (2003) four conditions must be obtained to test for mediation. First, there must be a significant relationship between a predictor/independent variable (presence of meaning) and a predicted/dependent variable (life satisfaction). Second, there must be a significant relationship between the predictor variable (presence of meaning) and the mediating variable (positive affect). Third, there must be a significant relationship between a mediator (positive affect) and a predicted variable, and finally, the strength of the relationship between a predictor (presence of meaning) and a predicted variable (life satisfaction) decreases significantly or no longer significant when a proposed mediator (positive affect) enters the model. Multiple regression standardized beta weights were used to summarize the direct effect of meaningfulness and indirect effects of the mediator (positive affect) on life satisfaction. G*Power software was used to detect sample size (Faul et al., 2007) and all statistical analyses were conducted using SPSS for Windows (Version 22).

Results

Descriptive Analysis and Zero-order Correlations

Prior to statistical analyses, scores on all scales were examined for the data screening procedure (Tabachnick & Fidell, 2007), with assumptions required for multiple regression, including normality, multicollinearity, and outliers resulting in satisfaction (Osborne & Waters, 2002). Pearson product-moment correlations were calculated among life satisfaction, positive affect, negative affect, presence of meaning, and search for meaning scores in all participants (see Table 2). As expected, life satisfaction was significantly and positively correlated with positive affect ($r = .68, p < .001$, Cohen's $d = 1.89$) and presence of meaning ($r = .62, p < .001$, Cohen's $d = 1.61$). Conversely, life satisfaction was significantly and negatively associated with negative affect ($r = -.22, p < .001$, Cohen's $d = 0.47$) and search for meaning ($r = -.26, p < .001$, Cohen's $d = 0.55$). Based on Cohen's d (1992) criteria, all the bivariate correlation coefficients range from medium to large effect sizes.

Table 2. Correlation matrix and descriptive data of the variables

Measures	1	2	3	4	5
1. Life Satisfaction (LS)	1	.68**	-.22**	.62**	-.26**
2. Positive Affect (PA)		1	-.54**	.59**	-.58**
3. Negative Affect (NA)			1	-.17**	.45**
4. Presence of Meaning (MLQ-P)				1	-.35**
5. Search for Meaning (MLQ-S)					1
<i>M</i>	15.96	35.12	24.19	21.24	19.65
<i>SD</i>	3.60	9.46	10.21	9.11	7.31
<i>N</i>	388	388	388	388	388

* $p < .05$. ** $p < .01$. *** $p < .001$.

Test of Mediation

We used a series of multiple regression analyses to investigate whether positive affect mediated the relation between the presence of meaning and life satisfaction. We first tested that the conditions for mediation were met (Baron & Kenny, 1986; Kenny et al., 2003). As revealed in Table 3, satisfying the first requirement, presence of meaning was significantly related to life satisfaction ($\beta = .62, p < .001$). Satisfying the second requirement, positive affect was also related to presence of meaning in life ($\beta = .59, p < .001$). Satisfying the third requirement, positive affect was related to life satisfaction in a multiple regression analysis ($\beta = .68, p > .001$). For the fourth requirement, a final hierarchical multiple regression analysis was performed to investigate whether positive affect significantly reduced the relationship between presence of meaning and life satisfaction. In this analysis, life satisfaction was regressed on presence of meaning (entered in step 1) and positive affect (entered in step 2). Regarding the fourth requirement of mediation, presence of meaning was still significantly associated with life satisfaction ($\beta = .32, p > .001$) when positive affect was added to the model. Nevertheless, the beta values (β) representing the strength of the relationship between a

sense of meaning and life satisfaction diminished from .62 to .32.

This refers to a reduction suggesting that positive affect did not mediate fully the relationship between presence of meaning and life satisfaction, as determined by a statistical test guided by Baron and Kenny (1986) and Kenny et al. (2003) that estimates the degree of change in β after a potential mediator variable is controlled. However, we conducted a Sobel significance test to detect whether positive affect partially mediates the relationship between the presence of meaning and life satisfaction. The Sobel test was significant (Sobel test statistic $z = 8.99, p = 0.0001$), indicating that positive affect explained at least part of the relationship. In other words, positive affectivity partially mediated the association between a sense of meaning and life satisfaction. Lastly, following guidelines reported by Frazier et al. (2004), we computed that 87.4% of the total effect was mediated by positive affect. This ratio was obtained by multiplying the unstandardized regression coefficient of the relationship between the presence of meaning and positive affect ($b = .61$) by the value of the association between positive affect and life satisfaction ($b = .18$), then dividing by the coefficient of the relation between the presence of meaning and life satisfaction ($b = .13$) (see Frazier et al., 2004).

Table 3. Summary of Series of Regression Analyses: Positive affect as a Mediator of the Relation Between Presence of Meaning and Life Satisfaction

Steps	Predictors	Predicted Variables	<i>b</i> (SE)	β	<i>t</i>	<i>p</i>	<i>R</i> ²	<i>F</i> (1,386)
1	Presence of meaning	Life satisfaction	.24(.02)	.62	15.37	.0001***	.38	236.24
2	Presence of meaning	Positive affect	.61(.04)	.59	14.30	.0001***	.35	204.50
3	Positive affect	Life satisfaction	.26(.01)	.68	18.34	.0001***	.46	336.35
4	Presence of meaning		.24(.02)	.62	15.37	.0001***	.38	236.24
	Presence of meaning	Life satisfaction	.13(.02)	.32	7.64	.0001***		
	Positive affect		.18(.01)	.49	11.39	.0001***	.54	222.42

* $p < .01$, ** $p < .001$, *** $p < .0001$

Note: Predictor/Independent variable: Presence of meaning; predicted/dependent variable: Life satisfaction; Mediator: Positive affect

Discussion

In the current study, we first examined the associations among meaning in life dimensions (presence and search for meaning), positive and negative affect, and life satisfaction. Secondly, we attempted to find out a possible mediator role of positive affect in the relationship between a sense of meaning and life satisfaction in individuals with VI. Nevertheless, before discussing the main findings, it is worth briefly mentioning the participants' socio-demographic characteristics, including the meaning sources in their lives. Consistent with earlier Turkish studies, in our VI sample, only half of the participants were married and had elementary/secondary school diplomas with moderate wage, and blindness by condition (diabetic

retinopathy, and glaucoma) was more common than congenital blindness (Küçük et al., 2019), and the frequency of severe VI was greater than blindness (Kıvanç et al., 2016). Regarding the meaning sources, as parallel with previous research (Alparslan et al., 2021; Lambert et al., 2010; Schnell, 2009), the participants in the current study reported that their most valued meaning source was firstly their family and close friends; secondly, religious/spiritual experiences; thirdly, participating in self-developmental facilities, including learning new things and traveling to new places; and finally, hedonistic activities such as playing games, lottery, watching fun videos.

In terms of main findings, as expected, all the study variables -the presence and search for meaning, positive and negative affect, and life satisfaction- were moderately correlated with each other. This finding is also consistent with earlier research (Dezutter et al., 2013; Dunn & O'Brien, 2009; Glaw et al., 2017; Shek et al., 2022; Steger et al., 2006; 2009; Steger & Kashdan, 2007). The mediation analysis revealed that positive affect partially mediated the relationship between meaningfulness and life satisfaction, which suggests that our participants with a higher sense of meaning in their lives might experience greater life satisfaction because they derive positive affect from having a sense of meaning in their lives. This finding supports the previous studies that meaningful activities increase the likelihood of experiencing positive mood states (Martela et al., 2018; Miao et al., 2017) rather than positive moods facilitate the judgments of meaningfulness (Hicks et al., 2012; King et al., 2006).

The mediation finding points out the importance of a sense of meaning in life as a psychological reservoir that predisposes individuals to feel more positive in the VI context, leading to more life satisfaction. For instance, a Turkish study revealed that having a career has more valuable functions beyond earning money, providing a sense of inclusion, self-efficacy, security, and attachment to the society in which individuals with VI live (Özçatal & Aşın, 2022). Additionally, living independently with social support facilitates feeling more meaningful in life, which increases well-being in people with VI (Ağztemiz et al., 2021). Accordingly, the present study confirmed that the most valued meaningful resources were family and close friends, religious activities, self-growth facilities such as traveling independently, and lastly, engaging leisure time with playful activities, respectively. If these meaning-making sources were provided to these individuals, they would be more likely to feel more positive, such as enthusiastic, alert, attentive, and excited, increasing their life satisfaction in the long run. Thus, this study confirmed that having a meaningful life as a psychological resource may increase sensitivity to experience more positive feelings that increase life satisfaction and total well-being. Focusing on providing a meaningful life and enhancing positive mood states among individuals with VI are essential in promoting life satisfaction and maintaining mental health and should be part of rehabilitation practices.

The current study includes some limitations that should be addressed in future research. First, the research sample was relatively homogenous regarding the female/male ratio; most were male. Second, this is a cross-sectional study with non-probability sampling; optimal progress in well-being research can be achieved with longitudinal designs. Third, conceptually, VI is not a single or homogeneous entity; even though we asked the participants whether they had congenital or acquired vision loss based on their hospital health reports, we failed to collect more medical records such as the diagnosis, onset age, severity, and prognosis. Finally, our sample included a wide range of ages between 18-66; future studies can employ narrower sample characteristics, such as children or the elderly, to assess the vision-threatening conditions more clearly. Future studies can also focus on

the buffer effects of traumatic responses such as growth, and resilience in coping with adversities in VI condition.

Conclusion

To conclude, in this study, we aimed to investigate the associations among meaning in life dimensions (presence of meaning and search for meaning), life satisfaction, positive and negative affect. Secondly, we examined the mediator role of positive affect in the relationship between a sense of meaning and life satisfaction since very few studies have been encountered in the VI context. The mediation test displayed that positive affect partially mediated the relationship between meaning and life satisfaction, indicating that people involved with meaningful activities are more likely to be satisfied if they have experienced more positive affect with their meaningful engagements.

Implications and Recommendations

The present study can add an essential dimension to the meaning research within the context of VI by indicating that positive affect should occur in people with VI after constructing a general sense of meaning to obtain more satisfied lives. This study also reconfirmed that family, close friends, and religious activities are the most meaningful activities people with VI utilize. Hence, as a part of the rehabilitation process, clinicians can screen and monitor the meaningfulness in individuals with VI and suggest these meaning-making methods to increase positive affectivity to maintain life satisfaction. The finding that meaningfulness works better with positive affect can be enrolled for planning public health policies and public awareness of VI, declaring that the outcomes of VI are reversible and preventable.

Declarations

Ethics Committee Approval

Ethical approval was obtained from the Human Research Committee of Selçuk University, Konya, Türkiye (03.02.2022 with Protocol No. 226563). Prior to their participation, all participants were provided with and approved informed consent forms.

Consent for Publication

Not applicable

Availability for Data and Materials

Not applicable

Competing Interests

The author declares that no competing interests in this manuscript.

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Authors' Contributions

A.Ateş and AA carried out the proposal of the main idea of the research, AA contributed to the collection of data. AAteş and PDK performed the analyses and made contributions to interpretation of the findings. AAteş and PDK made a great contribution to writing the introduction and discussion section of the article. All authors have read and approved the final version of the article.

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