Pakistan Journal of Positive Psychology

Print ISSN : 3078-6428 | Online ISSN : 3078-6436
Pakistan Journal of Positive Psychology

Original Article

PERCEIVED STRESS, PSYCHOLOGICAL FLEXIBILITY, AND LIFE SATISFACTION IN CANCER PATIENTS

Samra Amanat[a*]

[a]Department of Applied Psychology, Government Graduate College for Women, Raiwind, Lahore, Pakistan

*Correspondence to: Ms. Samra Amanat, Department of Applied Psychology, Government Graduate College for Women, Raiwind, Lahore, Pakistan. E-mail: samraamanat39@gmail.com.

KEYWORDS
Perceived Stress, Psychological Flexibility, Life Satisfaction, Cancer Patients

CITE THIS ARTICLE:
Amanat, S. (2025). Perceived stress, psychological flexibility and life satisfaction in cancer patients. Pakistan Journal of Positive Psychology, 2(2), 17-22.

ARTICLE DETAILS:
Received on 10 Aprl, 2025
Accepted on 03 Jun, 2025
Published on 25 Jun, 2025

ABSTRACT

To a majority of individuals, cancer is a life-changing experience. To many, it may be a chance to get new priorities and reduce the number of regrets. A number of side effects, such as pain, nausea, exhaustion, or the cancer or the treatment, may cause dyspnea. In this study, the authors depict the interaction of life satisfaction, psychological adaptability, and perceived stress of cancer patients. Cancer diagnosis and treatment often cause higher stress levels, which affect the psychological health of patients and their overall quality of life. So, in this research, the survey research design was used. The sample size was 130 cancer patients, 65 of whom were male and 65 of whom were female and above 18 years. It used three tests, including the Perceived Stress Scale (Reis et al., 2010), the Acceptance and Action Questionnaire-II (Bond et al., 2011), and the Satisfaction with Life Scale (Diener et al., 1985). The results indicated that psychological flexibility is significantly related to satisfaction in life and perceived stress among cancer patients. Gender difference did not pose significant statistical differences when it was related to life satisfaction, psychological flexibility, and perceived stress among cancer patients. The findings of this research might be used to develop specific interventions aimed at addressing the specific mental health needs of cancer patients.

I. INTRODUCTION

Cancer is a global health issue. Cancer has now become one of the greatest causes of death amongst human beings. It caused 9.6 million deaths in 2018, which is the second cause of death in the world, only surpassed by cardiovascular diseases (Benschop et al., 1998). Cancer is the second most serious cause of death worldwide because every year, around 1 out of 6 deaths are caused by cancer (WHO, 2021). The Canadian Cancer Society (2019) declares that nearly half of the Canadian population will be diagnosed with cancer at some point in their lives. Brenner et al. (2020) mention that new medical interventions have decreased the cancer-related deaths of males and females, and 63 percent of patients will be able to live over five years. There is a correlation between increased perceived stress and cancer diagnosis and treatment (Burgess et al., 2015). In addition to diagnosis, treatment, and end-of-life care, the cancer experience is more than that. The researchers ought to focus on the complex relations between physical and psychological factors which influence the effect of a cancer diagnosis on overall physical and psychological health as an increasing number of patients have survived cancer (Brenner et al., 2020).

Cancer is a global illness. Cancer is a life-changing diagnosis, which impacts mental health as well as physical challenges. Cancer is a complex and challenging disease which greatly affects psychological health besides physical

health. The stress has been linked to poor physical and psychological consequences in the case of cancer patients (Barre et al., 2018). The stress levels among cancer patients are quite high, and this fact may lead to a negative impact on their overall satisfaction and quality of life (Fereidouni et al., 2024). Perceived stress is the personal assessment about stressors by a person and emotional reaction to it. The patients with cancer often face numerous stressors such as uncertainty about their chances to survive, adverse effects of the treatment, and disturbances of their regular lives. This perceived stress would have a significant adverse impact on psychological health and life satisfaction. Psychological flexibility, the ability to change and effectively adjust to the demanding environment, is influential in the way people cope with stress. Patients who display increased psychological flexibility tend to manage the requirements of cancer and its treatment. This flexibility assists them to feel that they are in control, they are occupied in something worthwhile, and they gain positive meaning to their experiences all of which leads to better life satisfaction. Cancer patients are prone to various challenges which may affect the quality of life such as physical symptoms, discomfort associated with the treatment process and disruption of normal day to day operations (Rice, 2012).

The process of cancer diagnosis and treatment has a significant impact on the mental status of patients and their overall well-being, and perceived stress is one of the factors that influence this process immensely. Anxiety, depression, and fatigue that are linked to elevated levels of perceived stress are capable of impeding treatment adherence and decreasing life satisfaction (Fereidouni et al., 2024). In its turn, low perceived stress levels are associated with higher emotional stability and better coping skills, which, in turn, leads to better life satisfaction. Psychological flexibility, i.e. the ability to modify to the new situations and respond efficiently to the challenges, is a defensive mechanism that reduces negative impact of stress. It is also true that people who are more psychologically flexible re-frame negative events, maintain emotional equilibrium, and exhibit higher resilience and wellness (Kashdan & Rottenberg, 2010). On the other hand, decreased psychological flexibility may culminate into the presence of rigid thought processes, emotional distress, and poor life satisfaction.

Psychological flexibility may be destroyed due to high-perceived stress overwhelming people and restricting their ability to adapt (Cyniak-Cieciura, 2021). Nevertheless, these adverse impacts can be countered through high psychological flexibility, which allows people to manage emotions more effectively and deal with the problems associated with cancer (Li et al., 2024). Perceived stress and psychological flexibility have a reciprocal relationship-they mutually affect each other in both dynamic and complicated manners. Moreover, gender differences should be comprehensively studied to establish specific interventions to meet the psychological demands of patients with cancer (Butaney et al., 2025). These interrelationships highlight the complexity of the interaction between perceived stress, psychological flexibility, and life satisfaction. Through the dynamics, researchers would be able to come up with good strategies to enhance psychological well-being and resilience among cancer patients. Although the significance of these factors has been identified, their associations are not well comprehended and there is thus the necessity of conducting more empirical research. This paper aims to address this gap by looking at the interaction of perceived stress and psychological flexibility on the determination of life satisfaction among people living with cancer.

II. METHOD

Participants

A survey design was employed. Data were collected from 130 cancer patients aged 18 years and above, comprising 65 males (50%) and 65 females (50%). A convenient sampling technique was used to recruit participants.

Measures

For assessment in the current study, the following tools were used. The Perceived Stress Scale (Reis et al., 2010) contains ten items with five Likert scale (0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Fairly Often, 4 = Very Often). The psychological flexibility was measured using Acceptance and Action Questionnaire-II (Bond et al., 2011), a holistic, seven-item measure of psychological flexibility, the items of which are focused on various key processes. A response scale is provided with seven categories just after every item; 1 always true to never true. Satisfaction with Life Scale (Diener et al., 1985). It is composed of five statements which the respondents will scale based on

how strongly they disagree or agree. A scale of 5 items that was intended to assess the global cognitive judgments that one is very satisfied with their life (not the measure of either positive or negative affect).

Procedure

After the approval of the research topic, authorization was sought from the principal of Government Graduate College (w), Rewind, Lahore, affiliated with the University of Punjab, Lahore. Permissions regarding the usage of selected tools were taken from the authors/publishers. The sample of cancer patients was selected from the Shaukat Khanum Memorial Cancer Hospital and Inmol Cancer Hospital, Lahore District. After explaining the aim of the research, oral and written consent was taken from them. Only those who have fulfilled the inclusion and exclusion criteria were included in the research. Informed consent was signed by the participants before data collection. They were also assured that their privacy and confidentiality were maintained, and they could withdraw at any time. Questionnaires were provided to the participants, and they were guided wherever they needed in one-to-one meetings. After the questions were provided to the participant, they were asked to fill out the questionnaire.

III. RESULTS

Demographic findings show that an equal number of males 50% and females 50% were participants in this study. Patients at the matric level were 43% and the intermediate level were 39% and at the graduation level were 18%. 65% of the participants belonged to urban areas, whereas 35% had a rural background. Married Patients were more in the study, 53%as compared to unmarried students 47%. 58% patient belongs to a joint family system, whereas 42% have a nuclear family system. Demographics also indicate that 1st born patients were 51% and 2nd born patients were 25% and any other born patients were 24%.

Table 1: Psychometric Properties of the Scales

Variables	*M*	*SD*	Range	α
Perceived Stress	26.09	9.85	10-40	.77
Psychological Flexibility	23.13	9.11	7-49	.75
Life Satisfaction	21.76	6.918	5-35	.73

Table 1 shows the psychometric properties of scales used in the current study. Reliability of all the scales was above .70, so they were good to use in the current study.

Table 2: Relationship between Perceived Stress, Psychological Flexibility, and Life Satisfaction in Cancer Patients

Variables	1	2	3
1. Perceived Stress	--		
2. Psychological Flexibility	.67**	--	
3. Life Satisfaction	-.29*	.23**	--

**$p < .01$

The correlation coefficients of table 2 show that there is a significant negative relationship between perceived stress and life satisfaction. Furthermore, there is a significant positive correlation between psychological flexibility and life satisfaction. Psychological flexibility was found to be positively correlated with life satisfaction.

Table 3: Gender Differences in Perceived Stress, Psychological Flexibility, and Life Satisfaction in Cancer Patients

	Males		Females			
Variables	*M*	*SD*	*M*	*SD*	*t*(128)	*p*
Perceived Stress	25.34	9.13	26.85	10.53	.87	.38
Psychological Flexibility	22.57	8.98	23.69	9.26	.70	.44
Life Satisfaction	22.35	5.71	21.17	7.95	.97	.31

The results showed that there are no significant gender differences exist in perceived stress, psychological flexibility, and life satisfaction between male and female cancer patients.

IV.DISCUSSION

The findings indicated that perceived stress is negatively related to life satisfaction. And, therefore, the hypothesis was accepted. Past studies proved that there was negative relationship between perceived stress and life satisfaction that was statistically significant. That is, when there was a high-perceived stress, the level of perceived ease in the dimension of life satisfaction was low meaning dimensions of perceived stress: helplessness and lack of self-efficacy is a key negative predictor of life satisfaction. In the past, the research has identified that perceived stress has an effect on the life satisfaction of patients. The study findings indicated a negative relationship between the perceived stress in cancer patients and the level of life satisfaction (Ye et al, 2021). To begin with, the results of the study proved that there is a significant negative correlation between life satisfaction and perceived stress in cancer patients. The results are consistent with previous studies that reported that high perceived stress levels were linked to low life satisfaction levels (Ye et al., 2021). Perceived stress in cancer is an important stress that individuals undergo and this impacts negatively on satisfaction in their lives. It has been demonstrated in the present research that a buffer can be used to mitigate the adverse stress impacts on life satisfaction and well-being (Satici et al., 2021).

The results also showed that there is a significant positive relation between psychological flexibility and life satisfaction. Psychological flexibility also has a role in promoting mental health, which may mediate the relationship with life satisfaction. Moreover, Oliani (2022) the result revealed a significant positive relationship between psychological flexibility and life satisfaction. Findings revealed psychological flexibility as a significant positive predictor of life satisfaction. A significant positive correlation was found between psychological flexibility and life satisfaction. These findings suggest that those who are more psychologically flexible are also more satisfied with life. The results showed that there is likely to be a non-significant gender difference in terms of perceived stress, psychological flexibility, and life satisfaction. According to Nawi et al. (2015), a study on gender divergence in level of perceived stress, Happiness, and life satisfaction was undertaken, and the results revealed that men and women with cancer would exhibit distinct patterns of perceived stress and life satisfaction. However, our findings are consistent with previous research that has reported non-significant gender differences in perceived stress and life satisfaction among cancer patients. The same results were also found by several studies (Joshanloom & Jovanovic, 2020). The findings revealed that females were seen to be less satisfied with their lives as compared to males. The findings also indicate that higher life satisfaction was linked to lower perceived stress and higher psychological flexibility of the cancer patients. Findings suggest that no significant differences between males and females were found in levels of psychological flexibility, but men experienced higher life satisfaction, and females showed less satisfaction with life in general.

V. CONCLUSION

The current research examined the connection among perceived stress, psychological flexibility and life satisfaction in cancer patients. The findings revealed that there is a negative correlation between life satisfaction and the perceived stress, implying that the greater the perceived stress the less the life satisfaction. Nevertheless, there was a positive influence of psychological flexibility on life satisfaction that suggests that the ones who adapt

better to challenging situations experience an improved mood. The findings also revealed that female patients had lower levels of life satisfaction as compared to male ones, whereas psychological flexibility affected both sexes. Overall, the given study can contribute to the current body of literature by highlighting the interdependent nature of perceived stress, psychological flexibility, and life satisfaction. It is not only a significant contribution to the area of health psychology, but also to the sphere of cancer care and management that can be used in further studies in the field.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

The author received no funding from any organizations.

VI.REFERENCES

Barre, P. V., Padmaja, G., Rana, S., & Tiamongla. (2018). Stress and quality of life in cancer patients: medical and psychological intervention. Indian Journal of Psychological Medicine, 40(3), 232-238.

Benschop, R. J., Geenen, R., Mills, P. J., Naliboff, B. D., Kiecolt-Glaser, J. K., Herbert, T. B., ... & Cacioppo, J. T. (1998). Cardiovascular and immune responses to acute psychological stress in young and old women: a meta-analysis. Psychosomatic Medicine, 60(3), 290-296.

Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., ... & Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire–II: A revised measure of psychological inflexibility and experiential avoidance. Behavior therapy, 42(4), 676-688.

Brenner, D. R., Weir, H. K., Demers, A. A., Ellison, L. F., Louzado, C., Shaw, A., ... & Smith, L. M. (2020). Projected estimates of cancer in Canada in 2020. Cmaj, 192(9), E199-E205.

Burgess, S., Thompson, D. J., Rees, J. M., Day, F. R., Perry, J. R., & Ong, K. K. (2017). Dissecting causal pathways using Mendelian randomization with summarized genetic data: application to age at menarche and risk of breast cancer. Genetics, 207(2), 481-487.

Butaney, B., Hoover, E. B., Coplan, B., & Bernard, K. (2025). Impact of COVID-19 on student-perceived stress, life satisfaction, and psychological flexibility: examination of gender differences. Journal of American College Health, 73(4), 1362-1368.

Cyniak-Cieciura, M. (2021). Psychological flexibility, temperament, and perceived stress. Current issues in personality psychology, 9(4), 306-315.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49(1), 71-75.

Fereidouni, Z., Abnavi, S. D., Ghanbari, Z., Gashmard, R., Zarepour, F., Samani, N. K., ... & Ghasemi, A. (2024). The Impact of Cancer on Mental Health and the Importance of Supportive Services. Galen Medical Journal, 13, e3327.

Joshanloo, M., & Jovanović, V. (2020). The relationship between gender and life satisfaction: analysis across demographic groups and global regions. Archives of women's mental health, 23(3), 331–338. https://doi.org/10.1007/s00737-019-00998-w

Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. Clinical psychology review, 30(7), 865-878.

Li, P., Zhou, Y., Fang, Y., & Chen, Z. (2024). Understanding the Relationship Between Trait Mindfulness and Perceived Stress: The Serial Multiple Mediating Roles of Basic Psychological Needs Satisfaction and Psychological Flexibility. Psychological Reports, 00332941241300963.

Nawi, N. H. M., Redzuan, M., Hashmi, S. I., Din, A., & NAWI, N. H. M. (2015). Big Five personality traits and its effect on emotional intelligence among public school personnel in Malaysia. Southeast Asia Psychology Journal, 3.

Oliani, T. (2022). Understanding the influences of self-compassion and psychological flexibility on life satisfaction and depression after stroke (Doctoral dissertation, University of Sheffield).

Reis, R. S., Hino, A. A., & Añez, C. R. (2010). Perceived stress scale. Journal of Health Psychology, 15(1), 107-114.

Rice, V. H. (2012). Theories of stress and its relationship to health. In V. H. Rice (Ed.), Handbook of stress, coping, and health: Implications for nursing research, theory, and practice (2nd ed., pp. 22–42). Sage Publications, Inc.

Satici, B., Gocet-Tekin, E., Deniz, M. E., & Satici, S. A. (2021). Adaptation of the Fear of COVID-19 Scale: Its association with psychological distress and life satisfaction in Turkey. International Journal of Mental Health and Addiction, 19(6), 1980-1988.

Ye, M., Shen, J., Lin, G., Xiang, T., Shao, L., & Hoi, S. C. (2021). Deep learning for person re-identification: A survey and outlook. IEEE transactions on pattern analysis and machine intelligence, 44(6), 2872-2893.