

A Descriptive Profile of Big Five Personality Traits among Volunteers at the MIECC Vaccination Centre, Malaysia

Erwan Ismail¹, Shahrulanuar Mohamed¹, Asniyani Nur Haidar Abdullah², Siti Nazariah Abdul Razak³

¹Sekolah Pengajian Antarabangsa dan Bahasa Global, Universiti Teknikal Malaysia Melaka, 76100 Durian Tunggal, Melaka, Malaysia, ²Fakulti Teknologi Maklumat dan Komunikasi, Universiti Teknikal Malaysia Melaka, 76100 Durian Tunggal, Melaka, Malaysia, ³Pejabat Pendaftar Pertubuhan Belia, Kementerian Belia dan Sukan Malaysia, Kompleks C, 62520 Putrajaya, Wilayah Persekutuan, Malaysia

DOI Link: <http://dx.doi.org/10.6007/IJARPED/v15-i4/29269>

Published Online: 20 October 2026

Abstract

Volunteers contributed substantially to the routine and public-facing operations of Malaysia's mass vaccination programme; nevertheless, limited attention has been given to the personality characteristics of individuals serving in these roles. Therefore, this cross-sectional study aimed to describe the Big Five personality profile of 127 volunteers recruited through convenience sampling at the MIECC Vaccination Centre (PPV). Personality was assessed using the 44-item Malay-language Big Five Inventory (BFI), and the resulting data were analysed descriptively. Among the five dimensions, agreeableness recorded the highest mean ($M = 3.45$), followed by conscientiousness ($M = 3.41$), extraversion ($M = 3.17$), openness ($M = 2.83$) and neuroticism ($M = 1.69$). Agreeableness, conscientiousness, extraversion and openness were classified at moderate levels, whereas neuroticism was classified as low. These findings indicate that, within this sample, cooperative tendencies were relatively more prominent while self-reported anxiety and emotional instability were less pronounced. However, the descriptive scores should not be interpreted as evidence of task suitability or effective performance. The study provides an initial Malaysian reference for the personality profile of volunteers in a vaccination-centre setting and highlights the need for multi-centre research to determine whether comparable patterns occur elsewhere and whether the traits are related to task fit and performance.

Keywords: Big Five Personality Traits, Volunteers, Vaccination Centre, Personality Profile, Descriptive Study

Introduction

At vaccination centres, as in many community programmes, a considerable share of the work depends on people who give their time voluntarily. Such service is usually treated as intentional prosocial behaviour: it is freely chosen and intended to benefit other people or the wider community. Remaining involved, however, depends on a combination of influences. Penner and Finkelstein (1998) and Penner (2002) draw attention to motivation, organisational

commitment and personality. Individual psychological differences may therefore help explain why volunteers do not all participate, respond or persist in the same way.

The term personality refers here to enduring differences in how people think, feel and behave. The Big Five model groups those differences into five broad traits (John & Srivastava, 1999). Openness to experience concerns curiosity and receptiveness to unfamiliar ideas. Conscientiousness is associated with being organised, dependable and self-disciplined, whereas extraversion concerns social energy and engagement with others. Agreeableness reflects consideration and a willingness to cooperate. Neuroticism describes proneness to worry and emotional instability.

Personality has repeatedly been examined in relation to volunteer activity, but no trait provides a complete explanation. Prosocial dispositions and altruistic motives predicted several aspects of volunteer behaviour in Penner and Finkelstein's (1998) study. Carlo et al. (2005) found that agreeableness and extraversion worked in tandem with prosocial value motivation. Bekkers (2005) added personal resources and values to this picture. Volunteering is consequently better understood as the product of several interacting influences, including the circumstances in which a person lives and serves.

The pattern is not identical across forms of service. Ackermann's (2019) Swiss study found that extraversion was associated most consistently with formal, informal and online volunteering, while results for openness, agreeableness, conscientiousness and emotional stability depended more heavily on the form examined. What matters in one volunteer environment may not carry the same weight in another.

The issue continues to attract recent attention. Using respondents from the United States and the United Kingdom, Stahlmann et al. (2024) identified small but consistent links between agreeableness, extraversion and openness and forms of civic engagement, particularly volunteering and charitable giving. Cho et al. (2024), approaching the subject from volunteer management, reported that both personality and management practices were related to volunteer satisfaction. These studies reinforce the need to interpret personality within the environment and organisational arrangements in which volunteering occurs.

Other recent studies have examined individual dimensions more closely. Among university students, Chen and Su (2025) found that agreeableness was positively related to volunteer motivation and behaviour. Motivation mediated this relationship, while social support altered the strength of the link between agreeableness and motivation. Hamdani et al. (2026), meanwhile, associated extraversion and openness with community involvement during crises, but observed different patterns for the remaining traits depending on the form of involvement. Such variation indicates that findings cannot be separated from the population, setting and activity being studied.

Malaysian research has largely approached volunteering through the factors that encourage participation. Sutan et al. (2024) examined demographic, social and health correlates of community volunteering among Malaysians aged over 50, whereas Kadir et al. (2024) focused on the motivations of Malaysian youth. Both studies add valuable local evidence, but neither describes all five personality dimensions among people volunteering at vaccination centres.

That setting emerged during Malaysia's National COVID-19 Immunisation Programme, when vaccination centres operated at sites across the country. The MIECC centre in Seri Kembangan opened on 14 June 2021 as a mega centre for the Klang Valley and was initially reported to have a maximum daily capacity of 8,000 recipients (Bernama, 2021a). Malaysia Vaccine Support Volunteers (MyVAC) supported registration, logistics and assistance for recipients (Bernama, 2021b). Unlike many forms of volunteering considered in earlier research, this work combined large-scale public health operations, prescribed procedures and frequent contact with people from varied backgrounds.

Despite continuing interest in personality and volunteering, much of the available evidence concerns general volunteering, civic engagement and crisis response outside Malaysia. Malaysian studies have focused predominantly on volunteer motivation, demographic characteristics and community participation, with limited attention given to the complete Big Five profile of volunteers involved in large-scale public health operations. This study addresses this gap by describing the levels of openness to experience, conscientiousness, extraversion, agreeableness and neuroticism among volunteers at the MIECC Vaccination Centre.

Its novelty lies in providing context-specific empirical evidence from volunteers involved in Malaysia's large-scale COVID-19 vaccination programme, a population that has received limited attention in personality and volunteering research. The study contributes to social science literature by extending current understanding of volunteer personality beyond conventional community and civic settings into an organized public health context. The resulting profile provides a baseline for future research examining how personality may relate to volunteer motivation, training needs, task placement, performance and continued participation.

Literature Review

Personality is commonly used to account for the relatively enduring ways in which people think, feel and behave. Among the best-established frameworks is the Big Five, or Five-Factor Model (John & Srivastava, 1999; McCrae & Costa, 2003). It represents personality through five broad dimensions: openness to experience, conscientiousness, extraversion, agreeableness and neuroticism.

The five dimensions emphasise different aspects of a person's usual orientation. Openness is concerned with curiosity about new ideas and experiences. Conscientious people tend to be orderly, responsible and persistent, while extraversion is expressed through sociability and active communication. Trust, cooperativeness and concern for other people fall under agreeableness. Neuroticism captures greater susceptibility to worry, stress and emotional fluctuation (John & Srivastava, 1999; McCrae & Costa, 2003).

Several considerations support the use of this model here. The Big Five has been tested across countries and cultures (Schmitt et al., 2007), and Malaysian research suggests that the five dimensions can capture meaningful personality variation in the local cultural setting (Mastor et al., 2000). The Big Five Inventory (BFI) also offers an established means of measuring these dimensions (John et al., 1991). Its use in Malaysian studies provides further support for applying the framework locally (Abdul Azis et al., 2024; Mudayat et al., 2022; Muhamad et al.,

2018). It is therefore a suitable basis for describing the personality profile of MIECC PPV volunteers.

Personality and Volunteer Involvement

Volunteer service is prosocial because time and labour are directed towards other people, an organisation or the community. The choice to take part is nevertheless embedded in a person's motives, values, resources and social situation, as well as in how the organisation manages its volunteers. Penner and Finkelstein (1998) reported that prosocial personality and motivation were related to both hours contributed and length of service. Penner's (2002) interactionist account places continued service at the meeting point between individual disposition and organisational experience.

A similar conclusion can be drawn from Bekkers (2005), who related participation in voluntary associations to resources and political values alongside personality. Personality is one influence among several, not a mechanism that fixes a person's decision in advance. Scores on its dimensions indicate general tendencies and should be interpreted within the opportunities, motives and social conditions surrounding participation.

Rather than considering personality and motivation as competing explanations, Carlo et al. (2005) examined their combined influence on volunteering and demonstrated that the relevance of a particular disposition may vary according to both the individual's motive for serving and the environment in which the service takes place. This consideration is particularly important because voluntary work encompasses roles ranging from brief social interaction to sustained responsibilities performed under formal and potentially demanding conditions.

Agreeableness and Volunteering

Agreeableness reflects cooperation, consideration, trust and concern for social well-being, qualities that readily align with prosocial and collaborative activity. Carlo et al. (2005) linked the trait with prosocial value motivation in volunteering. Their findings nevertheless suggest that agreeableness should be considered in conjunction with personal motives and social circumstances.

Evidence from university students points in the same general direction. Chen and Su (2025) reported positive associations between agreeableness, volunteer motivation and volunteer behaviour. The pathway was conditional: motivation served as a mediator, and social support influenced the association between agreeableness and motivation. Agreeableness may thus facilitate volunteer behaviour without acting independently of psychological and environmental support.

At a PPV, a cooperative and considerate manner may be useful when dealing with vaccine recipients, health personnel and fellow volunteers. The present analysis did not test that possibility against task suitability or performance. Its agreeableness score consequently describes the sample; it should not be taken as proof that respondents performed particular duties well.

Extraversion and Volunteering

Extraversion concerns sociability, active communication and the stimulation people derive from interacting with others. It is often relevant to volunteer work that involves regular social contact. In Ackermann's (2019) Swiss population study, extraversion showed the most consistent relationship with formal, informal and online volunteering.

Not every volunteer role places the same demands on sociability. Some require continuous communication with the public, while technical, administrative or logistical roles may involve much less direct contact. The relevance of extraversion is therefore likely to change with the task and setting.

Hamdani et al. (2026) also associated extraversion with several forms of community participation during crises. This lends support to its possible relevance when collective action and cooperation are required. Even so, evidence drawn from other settings cannot substitute for a profile based on PPV volunteers themselves.

Openness to Experience and Volunteering

Openness to experience reflects a willingness to consider unfamiliar ideas, experiences and working methods. This orientation could be useful when volunteers must adjust to revised duties, procedures or environments. Ackermann (2019), however, found that the association between openness and volunteering differed by type of activity.

Stahlmann et al. (2024) observed small but consistent associations between openness and several forms of civic engagement, including volunteering and charitable giving. Their modest size is important: openness accounts for only part of the picture. Motivation, access to opportunities, resources and organisational conditions remain relevant.

PPV volunteers worked within assigned roles and specific operating procedures. Although openness might plausibly support adjustment to a new experience, neither adaptability nor task performance was measured in this study. Here, the trait serves only as one component of the sample's descriptive profile.

Conscientiousness and Volunteering

Conscientiousness brings together orderliness, dependability, self-discipline and a sense of responsibility. It seems intuitively relevant where volunteers must arrive reliably, observe procedures and finish assigned tasks. Research has not, however, found a consistent relationship between this trait and volunteering.

Ackermann (2019) reported different results for conscientiousness across different forms of service. In the wider field of civic engagement, Stahlmann et al. (2024) found that personality associations were usually small and depended on other influences. A conscientious person, in other words, will not necessarily volunteer more often in every setting.

The score reported here is limited to respondents' self-described organisation, responsibility and discipline. It was not compared with attendance, adherence to PPV procedures, commitment or observed performance. Any claim about those outcomes would go beyond the data.

Neuroticism and Volunteering

People who score higher in neuroticism tend to report anxiety, stress and fluctuating negative emotion more readily. A lower score is commonly described in terms of emotional stability. Even so, a personality score is not a test of how well someone manages a stressful shift, performs assigned work or functions as a volunteer.

Nor has research found one stable pattern across every volunteer group. Ackermann (2019) observed variation by activity and population, and Hamdani et al. (2026) found that links between personality and crisis-related community action depended on the form of action considered. Neuroticism cannot therefore be used on its own to predict either participation or performance.

Measuring neuroticism nevertheless completes the overall personality profile of the PPV sample. Because occupational stress and the capacity to work under pressure were not assessed, the present descriptive results cannot support conclusions about either outcome. Those questions require research designed to test the relevant relationships directly.

Personality in Public Health and Crisis Contexts

Public health and crisis volunteering differs in several respects from routine community activity. Conditions may change quickly; duties can be specialised; volunteers encounter diverse groups; and their work is often coordinated by formal organisations. Bakker et al. (2006) showed that personality can shape how volunteers respond to demands and resources in their work environment. King et al. (2015) likewise connected personality with volunteering in community and health contexts.

Studies of community responses during crises further indicate that traits relate differently to different kinds of involvement (Hamdani et al., 2024, 2026). This contextual variation makes setting-specific investigation important: the relevance of any one trait may depend on who is volunteering, what they are asked to do and the conditions in which they work.

Vaccination-centre volunteers supported large public health operations through duties such as registration, directing recipient movement, providing information and assisting with logistics. Some personality characteristics may be pertinent to this work, but Malaysian evidence describing all five traits in this particular volunteer population remains scarce.

Volunteering in the Malaysian Context

Malaysian studies have explored a range of influences on volunteering. Among adults over 50, Sutan et al. (2024) linked community participation with individual, social and health factors. Kadir et al. (2024), studying Malaysian youth, identified both altruistic and self-enhancement motives for volunteering.

This work has improved understanding of volunteer participation in Malaysia, particularly with respect to motivation, demographic characteristics and social conditions. Far less attention has been given to a complete Big Five profile of volunteers serving at vaccination centres.

As one of the sites used for Malaysia's large-scale COVID-19 vaccination programme, the MIECC PPV relied on volunteers for public-facing and operational support. Their working context differs from that of volunteers in charities, educational institutions or ordinary community programmes. Describing their five personality dimensions is therefore worthwhile in its own right rather than assuming that profiles from other volunteer settings apply.

Research Gap and the Need for Further Research

Research has considered personality in voluntary organisations, civic engagement, community participation and crisis response (Ackermann, 2019; Bekkers, 2005; Carlo et al., 2005; Hamdani et al., 2024, 2026; Penner, 2002; Stahlmann et al., 2024). Across this literature, neither the strength nor the direction of associations is fully consistent across traits, populations and activities. It would therefore be inappropriate to generalise a personality profile from one volunteer context to another without direct evidence.

Within Malaysia, the emphasis has been on motives, demographic and social factors, and the extent of volunteer participation (Kadir et al., 2024; Sutan et al., 2024). Evidence on openness, conscientiousness, extraversion, agreeableness and neuroticism among vaccination-centre volunteers remains limited. In particular, no systematic Big Five description has been reported for volunteers at the MIECC PPV.

The present study responds to this gap by estimating the level of each Big Five trait in the MIECC volunteer sample. Its contribution is deliberately descriptive: it establishes a baseline within a large public health operation. This baseline can inform later studies of whether personality is related to training needs, appropriate task placement, performance or continued volunteering.

Methodology

Research Design

A quantitative cross-sectional survey design was adopted to obtain a profile of the volunteers' characteristics at a single point in time. Such a design is appropriate for describing a population and estimating the prevalence of particular traits or behaviours (Creswell & Creswell, 2018). Accordingly, the design enabled the five personality dimensions of the MIECC volunteers to be described without manipulating the study variables or inferring causal relationships.

Study Population and Sample

The study population comprised Civil Servant Volunteers (PPA) and Malaysia Vaccine Support Volunteers (MyVAC) assigned to the MIECC Vaccination Centre in Seri Kembangan. A total of 127 volunteers who were actively serving at the centre completed the survey. Participants were recruited on site according to their availability during the data collection period and were included only after agreeing to participate. Convenience sampling was employed because a complete list of volunteers was unavailable and the fieldwork had to be undertaken within a limited period; consequently, a random sample could not be drawn.

Research Instrument

Personality was assessed using the 44-item Big Five Inventory developed by John et al. (1991), which measures Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness.

Each item was rated on a five-point response scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), thereby indicating the extent to which each statement described the respondent.

The Malay adaptation developed by Azilah (2010) through forward and backward translation was employed in the present study because Malay was the principal language used by most respondents. Furthermore, evidence obtained from other Malaysian samples indicates that this version of the BFI demonstrates acceptable psychometric properties (Muhamad et al., 2018; Mudayat et al., 2022).

Data Collection Procedure

Data collection was conducted over two weeks after permission had been obtained from the MIECC PPV management. Prior to participation, the volunteers were briefed on the purpose and procedures of the study and informed that their involvement was voluntary and that withdrawal would not incur any penalty. Those who provided consent completed the questionnaire during their rest periods to avoid interrupting assigned duties, after which the completed forms were returned directly to the researcher and managed as confidential records.

Data Analysis

IBM SPSS Statistics 26.0 was used to analyse the data. The demographic characteristics of the respondents were summarised using frequencies and percentages, whereas the personality dimensions were described using subscale means and standard deviations. Prior to computing the subscale scores, all negatively keyed BFI items were reverse-scored. Mean values ranging from 1.00 to 2.33 were classified as low, values from 2.34 to 3.66 as moderate and values from 3.67 to 5.00 as high. In addition, Cronbach's alpha was calculated separately for each subscale to determine its internal consistency.

Results

Demographic Characteristics of Respondents

A total of 127 completed questionnaires were included in the final analysis, and the demographic characteristics of the respondents are presented in Table 2.

Table 2

Demographic Characteristics of Respondents (N = 127)

Characteristic	Category	Frequency (N)	Percentage (%)
Sex	Male	48	37.8
	Female	79	62.2
Age (years)	< 20	15	11.8
	20 – 29	72	56.7
	30 – 39	24	18.9
	≥ 40	16	12.6
Working Sector	Government	20	15.7
	Private	22	17.3
	Own Business	13	10.2
	Student	51	40.2
	Unemployed	21	16.5
Level of Education	SPM	21	16.5

STPM	3	2.4
Skills Certificate	9	7.1
Diploma	45	35.4
Degree	35	27.6
Master	7	5.5
Others	7	5.5

As shown in Table 2, women accounted for 62.2% of the respondents ($n = 79$), while 56.7% were aged between 20 and 29 years; the overall mean age was 27.0 years ($SD = 8.4$). With respect to employment and educational background, students represented the largest employment category (40.2%), whereas a diploma was the most frequently reported qualification (35.4%).

Levels of Big Five Personality Traits

The mean score obtained for each Big Five subscale, together with its corresponding low, moderate or high classification, is presented in Table 3.

Table 3

Mean Scores and Interpretations of the Big Five Personality Traits (N = 127)

Personality trait	Mean (M)	Interpretation
Agreeableness	3.45	Moderate
Conscientiousness	3.41	Moderate
Extraversion	3.17	Moderate
Openness	2.83	Moderate
Neuroticism	1.69	Low

As presented in Table 3, agreeableness and conscientiousness recorded the two highest and closely comparable means of 3.45 and 3.41, respectively, followed by extraversion ($M = 3.17$), openness ($M = 2.83$) and neuroticism ($M = 1.69$). Based on the specified cut-off values, the means for agreeableness, conscientiousness, extraversion and openness were classified as moderate, whereas the mean for neuroticism was classified as low. The standard deviations should be obtained from the original statistical output before the manuscript is submitted.

Although agreeableness produced the highest mean, the value remained below the threshold for a high classification. This result suggests that cooperation and consideration were relatively more prominent in the respondents' self-descriptions than the other measured tendencies. Nevertheless, as teamwork and interaction with vaccine recipients were not assessed, the finding cannot establish whether these qualities were demonstrated during the volunteers' actual duties.

Conscientiousness was ranked second, with only a 0.04 difference between its mean and that of agreeableness. The moderate score reflects the respondents' self-reported organisation, self-discipline and sense of responsibility; however, it does not provide evidence of work performance because attendance, task completion, commitment and adherence to procedures were not evaluated.

A moderate mean was also obtained for extraversion, indicating the respondents' general self-perception of sociability and engagement with other people. However, this result should

not be interpreted as an assessment of communication quality during public-facing duties because such performance was not measured.

Openness recorded a mean of 2.83 and was ranked fourth among the five dimensions; nevertheless, the value remained within the moderate category. Therefore, its relative position in the ranking does not indicate that the volunteers lacked creativity, were predominantly conventional or were resistant to change.

In contrast to the other four dimensions, neuroticism was classified at a low level ($M = 1.69$), indicating that the respondents generally reported fewer tendencies towards worry and emotional instability. However, as coping ability and stress tolerance were not measured, the result cannot be taken as evidence that the volunteers were resilient under demanding working conditions. Overall, the sample demonstrated moderate levels for four personality dimensions and a low level for neuroticism.

Discussion

The present study aimed to describe the Big Five personality traits of volunteers at the MIECC Vaccination Centre. In general, agreeableness obtained the highest mean, followed by conscientiousness, extraversion, openness and neuroticism. Nevertheless, the first four dimensions were classified within the same moderate category, whereas neuroticism was low. These results represent descriptive differences within the sample and should not be interpreted as evidence that any particular trait produced better performance or greater effectiveness among the volunteers.

Agreeableness recorded the highest mean ($M = 3.45$), although the value did not reach the high category according to the adopted cut-offs. This pattern indicates that cooperation, consideration and interpersonal concern were comparatively more apparent in the respondents' self-descriptions. A related pattern was reported by Carlo et al. (2005), who considered agreeableness and extraversion together with prosocial value motivation, while Chen and Su (2025) demonstrated that the relationship of agreeableness with volunteer motivation and behaviour was also influenced by motivation and social support. Within the MIECC setting, agreeableness may therefore be relevant when volunteers interact with the public, health personnel and other volunteers; however, this interpretation remains tentative because teamwork, public interaction and actual task performance were not measured in the present study.

Conscientiousness produced a closely comparable mean of 3.41 and was similarly classified at a moderate level, suggesting a moderate self-reported tendency towards organisation, responsibility and discipline. Although these characteristics appear relevant to a vaccination centre in which volunteers operate according to assigned duties and specified procedures, the score cannot confirm their commitment, dependability or procedural compliance. Furthermore, previous research indicates that the relationships between personality and civic engagement are commonly modest and may vary according to the type of activity and organisational setting (Ackermann, 2019; Stahlmann et al., 2024).

Extraversion recorded a mean of 3.17 and was therefore classified as moderate; however, this group mean does not imply that every respondent was outgoing. Ackermann (2019)

identified extraversion as the most consistent personality correlate across formal, informal and online volunteering, yet the present study addressed a descriptive rather than relational question and did not observe communication among MIECC volunteers. Consequently, whether extraversion contributes to the performance of recipient-facing roles would need to be examined using direct observations or performance ratings.

Although openness was ranked fourth, its mean of 2.83 remained within the moderate range. This distinction between rank and classification is important because a comparatively lower mean does not demonstrate resistance to change or an absence of creativity. The interpretation may also depend on context, as Ackermann (2019) reported varying results across forms of volunteering and Stahlmann et al. (2024) found only small differences for several forms of civic engagement. Moreover, adaptability was not directly assessed in the present study.

Neuroticism yielded the lowest mean ($M = 1.69$) and was the only dimension classified at a low level, indicating that respondents were generally less likely to endorse statements concerning anxiety and emotional instability. Nevertheless, this result cannot explain how the volunteers coped under pressured working conditions because stress, coping, burnout and well-being were not measured. This limitation is particularly relevant given evidence that the relationship between personality and crisis involvement varies with the behaviour examined and the context in which it occurs (Hamdani et al., 2024, 2026).

Given the descriptive nature of the findings, none of the five traits should be used independently as a criterion for screening volunteer suitability. Agreeableness ranked first but remained at a moderate level and exceeded conscientiousness by only 0.04, indicating that the profile is more appropriately interpreted as a combination of interpersonal, organisational, social and experiential tendencies. This interpretation is consistent with previous accounts in which personality operates together with personal motives, social circumstances and organisational conditions (Bekkers, 2005; Penner, 2002; Penner & Finkelstein, 1998).

Practical and Research Implications

From a managerial perspective, the findings provide a baseline description of the MIECC volunteer group and may assist in considering training and support requirements at the group level. However, personality scores alone are insufficient for decisions concerning the recruitment, exclusion or task allocation of individual volunteers, as such decisions should also consider competence, experience, motivation, communication, availability and the specific requirements of each role.

The descriptive profile also provides a basis for subsequent research to examine whether the five personality dimensions are associated with task performance, teamwork, communication, perceived stress, satisfaction and intention to continue volunteering. Evidence concerning these outcomes would permit a more robust assessment of the extent to which personality information may contribute to volunteer management.

Limitations

The findings should be interpreted in view of four principal limitations. First, the participants were recruited through convenience sampling from a single vaccination centre; therefore, the sample may not represent PPV volunteers throughout Malaysia. Second, all personality measures were self-reported and may have been influenced by social-desirability or other response biases. Third, the descriptive cross-sectional design neither establishes causal relationships nor tests associations with volunteer outcomes. Finally, no information was obtained concerning actual performance, commitment, coping, stress tolerance or role suitability, and these characteristics cannot be inferred from the reported mean scores.

Future research could address these limitations by recruiting volunteers from several vaccination centres or comparable public health programmes and, where a suitable sampling frame is available, employing probability sampling to improve representativeness. In addition, personality measures could be analysed together with supervisor ratings, performance records, motivation, stress and satisfaction, thereby enabling the present descriptive pattern to be evaluated in relation to meaningful volunteer outcomes.

Conclusion

Among the 127 volunteers surveyed at MIECC, agreeableness recorded the highest mean, closely followed by conscientiousness, while extraversion and openness were ranked third and fourth, respectively, and neuroticism recorded the lowest mean. The first four dimensions were classified at moderate levels, whereas neuroticism was classified as low.

In conclusion, the findings describe the personality profile of the specific group of volunteers surveyed at MIECC and should not be regarded as a representation of an ideal volunteer personality. The study did not establish that any single trait resulted in better work quality, greater effectiveness or stronger performance under pressure. Nevertheless, the profile provides a local baseline for future investigations concerning volunteer training, task placement, performance and retention within public health programmes.

Acknowledgement

The authors would like to express their gratitude to Sekolah Pengajian Antarabangsa dan Bahasa Global, Universiti Teknikal Malaysia Melaka (UTeM), Melaka for providing unwavering support for the publication of this article. The authors declare no conflicts of interest.

References

- Abdul Azis, H., Rahman, Z. A., Rashid, M. R. A., Baharom, N., Awang, H., & Mohammad Lukman, N. H. (2024). Evaluating the reliability and model fit of the 13-item and 10-item Big Five Inventory (Malay version) among Malaysian firefighters. *Malaysian Journal of Medical Sciences*, 31(4), 185–194. <https://doi.org/10.21315/mjms2024.31.4.15>
- Ackermann, K. (2019). Predisposed to volunteer? Personality traits and different forms of volunteering. *Nonprofit and Voluntary Sector Quarterly*, 48(6), 1119–1142. <https://doi.org/10.1177/0899764019848484>
- Bakker, A. B., Van der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: A study among volunteer counselors. *The Journal of Social Psychology*, 146(1), 31–50. <https://doi.org/10.3200/SOCP.146.1.31-50>
- Bekkers, R. (2005). Participation in voluntary associations: Relations with resources, personality, and political values. *Political Psychology*, 26(3), 439–454. <https://doi.org/10.1111/j.1467-9221.2005.00425.x>
- Bernama. (2021a, June 11). MIECC mega vaccination centre in Seri Kembangan to open on Monday (June 14). *The Star*. <https://www.thestar.com.my/news/nation/2021/06/11/miecc-mega-vaccination-centre-in-seri-kembangan-to-open-on-monday-june-14>
- Bernama. (2021b, April 25). Minister says youths play key role in MyVAC to boost success of COVID-19 immunisation programme. *Malay Mail*. <https://www.malaymail.com/news/malaysia/2021/04/25/minister-says-youths-play-key-role-in-myvac-to-boost-success-of-covid-19-im/1969338>
- Carlo, G., Okun, M. A., Knight, G. P., & de Guzman, M. R. T. (2005). The interplay of traits and motives on volunteering: Agreeableness, extraversion and prosocial value motivation. *Personality and Individual Differences*, 38(6), 1293–1305. <https://doi.org/10.1016/j.paid.2004.08.012>
- Chen, C., & Su, W. (2025). The impact of agreeableness trait on volunteer service motivation and behavior: A moderated mediation study of Chinese college students. *Behavioral Sciences*, 15(10), Article 1308. <https://doi.org/10.3390/bs15101308>
- Cho, H., Lim, J., & Chiu, W. (2024). The effects of volunteer management and personality on quality of life and intention to donate in the context of compulsory volunteering: An environmental psychology approach. *SAGE Open*, 14(2), 1–15. <https://doi.org/10.1177/21582440241249887>
- Hamdani, L., Demel, R., Hutter, S., & Specht, J. (2026). Who gets involved in a crisis? The role of the Big Five personality traits and empathy in benevolent and activist engagement. *Social Psychological and Personality Science*. Advance online publication. <https://doi.org/10.1177/19485506251413297>
- Hamdani, L., Höltnann, G., Hutter, S., & Specht, J. (2024). The Big Five personality traits and social support during the COVID-19 pandemic: The supporters, the supported, and the overlooked. *Journal of Community & Applied Social Psychology*, 34(6), Article e2894. <https://doi.org/10.1002/casp.2894>
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory—Versions 4a and 54*. Institute of Personality and Social Research, University of California, Berkeley.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). Guilford Press.

- Kadir, Z. A., Megat Abdul Rahim, P. R., Syed Husain, S. S., Rais, H., & Yulia, Y. (2024). The role of volunteerism in shaping youth social skills: A study of motivational factors in Malaysia. *Malaysian Journal of Social Sciences and Humanities*, 9(10), Article e003055. <https://doi.org/10.47405/mjssh.v9i10.3055>
- King, H. R., Jackson, J. J., Morrow-Howell, N., & Oltmanns, T. F. (2015). Personality accounts for the connection between volunteering and health. *The Journals of Gerontology: Series B*, 70(5), 691–697. <https://doi.org/10.1093/geronb/gbu012>
- Mastor, K. A., Jin, P., & Cooper, M. L. (2000). Malay culture and personality: A Big Five perspective. *American Behavioral Scientist*, 44(1), 95–111. <https://doi.org/10.1177/00027640021956116>
- McCrae, R. R., & Costa, P. T., Jr. (2003). *Personality in adulthood: A Five-Factor Theory perspective* (2nd ed.). Guilford Press.
- Mudayat, N. A., Mohd Jaladin, R. A., & Md. Khalid, N. (2022). Kesahan dan kebolehpercayaan Big Five Inventory (BFI) di Malaysia: Analisis faktor penerokaan. *Jurnal Psikologi Malaysia*, 36(1).
- Muhamad, H., Roodenburg, J., & Moore, D. W. (2018). The adaptation of the Big Five Inventory in measuring Malaysian youths' personality traits. *International Journal of Advanced and Applied Sciences*, 5(7), 8–14. <https://doi.org/10.21833/ijaas.2018.07.002>
- Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues*, 58(3), 447–467. <https://doi.org/10.1111/1540-4560.00270>
- Penner, L. A., & Finkelstein, M. A. (1998). Dispositional and structural determinants of volunteerism. *Journal of Personality and Social Psychology*, 74(2), 525–537. <https://doi.org/10.1037/0022-3514.74.2.525>
- Schmitt, D. P., Allik, J., McCrae, R. R., & Benet-Martínez, V. (2007). The geographic distribution of Big Five personality traits: Patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology*, 38(2), 173–212. <https://doi.org/10.1177/0022022106297299>
- Stahlmann, A. G., Hopwood, C. J., & Bleidorn, W. (2024). Big Five personality traits predict small but robust differences in civic engagement. *Journal of Personality*, 92(2), 480–494. <https://doi.org/10.1111/jopy.12838>
- Sutan, R., Alavi, K., Sallahuddin, S. N., Abdul Manaf, M. R., Jaafar, M. H., Shahar, S., Abdul Maulud, K. N., Embong, Z., Keliwon, K. B., & Markom, R. (2024). Factors associated with community volunteering among adults over the age of 50 in Malaysia. *PLOS ONE*, 19(5), Article e0302220. <https://doi.org/10.1371/journal.pone.0302220>