

## **Urdu Translation and Validation of the Light Triad Scale for Young Healthcare Professionals: A Two-Phase Study**

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### **Abstract**

The Light Triad Scale (LTS) is a measure of positive personality traits, including Kantianism, Humanism, and Faith in Humanity. The scale has been widely used in research to investigate the relationship between positive personality traits and well-being. However, there is a lack of research on the LTS in Urdu-speaking populations, which highlights the need for a valid and reliable Urdu version of the LTS. The present study aimed to translate the LTS into Urdu language and validate the translated version for young healthcare professionals. The current study comprised of two phases. In the first phase, the LTS was translated into Urdu language. The translation and linguistic validation process followed the methodology suggested by MAPI (2008). In the second phase, the translated version was validated for young healthcare professionals. The sample for the study comprised of 710 participants including 238 men and 472 women. The participants were selected from different government hospitals of two districts of Punjab using purposive sampling. The sample included 422 doctors and 288 nursing staff. The Confirmatory Factor Analysis showed a good model fit, indicating adequate values of fit indices. The Cronbach Alpha for the overall and subscales ranged from .71 to .60, respectively. The Light Triad Scale Urdu version was found to be a valid and reliable tool for researchers and practitioners. The translated version of the LTS can be used in future research to investigate the role of the Light Triad in promoting well-being and positive outcomes among Urdu-speaking populations. The implications of the study findings are discussed with reference to the understanding of the Light Triad construct among professional working in health setups in Pakistani cultural context.

**Keywords:** Light Triad traits, Translation, Validation, Healthcare Professionals

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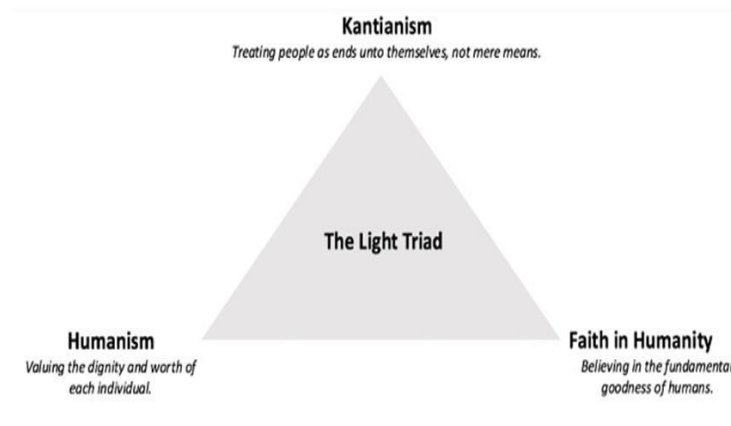
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### **1. Introduction**

The light triad and dark triad of personality are two categories of personality traits that exist in humans (Kaufman et al., 2020). The Light Triad was conceptualized as personality attributes that demonstrate a person's altruistic and caring nature (Aruta et al., 2022). Kantianism, humanism, and confidence in mankind make up the light triangle (Lukić & Živanović, 2021).

**Figure 1:** Light Triad Model (Kaufman et al., 2020).



The Light Triad emerges as the Dark Triad's counterpoint, although both structures are not just opposite to each other (Kaufman et al., 2020). The fact that the existence of a light side is not a prerequisite for the absence of a darker side (Gerymski & Krok, 2019). All individuals do not actually display a complete dark or light traits, feelings, or thoughts (Allemand & Flückiger, 2022), because each of these may be adaptive and depends on the situation (Ishak & Binti, 2014). Many previous studies assessed that a person's dark side traits refer to a set of behavior patterns, thoughts, and feelings that are directed at maximizing their own benefit at the expense of others, while their light side refers to similar patterns that are geared towards improving others' benefit and assisting them, and are therefore associated with self-actualization (Curtius, 2023).

Assessment of the Light Triad was done through various measure such as The Light Triad Scale (LTS; Kaufman et al., 2020) quantifying Kantianism, humanism, and confidence in humanity. The LTS was an accurate and widely used measure that had also been translated into three different languages: Turkish (LTS-Turkish Version; Pektas & Durmus, 2022); Polish (LTS-Polish Version; Gerymski & Krok, 2019); and Spanish (LTS Spanish Version; Stavraki et al., 2022). The other measure is the Light Triad Scale-3 (LTS-3; Johnson, 2018) having 12 items is based on a second-order structure that has a general component called prosocial personality as well as three specific characteristics (naming; altruism, compassion, and empathy).

For the Turkish population, Pektas and Durmus (2022) carried out a study to modify and validate the light triad scale (Kaufman et al., 2020). The data was collected from 139 graduate students from the disciplines of physical education and sports sciences. The scale had 12 items with three sub-factors: Humanism, Kantianism, and Belief in humanity. Following inter-item total correlation analysis, confirmatory component analysis was conducted, which supported the initial factor structure and offered the LTS Turkish version with strong internal validity. The sub-factor reliability coefficients and overall scale reliability were acceptable.

The Polish version of the Light Triad Scale (Kaufman et al., 2020) assesses three factors—Faith in Humanity, Humanism, and Kantianism (Gerymski & Krok, 2019). Four hundred participants of age 18 to 80 years were selected for the study. Polish versions of the Big Five and Dirty Dozen Scale were used to evaluate the psychometric properties of the scale. The statistical analyses verified that the three-factor model suited the data reasonably well. The reliability coefficients of all three domains were adequate. The Polish scale items appeared to fit the Light Triad idea well, according to the validity indices.

In the current study, LTS is translated into Urdu language to fill the gap in the previous literature since there is no established scale for Light Triad in Urdu. In other populations and languages, less research has been done on the psychometric qualities of already existed measure of light triad (Barros et al., 2022; Farah Bijari et al., 2022; Lukić & Živanović, 2021; Tekeş & Biçaksız, 2021; Gerymski & Krok, 2019). Furthermore, it is translated for health care professionals because their career goals focus on improving the lives and health of their patients. Their line of work demands excellent performance, and the growth of light triad personalities is

linked with effective teamwork in the health setups. Keeping this objective in view, the current research aimed at translating and validating the Light triad scale for health professionals.

## **2. Method**

The present research was carried out into two phases. Phase I focused on the translation of Light Triad Scale LTS into Urdu language while phase II is based on validation of the LTS for healthcare professionals.

### **Phase I: Translation of Light Triad Scale**

The whole translation process was done by following the standardized forward- backward translation procedures of MAPI (2008) guidelines. Two bilingual translators were requested to translate the questionnaire into Urdu language, keeping in mind the respondents' conceptual equivalence rather than literal word-to-word translation and avoiding double negatives for the scale items. Two independent translations were examined and compared to form a reconciled Urdu version of LT scale using committee approach. Only conceptually clear and comprehensive translations were retained. Finally, the best translation was retained through the process of expert rating.

Total 14 participants were included in piloting, Doctors (n=7) and Nurses (n=7) were administered with original English (Kaufman et al., 2020) and Urdu versions (Iqbal et al., 2021) of LTS. The findings of Bivariate correlation ranged from .79 to .82.

### **Phase II: Validation of Light Triad Scale (Urdu Version; Iqbal et al., 2021)**

#### ***Participants***

The participants of this phase were seven hundred and ten young healthcare professionals including Doctors (House officers, Medical officers and Postgraduate Researchers, n=422; Nurses n=288) both men (n = 238) and women (n = 472) of age 25-35 years (M = 27, SD = 5.8) from government and private hospitals of two districts of Punjab i.e. Faisalabad and Bahawalnagar. They were recruited through purposive sampling technique. Other demographic variables included marital status (Married n=247, Unmarried= 463), and family system (Joint n=389 and Nuclear n=321).

#### ***Measures***

***Demographic Information Sheet.*** The demographic information sheet was used to collect information on the demographics of the participants

***Light Triad Scale-LTS (Urdu version; Iqbal et al., 2021).*** The LTS is a 12 item scale (4 items in each sub-scale) scored at five point Likert type scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, and 5=strongly agree) used to measure light triads in the participants. The three subscales included Faith in Humanity (e.g., "I think people are mostly good";  $\alpha = 0.67$ ), Humanism (e.g., "I tend to admire others";  $\alpha = 0.69$ ), and Kantianism (e.g., "I prefer honesty over charm";  $\alpha = 0.52$ ). The scale has been successfully used in other relevant studies which indicate its validity (Curtis, 2023; Lukić, & Živanović, 2021).

#### ***Procedure***

The authors of the scale were requested to allow for the linguistic translation of the scale after getting approved from institutional ethical review board. The permissions were sought from hospital authorities before data collection and the availability of time slot was discussed before approaching the health professionals. Informed consent was taken from the research participants and confidentiality of the collected information was ensured. The research participants were acknowledged for their active participation.

**3. Results**

Data was analyzed using SPSS (23 version) and AMOS (23 version) after screening the data for missing values and the outliers. Skewness and kurtosis were calculated for the data before running parametric statistics.

**Table 1:** Descriptive of LTS-Urdu version and its subscales (N=710)

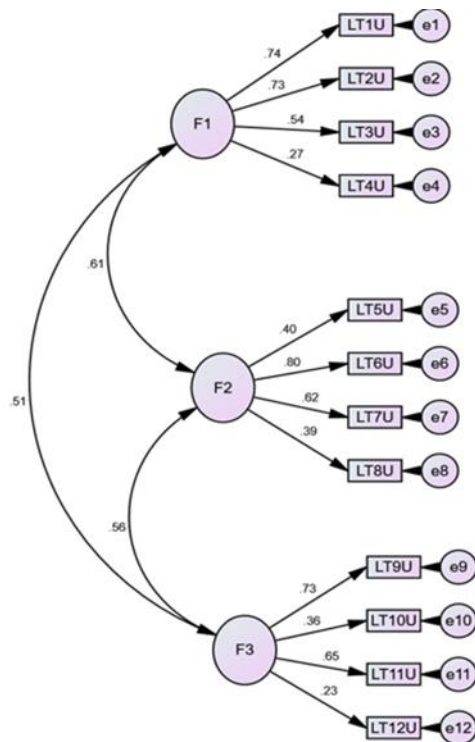
Scale/Subscale	<i>k</i>	<i>M</i>	<i>SD</i>	<i>α</i>
<b>Light Triad Scale</b>	10	21.78	6.03	.70
<i>Faith in humanity</i>	3	7.02	2.67	.71
<i>Humanism</i>	4	8.65	3.03	.61
<i>Kantianism</i>	2	6.10	2.33	.60

Note: *k* = number of items, *α* = Cronbach alpha

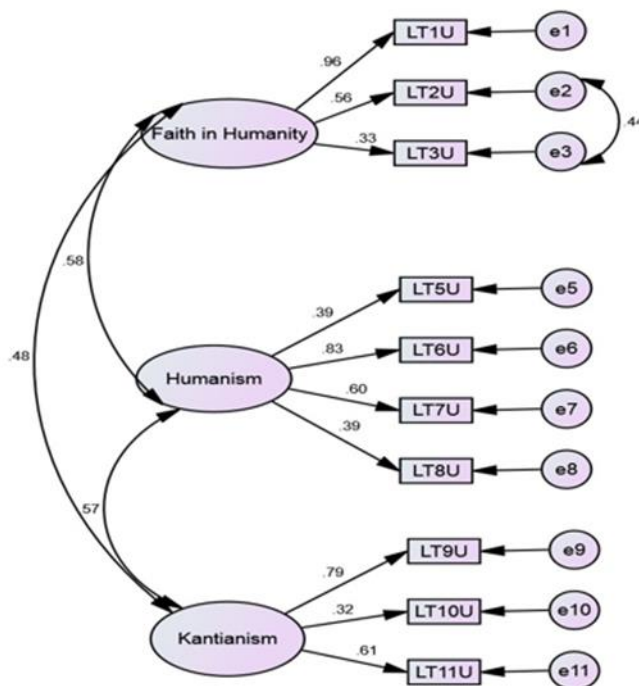
Table 1 shows that all subscales of Light triad yield satisfactory internal consistency range from .60 to .71.

**Confirmatory Factor Analysis of the Light Triad Scale-Urdu version**

**Figure 2:** Default Model of Light Triad-Urdu Version (N=710)



**Figure 3:** Modified Model of Light Triad-Urdu Version (N=710)



Confirmatory Factor Analysis was run to see the goodness of fit model. Figure 2 indicates model 1 of CFA where the item 4 and 12 had poor factor loading of .27 and .23 respectively. Therefore, these two items were excluded from the faith in humanity and Kantianism subscales.

Therefore, these items were deleted from subscale Faith in Humanity and Kantianism respectively of LTS and analysis was run again. One modification in the form of error covariance was added in the revised model to achieve better fit indices.

**Table 2:** Goodness of Fit Indices for the Light triad Scale-Urdu Version (N=710).

	Cmin/ Df	RMSEA Low CI	High CI	CFI	AGFI	SRMR	GFI	PCFI
Default Model	7.09	.08	.10	.82	.88	.07	.92	.63
Revised Model	4.78	.06	.08	.92	.93	.05	.96	.64

Note: Cmin= minimum discrepancy function, df- Degree of freedom, RMSEA - Root Mean Square Error of Approximation, CF-Comparative Fit Index, AGFI= Adjusted Goodness of Fit Index, SRMR- Standardized Root Mean Square Residual.

The fit indices were in the acceptable ranges. As a general rule of thumb, the GFI should be >.95 and CFI values greater than .80 is permissible, and values of the SRMR less than 0.09, and values of RMSEA less than 0.05 indicate good model fit (Kline, 2005; Tabachnick & Fidell, 2007).

### **Convergent Validity**

To compute convergent and discriminant validity Average variance extracted (AVE), Maximum Shared Variance (MSV) and Composite Reliability (CR) were used. The criteria for Reliability (CR>.7) convergent validity (AVE>.5) and discriminant validity (MSV<AVE) (Hair et al., 2010) were evaluated for the present study. CR was .78, AVE was .50 and MSV was .31 for the present data providing adequate evidences of the validity for the LTS-Urdu version.

## **4. Discussion**

There is no specific Scale for Light Triad in Urdu is available therefore; LTS is translated to bridge this gap. The main focus of the present study was translation of Light Triad Scale (Kaufman et al., 2020) into Urdu language for Adult population of Pakistan and further determining the psychometric properties of the translated version for health care professionals. Internal reliability (measured by Cronbach's alpha) and scale validity (measured by confirmatory factor analysis) indicated that the translated version is suitable for Health Professionals.

The translation and linguistic validation process was guided by the suggested methodology for translation of scales which involved forward and back translation, pilot-testing, review and reconciliation steps. There were no major concerns in the translation process. To ensure the good model fit in CFA, item 4 and 12 were deleted due to poor factor loadings from their respective subscales (see Figure 2) and modification indices were added in the model for fitting degree indexes. One covariance was drawn from error 2 and 3 for achieving better fit indices. These items were different in content from other items of their respective subscale. The remaining retained 10 items fit well to the three dimensional Light triad model (Kaufman et al., 2020) which include Humanism (appreciating each person's worth and dignity), Kantianism (the practice of treating individuals as means to themselves rather than as means to an end) and Faith in humanity (thought that that people are inherently good). If all other values like factor loadings, data adequacy and CR level is acceptable (i.e. >.60), the convergent validity is established (Lam, 2012; Fornell & Larcker, 1981). For the present study, the CR value is greater than .60 so the convergent validity of construct is found to be adequate.

### **Future Suggestions**

The sample of the current study comprised of only doctors and nurses, professional other than healthcare setups were not the part of study. It limits the generalizability of the study findings. In future data can be taken from other vulnerable and general populations too.

### **Implications**

The study has theoretical and practical implications. It provides a sound validation of the Kaufman's theory of light triad furthermore, the researchers provided a translated light triad tool for Pakistani healthcare professionals. Researchers working on the significance of positive traits for therapeutic purposes can use this scale as an assessment tool. This could be a very significant contribution in the field of positive psychology as well as another significant implication is for improving our knowledge of the Light Triad construct applicability in various cultural and linguistic environments.

## **5. Conclusion**

The study demonstrated that the Urdu version of the Light Triad Scale is both reliable and valid tool for researchers and clinicians who are short on time. The translated LTS has the potential to be used in future investigations into how the Light Triad can contribute in well-being and positive consequences for individuals working in health setups.

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