

Methodological Approaches in Psycholexical Studies of Personality: A Systematic Review

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This study provides an overview of findings from various research that examine personality dimensions in different cultures and languages. It also focuses on the various methods used to identify personality dimensions across cultures and languages. Findings were gathered from Scopus, Web of Science, Google Scholar, and through manual searches. Out of 1189 articles, 23 were chosen for review after eliminating not related or inaccessible studies. The study explored different approaches to studying personality taxonomies and summarised the taxonomies from existing literature. Broadly, Five approaches (Dictionary, Interview, Previous List and Scriptors) were used to obtain accurate taxonomies of personality. The findings indicate the emergence of some similar dimensions across diverse cultures. It is depicted that universal factors may be partially replicated in most cultures. It is also suggested that cultural variation aligns with personality traits and may be considered as significant predictor of an individual's personality.

Keywords: Personality, Psycholexical, Culture.

The structure of personality, which is considered multifaceted and complex in nature, has long been a subject of fascination and inquiry within the field of Psychology. It is important to understand the distinct ways through which individuals differ in their thoughts, feelings, and behaviours. Practical implications of individuality are so vast and can be studied through various branches such as Clinical, Organisational Behaviour, Educational Psychology, Military Psychology, Criminal Psychology, Sports Psychology etc. Among the many approaches aimed at unravelling the mystery of personality. Researchers are interested to provide an adequate taxonomy of personality by applying various perspectives and methodologies such as psychoanalytic, behavioural, cognitive, humanistic, psycholexical, statistical, ideographical, and nomothetic. The psycholexical approach stands out as a compelling and enduring perspective particularly under the trait psychology.

The psycholexical approach has its roots with the early pioneers of psychology, especially Sir Francis Galton (1884), who first proposed the idea of lexical hypothesis. He advocated that individual differences are encoded in the respective languages of the cultures. However, Gordon Allport (1936) also took this idea further by suggesting that language is the medium through which traits important for social interactions are encoded in the native language of an individual. Then, Allport and Odbert (1936) identified approximately 18,000 personality descriptors which became the basic source of trait taxonomy. This approach was further refined by Raymond Cattell, Warren Norman, and other psychologists, who provided the comprehensive investigations into the psycholexical framework. The psycholexical approach is crucial for studying personality structure because personality characteristics must be investigated with a representative sampling, which can only be achieved

through this approach. The psycholexical hypothesis assumes that "important personality characteristics are encoded in language" (Goldberg, 1993). The initial promise of the psycholexical approach in American English led to the Big Five personality factors. These factors are labelled as Extraversion or Surgency, Agreeableness, Conscientiousness, Emotional Stability, and Intellect (Goldberg, 1993).

In the past decade, numerous systematic comparisons of the findings of psycholexical investigations into personality structure have been studied (De Raad & Pergini, 1997). Early expansions into two other Germanic languages supported the Big Five in German (Ostendroof, 1990) and Dutch (De Raad et al., 1992). Nonetheless, the question still remains whether this outcome is universal or specific to a particular culture. Hence, it is crucial to explore personality structure in various languages and cultures to establish the degree to which personality dimensions are universal or culture-specific. Using psycholexical approach, some researchers found the existence of five factors (Saucier et al., 2001; Burtaverd & De Raad, 2019). Still, some researchers studied the existence of cross-cultural context in view of broad factors.

Numerous studies have been shown the existence of the Big One (Hofstee, 2001; Muek, 2007) and Big Two (Bakan, 1966) factors of personality. The three-factor structure, consisting of extraversion, agreeableness, and conscientiousness is cross-culturally replicable in many cultures (Di Blas & Forzi, 1999; De Raad et al., 2010; Singh, Misra, & De Raad, 2013). A six-factor structure which includes Honesty-Humility as an additional factor with the Big Five (Boies, 2001; Asthon et al., 2004; Saucier, 2009), has also been proposed. Furthermore, seven and eight factors have been identified in other studies (Chung et.al., 2007; De Raad

&Barelds, 2008; Zhou , Saucier & Liu, 2009). As personality researchers encompass diverse cultural and linguistic contexts, the universal applicability of trait terms is being questioned.

However, like any theoretical perspective, the psycholexical approach is not without its challenges and complexities. As the study of personality extends across diverse cultural and linguistic landscapes, questions arise regarding the universality of trait terms and their applicability in different contexts. Nonetheless, the psycholexical approach to personality endures as a powerful lens through which researchers continue to explore the dimensions of human personality. Numerous studies have been conducted in the field of the lexical approach to personality. Each study has adopted a different methodology to obtain the adequate taxonomy. Various studies are based on the dictionary method, some have explored other methods, such as the interview method, free descriptors, and previously established lists, to determine the personality factors in their respective cultures.

Purpose of the Study

Present research aimed to explore the key methodologies which are considered in conducting of psycholexical studies in personality. It seeks to verify how methodological variations in psycholexical research influence the interpretation of personality dimensions. It is also intended to find some culture-specific factors that emerge in various cultural contexts and should be considered during the interpretation of the personality of an individual.

Method

A literature review was conducted to identify relevant published studies which were available on various platforms. This systematic review was conducted using

Preferred Reporting Items for Systematic Review and Meta-analyses (PRISMA) guidelines. For this, the following steps were used:

Information Sources and Search Strategy:

The primary sources of literature were drawn from three electronic databases - Scopus, Web of Science and Google Scholar. Additionally, the references of the included documents were manually reviewed to identify further evidences. Two sets of related search terms were used to search each electronic database, focusing on the title, abstract, and keywords. The two broad groupings used for search items were "Lexical Hypothesis" and "Personality Structure". Synonymous terms (e.g. psycholexical approach, trait taxonomy, personality lexicon, lexical approach, trait adjectives, personality dimensions, personality adjectives and personality traits) were nested within these categories, using a Boolean search protocol to combine terms. Terms were searched across across title, abstract, and keyword fields.

Inclusion-Exclusion Criteria: The inclusion criteria for the review were as follow: (i) Studies employing the psycholexical approach to understand personality traits. (ii) Studies focused on the development or refinement of personality taxonomies using psycholexical methods. (iii) Research articles that provide detailed descriptions of the methodological procedures utilized in psycholexical studies. (iv) Only empirical papers were included. (v) Studies conducted in any cultural or linguistic context. (vi) Studies published within the last 20 years to ensure relevance to contemporary research. (vii) Only researches published in English language were considered for inclusion.

The exclusion criteria were: (i) Studies focusing on the clinical population rather than a general population. (ii) Articles lacking detailed descriptions of the methodological

procedure employed. (iii) Studies focusing on personality assessment techniques other than the psychological method. (iv) Review articles, meta-analyses, book chapters and dissertations not included. (v) Studies with only abstracts were excluded if access to the full paper was not available, as they may not contain sufficient information to conduct a quality assessment.

Screening and Selection Procedure

Each report identified from the searches went through a multi-stage screening process. First, titles and abstracts of articles were screened according to the eligibility criteria outlined above. Next, the full texts of potentially eligible articles were thoroughly examined. In addition, references of all considered articles were manually searched to find any relevant reports that may have been missed in the initial search strategy. Forward citation chaining was also utilized.

A thorough search of databases such as Web of Science, Scopus, and Google Scholar was carried out, along with a manual search (see Fig. 1). The initial search of these databases resulted in 1,184 records (Web of Science: 184; Scopus: 210; Google Scholar: 790). Furthermore, an additional four records were found through manual searches in other sources (e.g., citations, organizational websites, and research repositories), totaling an initial set of 1,188 records. After eliminating 140 duplicates, the titles and abstracts of the remaining records were evaluated for eligibility.

Out of the 1,044 records that underwent screening based on titles and abstracts, 942 were excluded due to the title, 62 were excluded based on the abstracts, 7 were excluded due to unavailability of the full text, and 8 review articles were also excluded. The main reasons for exclusion included the unavailability of full texts, non-English content, and records not meeting the eligibility criteria in terms of type and content.

As a result, 23 empirical articles were retained for the final consideration in this review.

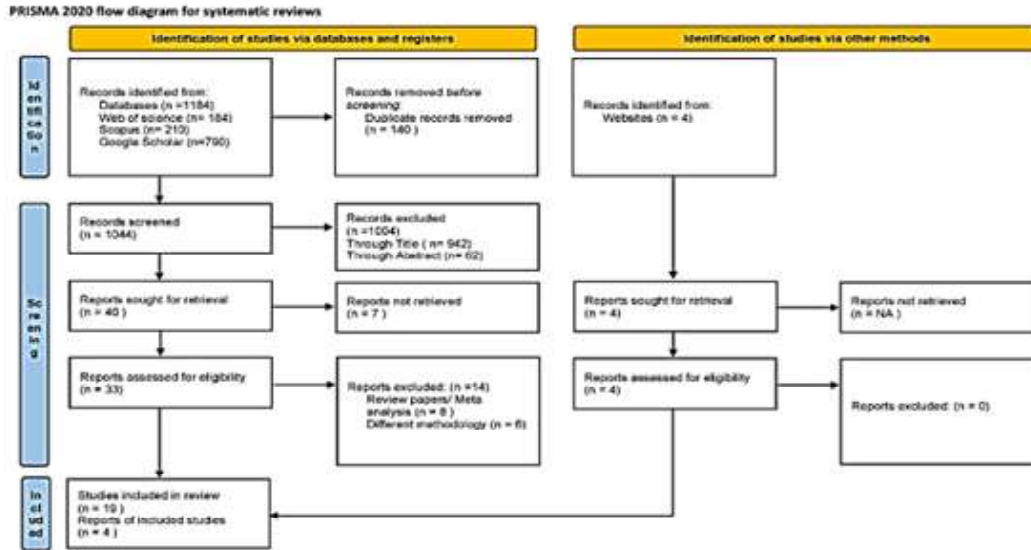


Figure. 1 PRISMA Flow Diagram

Results and Discussion

A total of 23 articles were identified as appropriate for inclusion in the further analysis. Among these, 10 studies employed the dictionary method, three utilized the interview approach, 10 relied on previous studies, 3 used descriptors from scripts and

novels, and Table 1 provides a list of these studies, including the author’s name, year of publication, culture, methodology used, and the major findings related to personality dimensions. The scope of data analysis in this review is limited to the identification of personality dimensions based on the different methodologies employed.

Table-1. List of studies, corresponding authors, year, Country/culture, method, and main finding.

Sr.No.	Author/s(year)	Country/culture	Method	Main findings
1.	Farahani et al., (2016)	Persian	Persian literature and dictionaries	The five-factor model appeared to be more suitable, with the factors named as “morality, positive/negative emotional tendencies, achievement, thoughtfulness, and affection.”
2.	De Raad et al., (2008)	Dutch	Computerized database of the Dutch language	A final structure with eight factors emerged from the analyses, with the inclusion of the Big Five. Virtue, Competence, and Hedonism emerged as three new personality factors.
3.	Livaniene et al., (2017)	Lithuanian	Lithuanian Dictionary	Two to seven-factor structures were discussed. Each structure was also linked to the five BFI scales. A comprehensive factor solution involving

4.	Di Blas et.al., (2005)	Italian language	The previous study by Di Blas & Forzi (1998)	five factors, including the Big Five factors: "extraversion, agreeableness, and conscientiousness, alongside a factor representing intellectual traits at one end and neurotic traits at the other, and finally, toughness." The analysis revealed a consistent three-factor structure and an inconsistent six-factor structure which were defined as "conscientiousness, self-assurance, sociability, placidity, honesty & humility, and cleverness & sophistication."
5.	Mlacicet.al., (2005)	Croatian	Standard Dictionary of the Croatian language	The extracted emic lexical factors from both datasets in Croatian were similar to the Big Five factors, including "Agreeableness, Extraversion, Conscientiousness, Intellect, and Emotional Stability." The content of the Croatian emic factors and their connection to the imported Big-Five measures showed strong similarity for all five Croatian factors.
6.	Boies Kathleen et.al., (2001)	French	Electronic Version of French Dictionary	French personality adjectives can be classified into six large dimensions: "Agreeableness, Emotional Stability, Extraversion, Conscientiousness, Honesty, and Imagination. These dimensions correspond closely to the English Big Five and Honesty."
7.	Imperio et.al., (2008)	Filipino	From the person-descriptive adjective terms of Church (1996)	These researchers found 10 categories relating to social and physical characteristics: "Prominence, Uselessness, Attractiveness, Respectability, Uniqueness, Destructiveness, Presentableness, Strength, Dangerousness, and Charisma." There was a significant overlap observed between the social and physical attribute categories and trait and evaluative categories.
8.	Smederevac et.al., (2007)	Serbian language	Descriptors were selected from Moskovljeviæ's Serbian dictionary (2000)	The first phase analysis identified seven factors: "negative valence, negative emotionality, aggressiveness, conscientiousness, positive emotionality, positive valence, and openness." The subsequent phase revealed five components described as sociability, anxiety, aggressiveness, activity, and impulsivity.
9.	Saucier et.al., (2005)	Greek personality	Dictionary of native language was used	The six-factor structure revealed considerable consistency over time; these factors were named as "Negative Valence/Honesty, Agreeableness/Positive Affect, Prowess/Heroism, Introversion/

10.	Ashton et.al., (2004)	English personality descriptors	1710 adjectives assembled by Goldberg (1982)	Melancholia, Even Temper, and Conscientiousness.” Five factor solution was emerged and the sequence of these factors is as follows: “agreeableness, conscientiousness, extraversion, emotionality, and openness to experience. In addition, the sixth and seventh factors were honesty-humility and religiosity, respectively.”
11.	Wasti et.al., (2008)	Turkish	From the personality descriptive terms of Goldberg and Somer’s (2000)	A six-factor structure was retained as per the aim of research. Factors are interpreted as “Extraversion, Conscientiousness, Agreeableness, Honesty-Humility, Emotionality, and Openness to Experience.” Results showed a pattern of strong convergent and weak discriminant correlations with HEXACO-PI.
12.	Jan et.al., (2012)	South Africa	Semi-structured interview	A total of nine broad clusters were formed from the 37 sub-cluster: “Facilitating, Integrity, Conscientiousness, Emotional Stability, Extraversion, Relationship Harmony, Intellect, Openness, and Softheartedness.”
13.	Valchevet.al., (2011)	Nguni cultural-linguistic groups of South Africa	Semi-structured interview	There were 26 clusters as a result. These clusters demonstrated a detailed understanding of the social and relational aspects of personality, focusing on concepts such as “altruism, empathy, guidance, and harmony.” Generally, the 26 clusters can be associated with a six-dimensional framework based on “Agreeableness, Conscientiousness, Emotional Stability, Extraversion, Openness, and Honesty.”
14.	Szarota et.al., (2007)	Polish	Polish Dictionary	An examination revealed a personality structure consisting with five factors. Two of these dimensions closely resembled the Big Five traits, specifically Conscientiousness and Agreeableness, while the other two represented variations of Extraversion and Emotional Stability. The fifth factor was identified as intellect, which was characterized by a lack of imagination and no unconventional content.
15.	Zhu et.al., (2015)	Chinese	Chinese novel “A Dream of Red Mansions”	The personality structure was defined by a five-factor solution. These factors are named as “Wicked, Intelligent, Amiable, Conscientious, and Frank.” It was also observed that men scored

16.	Singh et.al. (2013)	Hindi Language	Dictionary and Hindi novels	higher on Wickedness and Conscientiousness and lower on Amiable compared to women. Three factors solution has emerged as stable and suitable structure, and these factors are "Rajasic, Tamasic, and Sattvic."
17.	Zhou et.al. (2009)	Chinese	Chinese Dictionary	Emic analysis indicated the presence of a seven-factor configuration. These factors were identified as "Extraversion, Conscientiousness/Diligence, Unselfishness, Negative Valence, Emotional Volatility, Intellect/Positive Valence, and Dependency/Fragility."
18.	Chung et.al., (2007)	natural language	Self-descriptors essay	Seven important psycholexical dimensions were found. These dimensions were named as "sociable, evaluation, self-acceptance, fitting-in, maturity, negativity, and psychological stability." When analyzing additional content words (verbs, nouns, adverbs, and adjectives), nine dimensions relating to physical appearance, school, and relationships were identified.
19.	Shala et.al., (2020)	Albanian	Albanian Dictionary	One to seven factor structures were discussed. It was found that a seven-factor solution was the most appropriate. The structure resembles the Big-Five model, which also includes negative and positive valence factors.
20.	Mai et.al., (2023)	Vietnamese	Vietnamese-English Dictionary	Replicability across different cultures was noted in the Big One, Big Two, and Big Three models. Among the Big Six dimensions, an eight-factor solution emerged as the most understandable. These factors include "Warmheartedness-Virtue, Talented-Intellect, Orderly-Industriousness, Courage, Vivaciousness, Modesty, Straightforward-Genuineness, and Trustworthiness."
21.	Singh et.al., (2017)	Hindi	From the trait-descriptive adjectives of Singh et al. (2013)	Six-factor structures were extracted and these factors provided a good explanation for the variance in Big Five makers. These factors are explained as "Rajasic, Sattvic, Tamasic, Competence, Neuroticism, and Extraversion."
22.	De Raad et.al. (2018)	Hungarian	Trait descriptors from the Hungarian trait taxonomy (Szirmak & De Raad, 1994)	The Big Five factors were identified in the results, as well as an extra factor related to integrity and honesty. The research also validated previously published reports that were replicated in the new group of participants.

23.	Das and Chanda (2017)	'Guna-Traya' concept of the Bhagavad-Gita	The Bhagavad-Gita	Nine factors were kept, comprising 56 items. These factors are "Spirituality, Money and Power, Sacrifice, Giving to others, Wisdom, Eating habits, Communication skills, Determination, and Happiness."
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Regarding 23 articles which provided the personality structure, five different methods or approaches were used to obtain the accurate taxonomies (Dictionary, Interview, Previous list, Scriptors, and Speech-Based Agents) through the most frequent approach of usage of the dictionary method, which involved identification or extracting personality-related terms from the dictionary of a particular culture. When conducting psycholexical studies on personality, several methodologies were considered to ensure the validity of the findings. These studies often aimed to identify the most salient personality traits by examining how individuals express themselves and others through language. The following sources were used to extract the personality descriptors:

Personality Descriptors in Dictionary

By using the dictionary of the respective language, researchers can systematically identify personality descriptors by combing through large lexical resources. Typically, researchers identify personality-related terms from the dictionary specific to a particular culture. This approach provides a standardized and objective starting point, minimizing researcher bias in the selection of descriptors. However, some descriptors listed in the dictionary may not be fully relevant to modern personality traits. Some might be outdated or rarely used.

In the French language, six factors were found to be the most suitable. Initially, the study started with 12,696 personality adjectives which were extracted from the electronic version of the French Dictionary, and the final list was composed of 388 adjectives. (Boies, 2001). Results indicated

that French personality adjectives can be classified into six large dimensions (agreeableness, emotional stability, extraversion, conscientiousness, honesty, and imagination/intellect). These dimensions correspond fairly to the English Big-Five factors, and Honesty is found as an additional factor. Data from the Greek language revealed that six factors depicted the stability among Greek adjectives (Savivier, 2005). They extracted 3302 relevant personality terms from the dictionary, and the final list included 2245 adjectives. From these adjectives, they prepared three sets of adjectives on the basis of 400 high-clarity descriptors, 400 high-rated descriptors and 248 high-clarity and frequency descriptors. Obtained factors, irrespective of their order, are explained as temper, introversion, honesty, negative valence, conscientiousness and agreeableness/positive affect.

Zhou et al. (2009) also used the dictionary to extract the personality terms in Chinese language. Initially, the study was started with 3,159 personality-related terms identified from 65,000 entries. Data were collected from a total of 951 university students from Fudan University (self-reports were collected from 451 students, and peer reports were collected from 500 students). Based on used frequency, all descriptors are ranked, with 413 being the most highly used in the Chinese population. Ipsatised self and peer data revealed seven personality factors after applying the emic factor analysis: Extraversion, Diligence/Conscientiousness, Unselfishness, Negative valance, Emotional Volatility, Positive Valance/Intellect, and Dependency/Fragility represent the personality model in the Chinese population.

The personality factors in Albanian culture studied by Shala (2020) involved two parts (the first part compared the construction of the list of trait descriptors, and the second part comprised the structuring of the Albanian trait vocabulary). An Albanian dictionary was used for the construction of the list, and the final data set contained 434 trait adjectives. The data collected was examined using Principal Components Analysis, which included both raw and ipsatized data. One to seven-factor structure was discussed. After careful consideration, the researcher determined that a seven-factor solution was suitable. The structure resembles the Big-Five model, which also includes negative and positive valence factors.

The study conducted by Mai (2023) has provided valuable insights into the indigenous structure of Konamese personality traits. The research methodology involved extracting 2,129 terms from a Vietnamese English Dictionary. Principal Components with varimax rotation were then used to analyze the data, examining one to eight-factor solutions and correlating them with etic models of personality. The Big One, Big Two, and Big Three models showed consistent results across different cultures. Among the various solutions, the Eight-factor model was the most easily understandable. Five of its factors aligned with the Big Six dimensions. For example, Vietnamese Warmheartedness-Virtue corresponded with Agreeableness, Vietnamese Talented-Intellect aligned with Intellect, Vietnamese Orderly-Industriousness matched with Conscientiousness, Vietnamese Courage correlated inversely with Emotional Stability, and Vietnamese Vivaciousness was associated with Extraversion. Other native factors like modesty, straightforwardness, genuineness, and trustworthiness were moderately linked to the Big Six honesty and humility. Finally, Vietnamese gender

disparities were found to be small, providing initial evidence.

Szarota and colleagues in 2007 studied the personality traits of the Polish lexicon, and they identified 1839 personality traits from the Polish dictionary. These adjectives were sorted into five categories by ten judges, and a final set of 290 adjectives with NEO-FFI was self-rated by 350 students in Warsaw. The study suggested a five to six-factor structure based on self and peer ratings. The analysis showed that two factors were similar to Big-five conscientiousness and agreeableness, while two others were rotated versions of extraversion and emotional stability. The six-factor solution closely resembled the cross-language HEXACO structure. The study also showed that the second factor (Dynamism) and the fourth factor (Self-control) showed complex relationships with the NEO-FFI scales.

The same methodology used by Livaniene (2017) and the five-factor solution was found to be adequate in the Lithuanian language. The final list contained 194 most frequently used adjectives based on usefulness and appropriateness. Five-factor solution included extraversion, agreeableness, conscientiousness, intellect, and toughness. The first three factors resembled the Big Five personality traits. The structure of personality is investigated in the Persian language. Judges selected 11,530 terms related to personality from Persian literature and dictionaries. The final list comprised 126 adjectives suitable for describing stable traits. 2400 students rated 126 adjectives, and the five-factor model seemed to be more appropriate, with factors labelled as morality, positive/negative emotionality, achievement, thoughtfulness, and affection (Farahani et al., 2016).

The methodology used by Raad (2008), described personality traits that were taken from a computerized Dutch language

database. The study involved the use of multiple judges to ensure the clarity and meaning of the descriptors were reliable, and the interrater reliability was high. The results of the study led to the retention of eight factors, including the Big Five and three novel trait factors (Virtue, Competence, and Hedonism). Mlacic (2005) described the Croatian personality descriptives that were taken from the Croatian language dictionary. The final list consisted of 483 adjectives from the booklet of 3881 adjectives. The Croatian emic lexical factors extracted from both datasets were found to be comparable to the Big Five factors, which are Agreeableness, Extraversion, Conscientiousness, Intellect, and Emotional Stability.

Personality Descriptors by Interview Method

The interview method involves collecting data directly from individuals through structured or semi-structured interviews. This approach provides rich, detailed data about how people describe personality traits in natural language. The terms and phrases used in the interview are likely to be more current and relevant to the participant's everyday life. However, it requires significant effort to ensure that a diverse and representative sample is interviewed. This approach is also time-consuming in terms of conducting and transcribing interviews.

Jan et al. (2012) examined the 11 languages of South Africa to explore the personality structure. They explored the implicit personality and conducted interviews with 1,216 participants. By following this approach, they derived a list of 53139 personality descriptors. They used a clustering process for the analysis of the data. Data obtained from each interview was analyzed for underlying semantic relationships. This process resulted in 37 sub-clusters, which were then consolidated into nine broad clusters: Facilitating, Integrity,

Conscientiousness, Emotional Stability, Extraversion, Relationship Harmony, Intellect, Openness, and Softheartedness.

Valchev (2011) explored simultaneously three cultural groups of Africa. Focused on identifying emic cultural perspective and employing qualitative methods. They collected a total of 16,504 responses through semi-structured interviews, and the final analysis was done in three stages: labelling, categorization, and clustering. By following this analysis method, 26 clusters were formed. The clusters represented an elaborate conception of social-relational aspects of personality revolving around the themes of altruism, empathy, guidance, and harmony. The 26 clusters can generally be related to the six-dimensional space defined in terms of Agreeableness, Conscientiousness, Emotional Stability, Extraversion, Openness, and Honesty.

In 2008, Chung conducted a study exploring personality dimensions through open-ended self-descriptors. Participants were asked to write down their thoughts and complete a self-descriptors essay. Eighty Eight personality-related adjectives were identified through computerised text analytic tools. Factor analysis revealed seven significant psychological dimensions. These dimensions were labelled as sociable, evaluation, self-acceptance, fitting-in, maturity, negativity, and psychological stability. Nine psychological dimensions were identified which were related to physical appearance, school, and relationships when analyzing additional content words (adverbs, nouns, adjectives and verbs).

Previous List

This approach includes comparing previously established lists across cultures and facilitates the identification of stable personality traits. However, the previous list

might limit the discovery of new or emerging traits that were not included in earlier studies.

Ashton (2004) conducted a hierarchical analysis of the complete set of 1710 adjectives assembled by Goldberg (1982). Data were collected from 310 participants using self-rating, and all adjectives were presented in alphabetical order. The five-factor solution depicted the sequence of factors as agreeableness, conscientiousness, extraversion, emotionality, openness to experience, honesty-humility, and religiosity as the sixth and seventh factors, respectively. Wasti (2008) explored the Turkish personality lexicon. Self-rating was obtained on 498 personality traits taken from Goldberg and Somer's (2000) data set. In accordance with the objective, the six-factor solution was retained. Factors are interpreted as Extraversion and Conscientiousness. The third, fourth, fifth, and sixth factors are resembling Agreeableness, Honesty-Humility, Emotionality, and Openness to Experience. Results showed a pattern of strong convergent and weak discriminant correlations with HEXACO-PI.

Singh (2017) replicated an earlier psycholexical study of personality traits in Hindi. For this, they selected the previously established list of Hindi lexicons. The extended list of 357 trait descriptors and administered on 1250 participants. Principal Components Analysis was performed on the combined self and peer ratings, both with raw data and with ipsatized data. Results suggested six-factor solution, which consisted of Rajasic, Sattvic, Tamasic, Competence, Neuroticism and Extroversion factors. Rajasic factor was similar to the Honesty-Humility factor in English language. Sattvic factor indicated generous, altruistic, and humane attitudes. Tamasic factor reflected a cynical and destructive tendency. Competence adjectives partially resembled the Conscientiousness facets of NEO-PI-R. Neuroticism factor shared characteristics such as fear, emotion, and over-

nervousness, collectively defining a negative affective state. The sixth factor, Extraversion, indicated boldness and assertiveness. Three judges evaluated the list of 7918 adjectives assembled by De Vries, 2009, to identify sports personality dimensions that correspond with personality traits (Vries, 2020). Three hundred twenty-one adjectives with a score of three or higher were retained from 7918 adjectives. They identified six factors through Congruence analysis, out of which five factors are related to sports personality traits, namely, friendly/fairness, resilience, drive, perfectionism, and inventiveness. Additionally, one factor was found to be related to physical individual differences, specifically agility. All extracted factors also correlated with the HEXACO model, and the results revealed that culture-specific personality taxonomy is required to study.

In 2018, Nagy replicated a psycholexical taxonomy of Hungarian personality traits using a large sample size of 1503 participants. The findings confirmed the previously published structure and added an additional factor of integrity and honesty, renamed as narcissism. In 2008, Imperio investigated the relationship between personality traits and physical/social attributes. Participants rated themselves on a form containing 268 Filipino adjectives related to physical attributes and 253 personality adjectives. Ten dimensions were revealed, including attractiveness and respectability. The study suggested that social and physical characteristics can indicate personality traits and vice versa.

Blas (2005) examined the personality-relevant attribute nouns in the Italian language and their relationship with the Big Five Questionnaire. They selected 3236 attribute nouns from the previous study of Di Blas & Forzi, 1998. The final list contained the 447 attribute noun. Results showed a stable three-component solution and an unstable

six-factor solution, which were interpreted as conscientiousness, self-assurance, sociability, placidity, honesty and humility, and cleverness and sophistication. They concluded that personality word organisation in the Italian language reflects the psycholexical Big three and Big Six, but not the Big Five.

Smederevac (2007) investigated the personality structure of the Serbian language. Two questionnaires, Lexi (Questionnaire of lexical Personality Descriptors, containing only adjectives) and PL (Questionnaire of Lexical statements about Personality, items are in the form of statements) have been constructed in the psycholexical study. The study involved two phases. The first phase examined the structure of the Lexi questionnaire, which involved 264 items, and descriptors selected from Moskovljevic's Serbian dictionary (2000). The Principal Component analysis yielded a seven-factor extraction (negative valence, negative emotionality, aggressiveness, conscientiousness, positive emotionality, positive valence and openness). In the second phase, structure of PL questionnaire was examined and five components were extracted and interpreted as sociability, anxiety, aggressiveness, activity and impulsivity. The content of these dimensions correspond with Marvin Zuckerman's Alternative Five-Factor Model (1993).

Scriptures

This approach refers to deriving personality descriptors from narratives or scripts. This approach derives from how personality traits are conceptualized in a particular culture and how they are used to describe the person in day-to-day life. It also highlights cultural and societal influences on the understanding and expression of personality traits. However, it might be

possible that the evolution of language over time means that some terms may have changed in meaning or fallen out of use. Extracting and interpreting personality descriptors from literacy and historical context can be subjective, requiring careful consideration of the context and author's intent.

Zhu and their colleagues identified the personality taxonomy from the well-known Chinese novel "A Dream of Red Mansions" in 2015. They used 493 personality terms to account for different factor solutions. They concluded that the five-factor solution was appropriate, with the five factors being Wicked, Intelligent, Amiable, Conscientious, and Frank. Singh (2013) examined the Hindi personality descriptors. They extracted personality descriptors from thesaurus and Hindi novels (Nadi ke Dweep, Ve Din, Maila Anchal, Godan & Chaak). 2750 adjectives were retained from the thesaurus, and nearly 700 adjectives were retained from the novel. Self and peer ratings were collected on the final set of 295 descriptors, and obtained data was analyzed using the Principal Component method. Factor structure suggested three factors, which are summarized as Sattvic, Rajasic, and Tamasic.

Das and Chanda (2017) constructed the personality test based on Guna-trya concepts of the Bhagavad Gita. They formulated 134 items, and finally, 99 items were retained based on experts' opinions. The obtained data was analysed first through exploratory factor analysis, which suggested ten factors, and then confirmatory factor analysis, which suggested nine factors. A total of nine factors were retained, which included 56 items. Nine factors are named in terms of Spirituality, Money and Power, Sacrifice, Gifting to Others, Wisdom, Food Habits, Art of Speaking, Determinism, and Happiness.

Limitations

The review was restricted to three databases and manual search, and the possibility of unintentional exclusion of relevant articles indexed in other databases cannot be ignored. It is also possible that some articles are excluded that use some other methodology or identify factor structure of their respective language.

Conclusion

Various methodologies have been used to explore the factor structure of personality traits in different cultures and languages. Findings reveal the emergence of some similar dimensions across the diversity. Extroversion, Neuroticism, and Openness to Experience/Intellect are found in almost every culture. Each methodology has its own strengths and limitations. The interview method is useful for extracting personality-related terms in an implicit way, whereas Dictionaries and Scriptors are also used for the extraction of personality descriptors. Related literature possesses that cultural factors have significant influence on personality make-up. Cultural factors such as roles, social obligations, attitudes, etc studied by researchers and found a significant variation in personality traits. It was found that there are no major differences in dimensions of personality based on the approach used. Moreover, situational factors also share variance and are sometimes even more important rather than personality makeup itself. During the 1980, decades, Mischel argued the role of situational factors. Then, the person-situation controversy came into existence. It is also depicted that universal factors may be partially replicated in most of the cultures but manifestations of behaviours may be different.

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