

PERSONALITY, BODY IMAGE, AND MEANING IN LIFE AMONG FEMALE UNIVERSITY STUDENTS IN PAKISTAN: A CORRELATIONAL STUDY

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ABSTRACT

The present study explored the relationship between the Big Five personality traits and body image and meaning in life among female university students in Pakistan, a collectivistic and appearance-conscious society where there is comparatively little empirical research in the personality and well-being literature. The correlational design was employed using a purposive sampling method, which included 200 female university students (18-26+) from public and private universities of Pakistan. The participants filled out the Ten-Item Personality Inventory, Body Image Scale, and the Questionnaire of Meaning in Life online. A correlational analysis revealed that agreeableness, conscientiousness, and emotional stability (low neuroticism) were all significant predictors of overall meaning in life, with conscientiousness also being a significant predictor of the search-for-meaning subscale. A regression analysis revealed that agreeableness, conscientiousness, and emotional stability (low neuroticism) each accounted for a significant amount of variance in overall meaning in life and current presence of meaning, and conscientiousness accounted for a significant amount of variance in the search-for-meaning subscale. The personality traits failed to significantly predict the body image scores. They are explained in the context of Five-Factor Theory, Steger's presence-search framework of meaning, and sociocultural theories of body image in relation to converging data from Western and East Asian samples as well as other South Asian samples. The potential implications for university counseling services, culturally responsive well-being interventions, and future longitudinal and mixed-gender studies in Pakistan are explored.

Keywords: Big Five personality, body image, meaning in life, Five-Factor Theory, Pakistani university students

Introduction

Personality, Body Image, and Meaning in Life Among Female University Students in Pakistan

Meaning in life is considered to be a central theme of psychological health and is defined as the degree to which life makes sense, has direction, and has value or significance (Steger et al., 2006). University is a developmental period when young women are trying to develop an integrated sense of self, navigate cultural norms around physical appearance, and establish patterns of thinking, feeling, and doing. Therefore, there is both theoretical and applied value in understanding the

relationship between these three domains; personality, body image, and meaning in life is especially important in cultural contexts such as Pakistan, where collectivist family structures and appearance norms are extremely high, along with the fast-changing media environment (Mahmud & Crittenden, 2007).

The present study aims to explore three constructs in 200 female college-going adolescents in Pakistan. The data were collected during the time of COVID-19, which has revealed the close relationship between religiosity and psychological well-being in the general sample of university

students of Pakistan (Saleem et al., 2021); highlighting the probable influence of cultural and religious context on any account of personality, body image or meaning in this sample. The purpose is to place the new findings of the thesis in the context of the current personality and well-being research literature and to make comparisons with a wider and more recent evidence base, and to extract practical implications for mental health services currently operating at universities in South Asian contexts.

The Five-Factor Theory of Personality (FFM): Costa and McCrae (1992) have proposed the Five-Factor Model (FFM), the most widely used taxonomy for describing individual differences in personality, which consists of five major domains: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (the inverse pole: emotional stability). Beyond mere description of the traits, McCrae and Costa's Five-Factor Theory proposes that these five domains have a significantly biological, temperamentally based origin, which is manifested in culturally shaped characteristic adaptations that are the concrete habits, attitudes, and self-concepts that people form as they interact with the specific demands of their environment. From this perspective, personality traits are not only correlated with outcomes like body image or meaning in life, but they are also hypothesized as being a distal, partly biological cause, which is expressed in more proximal culturally patterned adaptations. The assumption of a reasonably stable, but also normative maturation over time, of the five domains, as suggested by twin and longitudinal studies, supports the notion that they serve as a dispositional framework for more episodic experiences such as body evaluation and existential meaning. Notably, most of this evidence base comes from Western, English-speaking samples; a more recent large-sample study of Egyptian college students found a broadly similar pattern of Big Five correlates of life satisfaction, providing indirect support for testing the same associations here with a Pakistani sample (Abdel-Khalek et al., 2022). According to the sociocultural models, including the tripartite influence model, the causes of body dissatisfaction can be traced to appearance pressures from family,

peers and media which become internalized as a thin or lean ideal to compare oneself to and internalization of thinness/leanness (Thompson et al., 1999). Based on the findings of personality studies, the FFM domains are hypothesized to moderate the internalization and response to these pressures rather than to directly influence the outcome of body image. In the most comprehensive synthesis to date, a meta-analysis of 26 studies and over 39,000 participants identified that the strongest association with body dissatisfaction is with neuroticism, followed by lower levels of extraversion and conscientiousness, with smaller associations with openness and agreeableness that were dampened when BMI was entered as a control variable (Allen & Robson, 2020). Previous studies have found that women with higher levels of neuroticism exhibit larger decreases in body esteem following exposure to idealized body images than women with lower levels of neuroticism (Roberts & Good, 2010), and that higher scores on the measure of body appreciation, a positive rather than a low-dissatisfaction measure of body image – are associated with lower neuroticism and higher conscientiousness and agreeableness (Swami et al., 2013). Neuroticism is believed to increase threat sensitivity and negative self-evaluation in general, and thus may also enhance threat sensitivity to appearance, whereas conscientiousness is believed to promote more stable, less reactive self-regulation of eating, exercise and appearance-related behaviors. While in principle, physical appearance may be more important for agreeable individuals, who tend to endorse traditional social roles and values (Allen & Robson, 2020), such a link has not been shown in all studies. This evidence base is largely from Western and East Asian samples, and it is an empirical question whether these associations hold for South Asian, and particularly Pakistani, university populations where body ideals are formed from a unique pattern of family-based, religious, and media influences (Mahmud & Crittenden, 2007).

Personality and Meaning in Life

In modern research on meaning in life, there are three distinct aspects to consider: the presence of meaning, the subjective experience of coherent

and meaningful life, and the search for meaning, as the extent to which a person is striving to create or enhance that sense of meaning (Steger et al., 2006). The two dimensions are different both conceptually and empirically; that is, knowing there is meaning is consistently related to higher levels of well-being, whereas searching for meaning is related to less positive outcomes when it co-occurs with low presence, and to more benign or even positive outcomes when presence is already high (Steger & Kashdan, 2013). The psychological literature on meaning has, throughout history, engaged with existential and humanistic ideas such as those of Frankl (1963) who conceived of meaning as discovered rather than invented, Maslow (1968) who proposed that meaning-oriented values were at the top of a human motivational hierarchy, and Yalom (1980) who argued for meaning as a personal construction in response to an indifferent universe. Modern studies on traits revealed that such experiences of the soul are systematically structured according to personality. More positive correlations for presence of meaning with extraversion, agreeableness, conscientiousness, and less positive correlations with neuroticism, whereas search for meaning correlates less positively with openness, and with neuroticism in some samples (Steger et al., 2008). The fact that positive affect is highly heritable, temperamentally based, and trait-linked to experiencing meaning in daily life (King et al., 2006) suggests one possible mechanism through which stable emotional dispositions, mediated by temperament, lead to a more reflective and cognitively elaborated sense of purpose.

Cultural Considerations in a Pakistani Sample
Majority of the personality, body image and meaning in life literature reviewed above is from Western individualistic contexts. Pakistan is a collectivist society where an interaction between family honour, religious identity, and modesty norms creates an environment of body image which is not necessarily conforming with the thin-ideal models of the west as globalised visual media is also being introduced into the country. In a comparative study of actual and perceived body shape, young Pakistani women from lower socioeconomic backgrounds who were educated in Urdu-medium schools experienced higher levels of

body dissatisfaction than their Australian peers, whereas the English-medium students had higher levels of body dissatisfaction specifically with regards to weight, which was explained by differences in exposure to Western media ideals and local body-referent speech norms between the two groups (Mahmud & Crittenden, 2007). Supportive evidence comes from more recent Pakistani studies that find that media and social media exposure are directly related to poor body image among medical students in Peshawar (Ali et al., 2021), and higher social media use is associated with higher levels of body image dissatisfaction in university students more generally (Tufail et al., 2022), suggesting that the sociocultural pressures documented in earlier Pakistani samples have, if anything, increased with the rise of image-based social platforms. Also, collectivist cultures are hypothesized to have more external and relational orientations to meaning in life, stemming from family, religious observance, and community roles, as compared to Western cultures that have more individual and self-actualizing orientations to meaning in life (Steger et al., 2006). These considerations point to the importance of considering the present sample as not only a replication context but one that is potentially informative for theoretical testing of the generalizability of Five-Factor associations with body image and meaning across populations in which they were first discovered.

The present study builds on this theoretical foundation and explores the interrelationships between the Big Five personality traits, meaning in life and body image in a sample of Pakistani female university students. The following three hypotheses were tested: Hypothesis 1 (H1): Personality traits, body image, and meaning in life would be significantly intercorrelated.

Hypothesis 2 (H2): The five personality traits would significantly predict body image.

Hypothesis 3 (H3): The five personality traits would significantly predict meaning in life and its presence and search subscales.

Research Design

A cross-sectional correlational design was employed in this study to investigate relationships

among personality, body image, and meaning in life.

Participants

Participants were 200 female university students (aged 18-26 years and above) selected by the purposive sampling method from different cities of Pakistan in various public and private universities. Only students who were currently enrolled in BS/MS programs were eligible to participate, and students in school and college were not included. The majority of the respondents were single (84.8%) and enrolled in BS-level programs; more than 30 institutions were represented, and more than 40 fields of study, with the majority being applied psychology. The data were collected during the COVID-19 pandemic, requiring an online recruitment and data-collection process.

Instruments

The Big Five personality domains were assessed by the Ten-Item Personality Inventory (TIPI; Gosling et al., 2003), comprising two items per domain that were scored on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree), with reverse scoring for items 2, 4, 6, 8, and 10. The TIPI was chosen for its brevity, and its use has been validated in Spanish, French, and German samples; however, previous research has also noted that it is a very short measure which can result in noisier and less-differentiated trait estimates than longer Big Five inventories (Credé et al., 2012).

Body image was assessed using Body Image Scale (BIS; Moeen et al., 2013) which consists of 35 items and has been developed and validated in young adult Pakistani women, on three subscales

using a 5-point scale ranging from 0 (never) to 4 (always).

The Meaning in Life Questionnaire (MLQ; Steger et al., 2006) was used to assess the presence of meaning (items 1, 4, 5, 6 and 9) and the search for meaning (items 2, 3, 7, 8 and 10) were measured on a 7-point scale ranging from 1 (absolutely untrue) to 7 (absolutely true), in reverse scoring for item 9. The MLQ has shown good internal consistency, temporal stability, and convergent and discriminant validity in several validation samples (Steger et al., 2006).

Procedure

This study received ethical approval from the Department of Applied Psychology's ethical review committee, and permission to utilize each scale was requested by the authors of the scale. Due to the closures of in-person testing sites during the pandemic, participants were recruited via social media groups, and all three questionnaires were administered online using a Google Forms link. Participants were told they were free to participate, that their answers would be kept confidential, and that the data would be used for research only.

Results

Descriptive, reliability, correlational, and regression analyses were conducted using SPSS. The sample was predominantly aged 20–21 years (48.0%), enrolled in BS-level programs (89.0%), and unmarried (84.8%), with representation from more than 30 public and private institutions across Pakistan, most heavily from Lahore College for Women University (58.0%) and other Punjab-based universities.

Table 1
Demographic Characteristics of the Sample (N = 200)

Variable	Category	f	%
Age	18–19	30	15.0
	20–21	96	48.0
	22–23	59	29.5
	24–25	7	3.5
	26 and above	8	4.0

Education	BS	178	89.0
	MS	22	11.0
Marital status	Single	168	84.8
	Married	13	6.6
	Engaged	18	9.1
Institute	LCWU	116	58.0
	Other	84	42.0
Major subject	Applied Psychology	80	40.0
	Other	120	60.0

Note. Percentages recomputed from reported frequencies; minor discrepancies from the original thesis report reflect rounding. LCWU = Lahore College for Women University.

Table 2
Descriptive Statistics and Internal Consistency (Cronbach's α) for the BIS, MLQ, and TIPI

Measure	<i>k</i>	α
Body Image Scale (BIS)	35	.96
Physical component	15	.91
Psychological component	13	.91
Strategies for body image	7	.83
Meaning in Life Questionnaire (MLQ)	10	.72
Presence of meaning	5	.72
Search for meaning	5	.82
Ten-Item Personality Inventory (TIPI)	10	.61
Extraversion	2	.29
Agreeableness	2	.27
Conscientiousness	2	.13
Emotional stability	2	.17
Openness	2	.06

Note. *k* = number of items; α = Cronbach's alpha. The low alpha values for individual TIPI subscales reflect the two-item-per-domain structure of the instrument, a recognized psychometric limitation of ultra-brief personality measures rather than an anomaly specific to this sample (Credé et al., 2012).

Table 3
Intercorrelations Among Body Image, Meaning in Life, and Personality Variables (N = 200)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Body image	–	.97**	.97**	.92**	-.08	-.08	.14*	.01	-.10	.04	-.05	-.07
2. Physical component		–	.92**	.85**	-.09	-.09	.11	-.01	-.11	.02	-.03	-.08

3. Psychological component	-	.84**	-.04	-.04	.14**	.04	-.08	.03	-.03	-.06
4. Body image strategies	-		-.12	-.12	-.17*	.00	-.07	.07	-.08	-.04
5. Meaning in life			-	1.00**	.17*	.20**	.32**	.35**	.31**	.14
6. Presence of meaning				-	.20**	.32**	.35**	.31**	.14	.20
7. Search for meaning					-	.07	.18*	.29**	-.01	.11
8. Extraversion						-	.26**	.16*	.15*	.26**
9. Agreeableness							-	.42**	.25**	.30**
10. Conscientiousness								-	.24**	.32**
11. Emotional stability									-	.12
12. Openness										-

* $p < .001$. ** $p < .0001$

Table 3 shows that meaning in life was significantly and positively correlated with extraversion, agreeableness, conscientiousness, and openness, and that the psychological

component of body image was positively associated with search for meaning, while body image strategies were negatively associated with search for meaning.

Table 4

Simple Regression Analyses: Personality Traits Predicting Meaning in Life and Its Subscales (N = 200)

Predictor	<i>B</i>	<i>SE</i>	<i>B</i>	<i>T</i>	<i>p</i>	95% CI
<i>Meaning in Life (total)</i>						
Extraversion	.19	.12	.11	1.58	.12	[-0.05, 0.43]
Agreeableness	.36	.17	.16	2.18	.03	[0.03, 0.69]
Conscientiousness	.51	.16	.23	3.17	.00	[0.20, 0.82]
Emotional stability	.37	.12	.20	3.01	.00	[0.14, 0.61]
Openness	-.08	.15	-.04	-.55	.58	[-0.37, 0.21]
<i>Presence of Meaning in Life</i>						
Extraversion	.04	.02	.11	1.58	.12	[0.00, 0.08]
Agreeableness	.07	.03	.16	2.18	.02	[0.01, 0.13]
Conscientiousness	.10	.03	.23	3.17	.01	[0.04, 0.16]
Emotional stability	.07	.02	.20	3.01	.01	[0.03, 0.11]
Openness	-.02	.03	-.04	-.55	.58	[-0.08, 0.04]
<i>Search for Meaning in Life</i>						
Extraversion	.04	.17	.01	.21	.83	[-0.29, 0.37]
Agreeableness	.23	.23	.08	1.02	.31	[-0.22, 0.68]
Conscientiousness	.75	.21	.27	3.48	.01	[0.34, 1.16]
Emotional stability	-.23	.17	-.09	-1.34	.18	[-0.56, 0.10]

Openness	.01	.20	.00	.06	.95	[-0.38, 0.40]
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Note. 95% CI = 95% confidence interval for B , computed as $B \pm 1.96 \times SE$. Because each model includes a single predictor, R^2 for a given row is equivalent to β^2 (e.g., conscientiousness alone accounted for approximately 5% of the variance in total meaning in life, $\beta = .23$, $R^2 \approx .05$, and approximately 7% of the variance in search for meaning, $\beta = .27$, $R^2 \approx .07$). Separate simple regression models were run for each predictor given the two-item TIPI subscales and their intercorrelations (see Table 3); because several traits were significantly correlated with one another (e.g., agreeableness and conscientiousness, $r = .42$), these coefficients should be interpreted as bivariate associations rather than unique, independent effects. A simultaneous multiple regression with a longer, more reliable personality inventory is recommended for future replications.

As shown in Table 4, agreeableness, conscientiousness, and emotional stability each significantly predicted overall meaning in life and its presence subscale, while extraversion and openness did not reach significance. For the search-for-meaning subscale, only conscientiousness emerged as a significant predictor. Parallel regression analyses predicting body image from the five personality traits were also conducted; none of the personality predictors significantly predicted body image scores, providing no support for H2.

Discussion

The aim of the present study was to explore the correlation between the Big Five personality dimensions and Body image and meaning in life of female university students of Pakistan. As in H1 and H3, personality was significantly correlated with meaning in life, with agreeableness, conscientiousness, and emotional stability significantly predicting the overall mean and presence subscale, and conscientiousness also predicting the search-for-meaning subscale. Unlike H2, there was no significant difference between the five traits and body image. This pattern of correlations among the Big Five and subjective well-being is closely replicated by the larger personality and subjective well-being literature; of the Big Five, low neuroticism is consistently the strongest correlate of subjective well-being, extraversion and conscientiousness modestly, and agreeableness and openness more modestly (Steger et al., 2008); a similar pattern of Big Five correlates of subjective well-being has been recently reported outside of Western samples, among Egyptian college students (Abdel-Khalek et al., 2022), lending further support to the fact that these

associations do not simply reflect sampling of Western samples. Emotionally stable people are less likely to experience the chronic negative affect and rumination that undermines a sense of coherence and purpose, and this might account for the strong and direct association between emotional stability and presence of meaning in this sample. The notion of goal-directed, self-disciplined behaviour appealing to the temperament of conscientiousness, as proposed by Five-Factor Theory (Costa & McCrae, 1992), lends plausibility to the idea that such behaviours foster the development of a sense of purpose, whether in the context of academic, religious, or relational projects, in which conscientious individuals are more likely to engage in sustained efforts. Conscientiousness was the only factor that predicted active searching for meaning in a meaningful way: in contrast with some initial theorizing, searching may not be an "othering" or a "negating" effort, but rather an effortful and disciplined self-examination that could be seen as a productive way to be present. Overall, the positive correlation between agreeableness and the meaning item was consistent with what has been found in Pakistan where family and community were key sources of meaning in life, and warmth, cooperation and social harmony were likely to be closely correlated with meaning (Steger et al. 2006); this also aligns with the earlier results showing that religiosity was also strongly associated with psychological well-being among Pakistani university students in the same pandemic period in which the data were collected (Saleem et al., 2021) suggesting that relationally and religiously anchored sources of meaning may be especially relevant for this population. This does not reflect the Western meta-analytical

evidence that showed that body dissatisfaction is positively related to the personality dimensions, especially with neuroticism, which had a small to moderate relation (Allen & Robson, 2020; Roberts & Good, 2010). There are some possibilities to consider. First, the two-item TIPI subscales used here have been shown to have reliability problems relative to longer Big Five questionnaires, like the NEO-FFI (Credé et al., 2012), which is likely to weaken any meaningful statistical relationship between them and to lower the power to detect it. Secondly, and most substantively, the sociocultural approach to body image focuses on the social pathways, commentary from the family, comparison with peers, and media exposure that influence appearance concerns (Thompson et al., 1999), which may operate somewhat independently from overarching constructs of personality in a culture where the family has a distinct framing of body image compared to the individualistic and media driven environments of most personality-body image research (Mahmud & Crittenden, 2007). In line with this sociocultural perspective, recent studies conducted in Pakistan have replicated this finding and found that specifically, exposure to the media and social media is more closely linked to body dissatisfaction than general personality traits in university students and medical students (Ali et al., 2021; Tufail et al., 2022), suggesting that in this context, sociocultural influences such as family appearance pressure or media internalization are likely more proximal than general personality traits. This interpretation agrees with the Five-Factor Theory's formulation of traits as operating at a distal dispositional level, with more situational and cultural inputs responsible for specific characteristic adaptations such as body evaluation (Costa & McCrae, 1992).

Implications

The results are an extension of Five-Factor Theory and Steger's presence vs. search model of meaning to an underrepresented collectivist, South Asian population, and provide partial support for the personality-meaning link as well as an important boundary condition for personality-body image associations drawn almost exclusively from Western samples. The pattern also indirectly confirms the notion that the sense of meaning in

life is more closely related to stable temperament than body image is, as the latter seems to be more influenced by the proximal sociocultural inputs, such as exposure to social media (Ali et al., 2021; Tufail et al., 2022) than by broad dispositional factors, as measured in this investigation. Theoretical studies in the future would benefit from an explicit treatment of sociocultural factors as moderators or mediators in the personality-body image-personality-body image meanings relationships in samples from South Asia. These results may indicate that, in a university counselling center in Pakistan and beyond, interventions that aim to enhance students' sense of meaning in life can benefit from focusing on the behavioral correlates of conscientiousness (structured goal setting, values clarification) and emotional stability (emotion-regulation, anxiety-management skills) instead of taking a one-size-fits-all approach. Since personality was not a meaningful predictor of body image in this sample, it may be better to target the sociocultural and media-literacy aspects of body image interventions, directly challenging family and peer appearance pressures and internalized appearance ideals, instead of being centered around changing the individual's personality. Since the search for meaning was correlated specifically with conscientiousness, and not with emotional instability, counsellors could encourage the students who reported searching for meaning but were conscientious to know that this search for meaning was a sign of engagement and effort rather than of distress.

Limitations and Future Directions

Several limitations qualify these conclusions. First, the sample was restricted to female university students recruited through convenience and purposive sampling during the COVID-19 pandemic, limiting generalizability to male students, non-university populations, and non-pandemic conditions. Second, the ultra-brief TIPI, while efficient for online data collection, has known reliability limitations for its two-item subscales (Credé et al., 2012); the correspondingly poor internal consistency observed here for several TIPI subscales ($\alpha = .06-.29$; see Table 2) means that trait-level associations in this study should be

treated as approximate lower-bound estimates rather than precise effects, and replication with a longer, psychometrically stronger instrument such as the NEO-FFI or the Big Five Inventory-2 is strongly recommended. Third, the personality, meaning regression analyses tested each of the five traits in a separate simple regression rather than a single simultaneous multiple regression; because several traits were significantly intercorrelated (e.g., agreeableness and conscientiousness, $r = .42$; see Table 3), the coefficients in Table 4 likely reflect some shared variance across traits and should not be interpreted as each trait's unique, independent contribution. Future research should adopt longitudinal or experimental designs to clarify causal pathways, include male and non-binary participants for a fuller picture of gender-related patterns, and explicitly measure sociocultural variables (family appearance pressure, media internalization, religiosity) as potential mediators of the personality, body image relationship in South Asian contexts.

Conclusion

Among female university students in Pakistan, agreeableness, conscientiousness, and emotional stability significantly predicted meaning in life, while personality traits were unrelated to body image. These findings broadly support the applicability of Five-Factor Theory to meaning in life in a South Asian collectivist sample while suggesting that body image in this population may be more strongly shaped by sociocultural than by dispositional factors. The results underscore the value of testing established Western personality and well-being frameworks in underrepresented cultural contexts, and point toward culturally tailored, rather than purely trait-based, approaches to supporting body image and psychological well-being among young women in Pakistan.

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