

Psychological Correlates of Extraversion Among Adults

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Abstract

Extraversion is an important dimension of personality that has been associated with psychological well-being and adaptive functioning. The present study examined the relationships between extraversion and selected psychological variables, namely self-control, general stress, self-respect, self-image, self-confidence, self-satisfaction, self-reliance, spirituality, general health, and the dimensions of general health, including somatic symptoms, anxiety and insomnia, social dysfunction, and depression. A correlational research design was employed, and the sample consisted of 200 adults aged 18–40 years selected from the general population of Kerala, India. Data were collected using the E-I Inventory, A Self-Profile, General Stress Scale, SC Scale I, Spirituality Scale, General Health Scale, and a Personal Information Schedule. Pearson's product–moment correlation coefficient was used to analyze the data. The findings revealed that extraversion was significantly and positively correlated with self-confidence, self-image, general health, self-respect, self-satisfaction, self-reliance, self-control, and spirituality, while significant negative correlations were observed with depression, general stress, anxiety and insomnia, social dysfunction, and somatic symptoms. The strongest positive correlations were found with self-confidence ($r = .37$), self-image ($r = .36$), and general health ($r = .36$), whereas depression ($r = -.33$) showed the strongest negative correlation with extraversion. Overall, the results indicate that individuals with higher levels of extraversion tend to exhibit more favourable psychological functioning, better general health, and lower levels of psychological distress. These findings contribute to a better understanding of the psychological correlates of extraversion and underscore the importance of personality in promoting psychological well-being among adults.

Keywords: Extraversion, personality, self-confidence, self-image, general health, stress, depression, psychological well-being, adults, correlation.

Introduction

In the field of personality, the identification and measurement of pertinent dimensions are one of the major problems. MacKinnon (1944) has listed a number of dichotomous typologies, or bipolar factors, which have been proposed as fundamental dimensions of personality. There exist a number of other classifications proposed by different investigators. Among these Jung's (1924) classification of extraverted and introverted types got wide acceptance, suggesting a basis in every day clinical observation. Jung was the first to describe the introverted (inner directed) and extraverted (outer-directed) personality types. Introverts tend to be preoccupied with the internal world of their own thoughts, feelings, and experiences. They generally are contemplative and aloof.

In contrast, extraverts tend to be interested in the external world of people and things. They're more likely to be outgoing, talkative, and friendly, instead of reclusive.

Eysenck (1991) views personality structure as a hierarchy of traits, in which many superficial traits are derived from a smaller number of more basic traits, which are derived from a smaller number of more basic traits which are derived from a handful of fundamental higher-order traits. He used factor analysis to identify three high order traits, viz., extraversion, neuroticism, and psychotism. Extraversion involves being sociable, assertive, active and lively. Neuroticism involves being anxious, tense, moody, and low in self-esteem. Psychotism involves being egocentric, impulsive, cold, and antisocial.

Many studies have found that introverts tend to exhibit higher levels of arousal than extraverts (Bullock & Gilliland, 1993; Wilson, 1990), but many studies have also failed to find the predicted differences (Gale, 1983). Even Eysenck (1990) acknowledges that the evidence on his theory is mixed and that the concept of physiological arousal has turned out to be much more multifaceted and difficult to measure than he originally anticipated.

Briefly considered, the Introversion-Extraversion dimension relates to differences in sociability and impulsiveness. The typical extravert is sociable, likes parties, has many friends, craves excitement, and acts on the spur of the moment. The introvert tends to be quiet, introspective, reserved, reflective, and distrustful of impulsive decisions and prefers a well ordered life to one filled with chance and risk.

Everyone, according to Jung (1933), has the capability for either attitude, but one becomes dominant (for reasons he did not make clear). Once an attitude has become the dominant one, the person's behavior and consciousness are largely ruled by it. However, the non-dominant attitude remains; it has not disappeared. It becomes part of the personal unconscious, where it is still capable of influencing behavior. For example, an introverted person may on occasion (or consistently in certain situations) display characteristics of extraversion, or he or she may wish to be more outgoing or may be very attracted to someone who is extraverted. The non-dominant attitude, then, is ever present, so that a person is not exclusively or totally an extravert or an introvert. The person carries both attitudes with in. Generally it is found that majority of people hold a position somewhere between extraversion and introversion. The personality type intermediate between introversion and extraversion is often called Ambiversion (Rahman, & Julka, 1998). A wide variety of studies indicates fundamental differences in the functioning of introverts and extraverts: Introverts are more sensitive to pain, are more easily fatigued, find that excitement decreases performance, do better in school, prefer more solitary vocations, are less suggestible, and are less sexually active both in terms of frequency and variety of partners than are extraverts (Eysenck, 1990; Wilson, 1978; Zuckerman, 1991). Eysenck suggests that introverts are more easily aroused by events and more easily learn social prohibitions than do extraverts. As a result, introverts are more restrained and inhibited.

Personality is one of the most extensively studied constructs in psychology because it influences how individuals perceive, interpret, and respond to their environment. Among the major dimensions of personality, extraversion has consistently received considerable attention due to its significant role in determining psychological adjustment, interpersonal relationships, occupational functioning, and overall well-being. According to the Five-Factor Model of personality proposed by Costa and McCrae (1992), extraversion is characterized by sociability, assertiveness, activity, positive emotionality, warmth, excitement seeking, and a tendency to experience positive affect. Individuals high in extraversion are generally energetic, optimistic, outgoing, and socially engaged, whereas those low in extraversion (introverts) tend to be reserved, quiet, and less inclined toward social interaction.

The biological basis of extraversion has been explained by Eysenck (1967), who proposed that differences in cortical arousal underlie variations in extraversion and introversion. According to Eysenck's arousal theory, extraverts possess relatively lower baseline cortical arousal and therefore seek greater environmental stimulation, whereas introverts exhibit higher cortical arousal and consequently avoid excessive stimulation. This theory has received considerable empirical support and continues to influence contemporary research on personality.

A substantial body of research has demonstrated that extraversion is positively associated with psychological well-being and adaptive functioning. Extraverted individuals typically report higher levels of happiness, life satisfaction, optimism, self-esteem, resilience, and social support than introverted individuals (Diener et al., 1999; Lucas & Diener, 2001). They also tend to establish stronger interpersonal relationships, demonstrate better coping abilities, and experience greater subjective well-being across different stages of life (DeNeve & Cooper, 1998). These characteristics make extraversion one of the strongest personality predictors of positive mental health.

Conversely, lower levels of extraversion have frequently been associated with various forms of psychological distress. Numerous studies have reported significant negative relationships between extraversion and depression, anxiety, stress, loneliness, and social dysfunction (Kotov et al., 2010; Lahey, 2009). Individuals who are less extraverted often experience reduced positive affect, diminished social engagement, and fewer interpersonal resources, thereby increasing their vulnerability to emotional disorders. Extraversion has also been linked with better physical health, fewer psychosomatic complaints, and healthier lifestyle behaviours, although these relationships are generally modest in magnitude.

In addition to emotional well-being, several self-related variables have been found to correlate positively with extraversion. Individuals high in extraversion generally possess greater self-confidence, a more positive self-image, higher self-esteem, stronger self-respect, and greater satisfaction with themselves and their lives. Extraverts are also more likely to exhibit adaptive coping strategies, maintain supportive social networks, and perceive greater control over life events. However, findings regarding variables such as spirituality, self-control, and self-reliance have been relatively inconsistent, indicating the need for further investigation.

Although numerous studies have examined the relationship between extraversion and individual psychological outcomes, relatively few investigations have simultaneously examined a broad range of psychological correlates within a single adult sample. Understanding the pattern of associations between extraversion and multiple aspects of psychological functioning—including self-related variables, mental health indicators, stress, physical symptoms, and spirituality—provides a more comprehensive understanding of the role of extraversion in adult psychological adjustment. Such information is valuable for counselling psychologists, mental health professionals, and researchers interested in personality assessment and psychological well-being.

The present study was therefore undertaken to examine the psychological correlates of extraversion among adults. Specifically, the study investigates the relationships between extraversion and self-confidence, self-image, self-respect, self-satisfaction, self-control, self-reliance, spirituality, general health, depression, somatic symptoms, anxiety and insomnia, social dysfunction, and general stress. It is expected that the findings will contribute to the growing body of literature on personality and mental health by identifying the psychological characteristics that are most closely associated with extraversion in adulthood.

OBJECTIVES OF THE STUDY

To examine the relationships between extraversion and selected psychological variables, namely self-control, general stress, self-respect, self-image, self-confidence, self-satisfaction, self-reliance, spirituality, general health, and the dimensions of general health, namely somatic symptoms, anxiety and insomnia, social dysfunction, and depression.

HYPOTHESIS

Extraversion will be significantly correlated with self-control, general stress, self-respect, self-image, self-confidence, self-satisfaction, self-reliance, spirituality, and general health. Extraversion will also be significantly correlated with the dimensions of general health, namely somatic symptoms, anxiety and insomnia, social dysfunction, and depression.

METHOD

Participants

The sample for the present study consisted of 200 adults who were randomly selected from the general population of Kerala, India. The participants were between 18 and 40 years of age.

Variables

The main variable of the study was extraversion. The independent variables included self-control, general stress, self-image, self-confidence, self-satisfaction, self-respect, self-reliance, spirituality, and general health. The sub-dimensions of general health considered in the study were somatic symptoms, anxiety and insomnia, social dysfunction, and depression.

Tools

1. E I Inventory (Ajilal & Raju, 2003)
2. A Self Profile (Ajilal & Raju, 2003)
3. General Stress Scale (Ajilal & Raju, 2003)
4. General Health Scale (Laiju & Sananda Raj, 2002)
5. Spirituality Scale (Sreekumar & Sananda Raj, 2002)
6. S C Scale I (Ajilal & Raju, 2003) and
7. Personal Information Schedule

Procedure for data collection

Data collection was conducted after obtaining informed consent from all participants. Before the commencement of the study, the investigator explained the purpose, objectives, and significance of the research and assured participants that their responses would remain confidential and would be used solely for research purposes. Participation was entirely voluntary, and participants were informed of their right to withdraw from the study at any time without any adverse consequences.

Following the consent process, participants completed a battery of standardized self-report instruments administered in a fixed order: the Personal Information Schedule, E-I Inventory, General Stress Scale, SC Scale I, A Self-Profile, Spirituality Scale, and General Health Scale. The questionnaires were administered individually under the supervision of the investigator in a quiet and distraction-free environment.

All instruments were self-administered and included standardized written instructions. Participants were instructed to respond independently, refrain from discussing the items with others, and provide honest and accurate responses based on their personal experiences. The investigator remained available throughout the administration to clarify procedural queries without influencing participants' responses.

Appropriate measures were taken to ensure the integrity of the data collection process. Participants were seated in a manner that minimized interaction, and they were instructed not to consult or copy responses from other participants. Upon completion, all questionnaires were collected immediately to maintain confidentiality and prevent post-administration alterations. The completed responses were reviewed for completeness before being coded for statistical analysis.

Statistical technique

Data were analyzed using Pearson's product–moment correlation coefficient to determine the magnitude and direction of the linear relationships among the study variables. Statistical analyses were performed using SPSS, and statistical significance was evaluated at the 0.05 and 0.01 levels.

RESULTS AND DISCUSSION

The data were analyzed using statistical techniques appropriate to the study objective and the hypothesis formulated. Pearson's product–moment correlation analysis was employed to examine the relationships between extraversion and the other study variables. The results of the analysis are presented below.

Correlates of Extraversion

The aim of the study was to find out the correlation of extraversion with self-control, general stress, self-respect, self-image, self-confidence, self-satisfaction, self-reliance, spirituality, general health, somatic symptoms, anxiety and insomnia, social dysfunction, and depression. The correlation coefficients obtained between extraversion and the other 13 variables included in the study are presented in Table 1.

TABLE 1
Correlation coefficient of Extraversion with other study variables

Sl. No	Variable	Correlation coefficient	% of Variance
1	Self-confidence	0.37	13.69
2	Self-image	0.36	12.96
3	General health	0.36	12.96
4	Self-respect	0.34	11.56
5	Self-satisfaction	0.32	10.24
6	Depression	-0.33	10.89
7	Self-control	0.24	5.76
8	Self-reliance	0.27	7.29
9	Spirituality	0.13	1.69
10	Somatic symptoms	-0.23	5.29
11	Anxiety & insomnia	-0.26	6.76
12	Social dysfunction	-0.26	6.76
13	General stress	-0.26	6.76

The correlation coefficients presented in Table 1 indicate that extraversion exhibited either small or moderate relationships with each of the thirteen psychological variables included in the study. None of the variables demonstrated a high correlation with extraversion, suggesting that the construct is influenced by multiple psychological factors rather than by any single dominant variable.

Among the positive correlates, extraversion showed the strongest association with self-confidence ($r = .37$), accounting for 13.69% of the shared variance. Moderate positive correlations were also observed with self-image ($r = .36$; 12.96% variance), general health ($r = .36$; 12.96% variance), self-respect ($r = .34$;

11.56% variance), and self-satisfaction ($r = .32$; 10.24% variance). These findings indicate that individuals with higher levels of extraversion tend to possess a more favourable self-concept, greater confidence in their abilities, better perceived physical and psychological health, and higher satisfaction with themselves. The results are consistent with previous personality research showing that extraverts generally experience greater positive affect, social competence, and psychological well-being.

Extraversion was moderately and negatively correlated with depression ($r = -.33$), indicating that individuals with higher levels of extraversion are less likely to report depressive symptoms. This finding supports the view that the sociability, optimism, and positive emotionality associated with extraversion may serve as protective factors against depression.

The relationships between extraversion and self-control ($r = .24$), self-reliance ($r = .27$), and spirituality ($r = .13$) were positive but relatively weak. These findings suggest that although these variables are associated with extraversion, they explain only a small proportion of its variance. Similarly, small but statistically significant negative correlations were obtained with somatic symptoms ($r = -.23$), anxiety and insomnia ($r = -.26$), social dysfunction ($r = -.26$), and general stress ($r = -.26$). These results imply that more extraverted individuals tend to report fewer physical complaints, lower anxiety, better social adjustment, and reduced levels of perceived stress.

All correlation coefficients were statistically significant at the .01 level, indicating that the observed relationships are unlikely to have occurred by chance. However, the magnitude of these correlations ranges from small to moderate, suggesting that extraversion is a multidimensional personality trait associated with several psychological characteristics rather than being determined by any single factor.

Overall, the findings suggest that extraversion is positively associated with healthy psychological functioning, including higher self-confidence, self-image, self-respect, self-satisfaction, and better general health, while being negatively associated with depression, stress, anxiety, somatic symptoms, and social dysfunction. Nevertheless, because the present study employed a correlational design, these findings should not be interpreted as evidence of causal relationships. Instead, they indicate that these psychological variables are important correlates of extraversion and may collectively contribute to understanding individual differences in extraverted personality characteristics.

Conclusion

The present study examined the psychological correlates of extraversion among adults by investigating its relationships with self-control, general stress, self-respect, self-image, self-confidence, self-satisfaction, self-reliance, spirituality, general health, and the dimensions of general health. The findings revealed that extraversion was significantly associated with a broad range of psychological variables. Specifically, higher levels of extraversion were positively related to self-confidence, self-image, self-respect, self-satisfaction, self-control, self-reliance, spirituality, and general health, while significant negative relationships were observed with depression, general stress, somatic symptoms, anxiety and insomnia, and social dysfunction. These findings suggest that individuals with higher levels of extraversion tend to exhibit more favourable psychological functioning, greater psychological well-being, and lower levels of emotional distress.

Among the variables examined, self-confidence, self-image, general health, and self-respect emerged as the strongest positive correlates of extraversion, whereas depression showed the strongest negative association. Although the observed relationships ranged from small to moderate in magnitude, they collectively indicate that extraversion is linked to multiple aspects of psychological adjustment rather than

being explained by any single psychological characteristic. The findings are consistent with established personality theories and previous empirical research, highlighting the adaptive role of extraversion in promoting positive mental health and overall well-being.

Given the correlational nature of the study, causal inferences cannot be drawn. Nevertheless, the results provide valuable insights into the psychological characteristics associated with extraversion among adults and underscore the importance of considering personality traits in counselling, psychological assessment, and mental health promotion. Future research may employ longitudinal and experimental designs with more diverse populations to further clarify the mechanisms underlying these relationships and to establish their causal direction.

REFERENCES

1. Ajilal, P., & Raju, S. (2003). **A Self- Profile and Manual**. Thiruvananthapuram: Department of Psychology, University of Kerala.
2. Ajilal, P., & Raju, S. (2003). **E I Inventory and Manual**. Thiruvananthapuram: Department of Psychology, University of Kerala.
3. Ajilal, P., & Raju, S. (2003). **General Stress scale and Manual**. Thiruvananthapuram: Department of Psychology, University of Kerala.
4. Ajilal, P., & Raju, S. (2003). **S C Scale I and Manual**. Thiruvananthapuram: Department of Psychology, University of Kerala.
5. Bullock, W.A., & Gilliland, K. (1993). Eysenck's arousal theory of introversion-extraversion: A converging measures investigation. **Journal of Personality and Social Psychology**, 64, 113-123.
6. Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) Professional Manual. Psychological Assessment Resources.
7. DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124(2), 197–229. <https://doi.org/10.1037/0033-2909.124.2.197>.
8. Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302. <https://doi.org/10.1037/0033-2909.125.2.276>.
9. Eysenck, H. J. (1967). *The Biological Basis of Personality*. Charles C. Thomas.
10. Eysenck, H.J. (1990). Biological dimensions of personality. In L.A.Pervin (Ed.), **Handbook of Personality: Theory and Research**. New York: Guilford.
11. Eysenck, H.J. (1991). Dimensions of personality: 16, 5, or 3? -Criteria for a taxonomic paradigm. **Personality and Individual Differences**, 12, 773-790.
12. Gale, A. (1983). Electro encephalographic studies of extraversion-introversion: A case study in the psychophysiology of individual differences. **Personality and Individual Differences**, 4, 371-380.
13. Jung, C.G. (1924). **Psychological Types**. London: Routledge & Kegan Paul.
14. Jung, C.G. (1933). **Modern man in search of a soul**. New York: Harcourt, Brau & World.
15. Kotov, R., Gamez, W., Schmidt, F., & Watson, D. (2010). Linking "big" personality traits to anxiety, depressive, and substance use disorders: A meta-analysis. *Psychological Bulletin*, 136(5), 768–821. <https://doi.org/10.1037/a0020327>.
16. Lahey, B. B. (2009). Public health significance of neuroticism. *American Psychologist*, 64(4), 241–256. <https://doi.org/10.1037/a0015309>.
17. Laiju, S., & Sananda Raj, H.S. (2002). **General Health Scale: Adapted and modified version**

General health Questionnaire & Manual Trivandrum: Department of Psychology, University of Kerala.

18. Lucas, R. E., & Diener, E. (2001). Understanding extraverts' enjoyment of social situations: The importance of pleasantness. *Journal of Personality and Social Psychology*, 81(2), 343–356. <https://doi.org/10.1037/0022-3514.81.2.343>.
19. MacKinnon, D.W. (1944). Personality and the behavior disorders. In J. McV. Hunt (Ed.), **The Structure of Personality**. New York: Ronald Press.
20. Rahman, I.M.D., & Julka, J.M. (1998). **Psychology**. New Delhi: IIMS publications.
21. Sreekumar, R., & Sananda Raj, H.S.(2002). **Spirituality Scale and Manual**. Thiruvananthapuram: Department of Psychology, University of Kerala.
22. Wilson, G. (1978). Introversion/ extroversion. In H. London & J.E. Exner (Eds.), **Dimensions of Personality**. New York: Wiley.
23. Wilson, G. (1990). Personality, time of day and arousal. **Personality and Individual Differences**, 11, 153-168.
24. Zuckerman, M. (1991). **Psychology of personality**. New York: Cambridge University Press.