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EXPLORING THE EFFECT OF MENTAL TOUGHNESS AND LOCUS OF CONTROL ON SUBJECTIVE WELL-BEING OF COLLEGE STUDENTS

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Abstract
This study was undertaken with a view to ascertain the effect of mental toughness and locus of control on the subjective well-being of college students. Subjective well-being is a broader concept that encompasses three major components: life satisfaction, positive affect, and negative affect. This study was conducted on a sample of 284 college students selected by the purposive sampling technique. Data were obtained through Dienner's SPANE and Life Satisfaction Scale, along with Denovan et al. (2024) mental toughness scale, and Pearlin and Schooler's (1978) Mastery Scale. Using correlational and regression analyses, it was found that mental toughness was positively associated with life satisfaction, while locus of control was positively linked to positive affect and negatively associated with negative affect. Regression results further revealed that mental toughness emerged as a significant forecaster of life satisfaction. On the other hand, locus of control has emerged as a significant predictor of positive and negative affect. The findings highlight the importance of psychological factors, namely mental toughness and belief system, in determining students' mental health and well-being.

Keywords: Subjective Well-being, Life Satisfaction, Positive Affect, Mental Toughness, Locus of Control

Introduction

College students' developmental stage is regarded as a transition stage. It is characterized by significant changes in their emotions and social relationships. At this stage, they move from dependence to interdependence. A stable sense of self is developing here by knowing different identities related to their caste, religion, morality, gender, and sexuality. They are learning how to manage their emotions and build conducive interpersonal relationships. On the cognitive level, they prepared themselves as a knowledge giver rather than a knowledge seeker. Therefore, their well-being is influenced by the interplay of psychological, social, and academic factors. When adolescents develop greater cognitive and moral complexity, they explore new social dynamics. As a result, it creates stress and vulnerability to mental health challenges.

Subjective well-being (SWB) is a broader concept of positive psychology. It has received the attention of researchers in the last two decades. Philosophically, well-being was defined by Aristotle in terms of hedonic and eudaimonic well-being. Well-being in the Vedas is viewed as a holistic balance of the body, mind, and spirit, achieved through practices like meditation, yoga, ethical living, and a connection with nature. This approach emphasizes the interconnectedness of physical health with mental and spiritual harmony, promoting a life of purpose, resilience, and inner peace (Avancha, 2024). The Vedas, Upanishads, and other ancient Indian texts describe various ways to lead a balanced life, promote mental peace and cope with psychological stress. The Atharva Veda, for example, explains the soothing effects of chanting a mantra. The modern sound therapy, as well as mindfulness-based stress reduction (MBSR) methods, also support this view (Sharma, 2021).

Subjective well-being refers to individuals' cognitive and affective evaluations of their lives. It includes life satisfaction (a cognitive judgment), positive affect, and negative affect (Diener, 2000). Veenhoven (1997) defined the concept of subjective well-being. According to him, SWB refers to "how good [life] feels, how well it meets expectations, how desirable it is deemed to be, etc." Diener and Seligman (2002) studied US students to assess factors that might influence their happiness levels. They found that there is no single key to enhancing happiness. It is seen that very happy people may have rich and sustaining social relationships (Diener & Seligman, 2002).

In the present study, two psychological constructs, namely, mental toughness and locus of control, have emerged as prominent determinants of adaptive functioning (Kesavayuth, Tran & Zikos, 2022; Ramshaw & Clair-Thompson, 2021). Mental toughness is associated with resilience (Gerber et al., 2013), physical exercise (Jahangard et al., 2017), and good quality sleep. It may result from lowering stress, minimal hyperarousal, or less dysfunctional thoughts (Brand et al., 2014). Mental toughness often emerges as a predictor of mental health and well-being. van der Meulen et al. (2017) observed that mental toughness did not significantly predict mental health disturbances for police personnel. It is suggested that a substantial change in mental toughness leads to such manifestations.

Locus of control, on the other hand, reflects the degree to which individuals notice events as contingent upon their own behaviour (internal locus) or outside forces beyond their control (external locus) (Rotter, 1966). Indian philosophical ideas outlined a broader view of human agency than the strictly individualistic approach in Rotter's locus of control theory. Karma states that a person's current and future conditions stem from their own actions, similar to an internal locus of control, yet its links to destiny across lifetimes also reflect external influences. Dharma highlights fulfilling one's moral duty with the right intent. It suggests that true well-being comes from acting ethically rather than trying to control all outcomes, offering a balanced perspective on responsibility and acceptance (Dalal, 2000; Hiriyanna, 2005). Students with a strong internal locus of control tend to have greater motivation, adaptive coping, and well-being. Several studies have shown that persons with an internal LoC have a tendency to be more sociable (Buddelmeyer & Powdthavee, 2016; Kesavayuth, 2020), and spending more time with their family and friends promotes a sense of well-being. On the other hand, individuals with lower levels of social capital may frequently experience feelings of social loneliness and isolation. These people are more likely to develop depression and psychological distress (Mathews et al., 2016).

Both mental toughness and locus of control are linked to well-being outcomes. However, there is little research on how both together affect the components of subjective well-being in Indian college students. This study aims to explore the predictive effect of mental toughness and locus of control on life satisfaction, positive affect, and negative affect.

Objectives of the Study

1. To examine the correlations among mental toughness, locus of control, and components of subjective well-being (life satisfaction, positive affect, and negative affect).
2. To analyse the predictive effect of mental toughness and locus of control on life satisfaction.
3. To assess the predictive role of mental toughness and locus of control on positive affect.
4. To examine the predictive role of mental toughness and locus of control on negative affect.

Methods

Sample

This study included 284 college students, selected using convenience sampling from different institutions. The participants were undergraduate students from different socio-economic backgrounds. There were 124 male and 160 female students. Of these, 164 were sportsmen, and 120 were non-sportsmen. The study used a correlational design to examine the relationships and predictive effects among the variables.

Measures

1. Mental Toughness Scale:

This scale was initially developed by Clough et al. (2002). Later, Denovan et al. (2024) developed the 10-item Mental Toughness Questionnaire. It is a condensed form of the 48-item Mental Toughness Questionnaire (MTQ48) (Clough et al., 2002). It measures the four components (4 C), namely, Confidence to the hardiness sub-concepts of Control, challenge and Commitment. The insertion of the Confidence component was designed to incorporate sport-related items (Gerber et al., 2013)

2. Locus of Control Scale:

This scale was advanced by Pearlin and Schooler in 1978, popularly known as the Mastery Scale. It measures the locus of control through seven items. Individuals are directed to rate their responses on a scale from 1 (“strongly disagree”) to 7 (“strongly agree”).

3. Scales on Subjective Well-being:

Here, subjective well-being was measured by two scales, namely, the life satisfaction scale and the Positive and Negative Affect Scale (PANAS). The satisfaction with life scale was developed by Dienner et al. (2009) to measure the cognitive component of subjective well-being. Whereas PANAS (Dienner et al.,2010) was used to measure the affective components of subjective well-being. The life satisfaction measure is a 5-item scale. Each item is measured on a 5-point scale. The SPANE consists of 12 items (6 positive and 6 negative affect items).

Results

Data obtained on the above measures were statistically analyzed using Descriptive statistics, Pearson correlation, and multiple regression analyses. The entire analysis was made through SPSS software.

Table-1
Correlations among Mental Toughness, Locus of Control and Dimensions of Subjective Well-being

	Life Satisfaction	Positive Affect	Negative Affect	Mental Toughness	Locus of Control
Life Satisfaction	1	-.010	.018	.317**	.080
Positive Affect	-.010	1	-.342**	.019	.294**
Negative Affect	.018	-.342**	1	.027	-.326**
Mental Toughness	.317**	.019	.027	1	.009
Locus of Control	.080	.294**	-.326**	.009	1
**. Correlation is significant at the 0.01 level (2-tailed).					

To measure the relationship among the scores obtained on mental toughness, locus of control and dimensions of subjective well-being, Pearson's coefficient of correlation was computed. Results are presented in Table 1. It states that mental toughness showed a significant positive correlation with life satisfaction ($r = .317$, $p < .01$), indicating that students with higher mental toughness experience greater life satisfaction. The locus of control was significantly and positively related to positive affect ($r = .294$, $p < .01$). Negative affect had significant negative correlations with locus of control ($r = –.326$, $p < .01$).

On the other hand, mental toughness did not show significant correlations with positive or negative affect. These results indicate that while mental toughness is associated with cognitive well-being (life satisfaction), locus of control plays a significant role in emotional well-being (positive and negative affect).

Predictive Effect of Mental Toughness and Locus of Control on Life Satisfaction

To measure the effect of mental toughness and locus of control on various dimensions of subjective well-being, multiple regression was used. The results depicted in Table 2 found that mental toughness significantly predicts life satisfaction ($B = .259$, $t = 5.612$, $p < .001$). However, locus of control did not significantly predict life satisfaction ($p = .170$). The overall model explained 10.7% of variance in life satisfaction ($R^2 = .107$). It states that higher mental toughness enhances cognitive evaluations of life among college students.

Prediction of Positive Affect

Locus of control emerged as a strong predictor ($B = .329$, $t = 5.150$, $p < .001$). Mental toughness did not emerge as a significant predictor of positive affect. The model accounted for 8.7% of the variance ($R^2 = .087$). Students who scored high on the internal locus of control scale experience more positive emotions.

Prediction of Negative Affect

Locus of control significantly predicted negative affect (B = –.356, t = 5.789, p < .001). Mental toughness was not a significant predictor. The model explained 10.7% of the variance (R^2 = .107). Students with an internal locus of control reported fewer negative emotional experiences.

Table-2

Predictive Effect of Mental Toughness and Locus of Control on Life Satisfaction

Dep. Variable	Ind. Variable	R	R2	F	B	t	Sig.
Life Satisfaction	Toughness of Mind	.326	.107	16.764	.259	5.612	.000
	Locus of Control				.089	1.375	.170
Positive Affect	Toughness of Mind	.294	.087	13.318	.013	.284	.777
	Locus of Control				.329	5.150	.000
Negative Affect	Toughness of Mind	.327	.107	16.870	.023	.527	.599
	Locus of Control				-.356	5.789	.000

Discussion

The results revealed several important insights into the psychological aspects of subjective well-being among college students. First, mental toughness was positively correlated with life satisfaction. It was also significantly predicted by life satisfaction. This indicates that students who are resilient, confident, and mentally strong tend to appraise their lives more positively (St Clair-Thompson & London, 2024; Ramshaw & St Clair-Thompson, 2021). The finding aligns with previous literature emphasizing mental toughness as a buffer against stress and dissatisfaction (Schapir et al., 2016). Second, locus of control appeared as a significant predictor of both positive and negative affect. Students who observe control over their life circumstances (internal locus) are more likely to experience more positive emotions and fewer negative emotions. This matches Rotter's theory and numerous studies that link internal control orientation to adaptive coping, optimism, and emotional stability (Devin et al., 2012; Nowak et al., 2024).

Interestingly, mental toughness did not predict emotional components of well-being (positive or negative affect). This suggests that while resilience enhances cognitive appraisal (life satisfaction), emotional experiences may depend more on perceived control rather than toughness or resilience alone. The moderate R^2 values (8–11%) forecast that mental toughness and locus of control influence SWB. Additional factors, such as social support, personality traits, academic stress, and coping strategies, may further shape well-being.

Conclusion

The study highlights that mental toughness and locus of control play meaningful roles in shaping subjective well-being among college students. Mental toughness significantly predicts

life satisfaction, whereas locus of control strongly predicts both positive and negative affect. Enhancing these psychological strengths may contribute to healthier emotional functioning and improved overall well-being in young adults. Educational counselling programs should include les on developing an internal locus of control among students to enhance emotional well-being. Training programs focused on resilience building and mental toughness may improve students' life satisfaction. Policy makers can incorporate cognitive-behavioural strategies and decision-making exercises. College mental health services can integrate psychological assessments to identify students with low mental toughness or an external locus of control.

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