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# Motivators, Deterrents, and Behavioral Correlates of Blood Donation Among Tertiary Students in Naga City, Philippines

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***Abstract*—** Blood donation is essential in maintaining an adequate and safe blood supply for emergencies, surgeries, and other medical needs. However, student participation in voluntary blood donation remains influenced by various personal, social, institutional, psychological, and knowledge-related factors. This study examined the motivators, deterrents, and related factors associated with blood donation behavior among students in selected tertiary educational institutions in Naga City. A descriptive-correlational design was used, involving 585 student respondents. Data were gathered using a structured questionnaire measuring demographic profile, motivator domains, deterrents, and blood donation behavior. Descriptive statistics, Spearman's rho, Chi-square test, Fisher's exact test, and Cramer's V were used for data analysis. Findings showed that most respondents were aged 20–24 years, female, single, and Catholic. Personal, institutional and environmental, awareness and knowledge-based, and psychological motivators had high influence, while social and interpersonal motivators had moderate influence. The leading deterrents were fear of needles, fear of adverse reactions, health concerns, temporary deferrals, and lack of knowledge. Age, sex, year level, and all motivator domains were significantly associated with blood donation behavior, while deterrents were not. The study concludes that student blood donation behavior is influenced more by positive motivators than by perceived barriers.

***Keywords*—** blood donation behavior, student donors, motivators, deterrents, tertiary students.

## I. INTRODUCTION

Blood donation is one of the most essential practices in modern health care because it supports emergency treatment, surgical procedures, trauma management, maternal care, cancer treatment, hematologic disorders, and other conditions requiring transfusion. The availability of safe and adequate blood supply remains a continuing concern in many health systems, particularly in communities where the number of voluntary donors does not sufficiently meet the demand for blood and blood components. Rajput et al. (2023) emphasized that blood donation and transfusion are central to sustaining medical services, while Tamai (2024) highlighted the importance of appropriate use of blood components in clinical hematology. In the same way, Walter (2023) stressed that blood donation is a public health practice that depends not only on medical systems but also on the active participation of communities. Without a steady pool of voluntary donors, hospitals and blood banks may experience shortages that can delay procedures and compromise patient care.

Voluntary blood donation is especially important because it provides a safer and more sustainable source of blood compared with replacement or paid donation systems. Health authorities and blood service organizations continue to encourage voluntary, non-remunerated blood donation as a way of maintaining safety, adequacy, and accessibility of blood supply. However, despite the recognized importance of blood donation, participation remains uneven across populations. Some individuals willingly donate because of altruism, empathy, social responsibility, or previous positive experiences, while others hesitate because of fear, misconceptions, lack of information, inconvenience, or concerns about possible adverse effects. These differences show that blood donation is not only a medical activity but also a behavioral decision shaped by personal, psychological, social, and environmental factors.

Students in tertiary educational institutions represent an important potential donor population. Most college students belong to the young adult age group, are generally healthy, and are physically eligible to donate blood. Their presence in organized institutional settings also makes them reachable through campus-based campaigns, school organizations, health programs, and blood donation drives. Because of these characteristics, tertiary students can contribute meaningfully to the development of a stable and sustainable donor base. However, student participation in blood donation is not automatic. Willingness to donate may be influenced by how students perceive the importance of blood donation, whether they understand the donation process, whether they feel emotionally connected to the need for blood, and whether donation opportunities are accessible and convenient within their school environment.

Previous studies have shown that motivational factors play a major role in blood donation behavior. Altruism, humanitarian concern, empathy, and the desire to save lives have consistently been identified as important reasons why individuals donate blood. Borsato et al. (2024) reported that motivational factors such as concern for others and social responsibility are central to blood donation, while Davison (2021) discussed the need to understand, predict, and influence donor behavior through behavioral and psychological perspectives. Similarly, Amoloza (2025) described donors as individuals often moved by compassion, social contribution, and meaningful personal experience. These studies suggest that individuals are more likely to donate when they view blood donation as a moral, emotional, and socially valuable act.

Psychological and emotional factors also influence donation behavior. Students may be encouraged to donate when they feel empathy toward patients, experience a sense of purpose, or expect emotional satisfaction after helping others. Ferguson et al. (2020) emphasized that blood donor motivations may vary, but emotional and value-based motives are important in understanding why people decide to donate. Balaskas et al. (2024) further explained that personality, emotional arousal, and altruistic messages may shape young adults' behavioral intention to donate blood. These findings are relevant to student populations because young adults may respond strongly to campaigns that connect blood donation with compassion, bravery, responsibility, and the opportunity to save lives.

Knowledge and awareness are also important enabling factors. Students who understand the need for blood, the presence of blood shortages, eligibility requirements, donation locations, and the actual procedure may become more confident in participating. Alanazi et al. (2023) reported that knowledge and barriers are closely related to blood donation behavior, while Samreen et al. (2021) found that beliefs, behaviors, and opinions about donation are associated with awareness and understanding of the process. Educational interventions can correct misconceptions, reduce uncertainty, and improve readiness to donate. However, awareness alone may not always result in actual donation. Students may know that blood donation is important but still fail to participate if the donation site is inconvenient, the process is unclear, or the environment does not promote confidence and comfort.

Institutional and environmental conditions are therefore significant in transforming intention into action. Donation opportunities that are accessible, well-organized, safe, clean, and supported by professional staff may increase student participation. Martín-Santana et al. (2021) found that service quality, donor satisfaction, and loyalty are important in active blood donation, while Piersma et al. (2021) emphasized that service quality and anticipated emotions influence donor retention. For students, the school setting may serve as a practical platform for blood donation when activities are scheduled conveniently, information is clearly communicated, waiting time is minimized, and the overall experience is positive. A supportive institutional environment may also encourage repeat donation, especially when students associate the experience with safety, appreciation, and personal fulfillment.

Despite these motivators, several deterrents may discourage students from donating blood. Common

barriers include fear of needles, fear of blood, anxiety about pain, fear of fainting or dizziness, concerns about negative health effects, and uncertainty about eligibility. Bani et al. (2024) reported that fear of donation-related stimuli, including needles, blood, and adverse reactions, varies according to donation experience and type of donation. Dorle et al. (2023) also emphasized the need to improve awareness using effective strategies, while Eltewacy et al. (2024) showed that knowledge, attitudes, and practices among university students differ across contexts. These studies indicate that fear and misinformation remain common issues, particularly among young or first-time donors. However, deterrents may not always be strong enough to prevent donation when positive motivators and enabling conditions are present.

Theoretical perspectives help explain the complexity of blood donation behavior. The Health Belief Model explains that individuals engage in health-related behavior based on perceived benefits, perceived barriers, perceived seriousness, cues to action, and self-efficacy. In the context of blood donation, students may donate when they believe that donation saves lives, when they perceive the process as safe, and when they feel confident in their ability to donate. The Theory of Planned Behavior also provides a useful foundation by explaining that behavior is shaped by attitude toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). Students may be more likely to donate if they have positive attitudes, feel supported by their peers or institutions, and believe that donation is easy and accessible. Together, these theories show that student donation behavior is shaped by beliefs, motivation, social influence, and enabling conditions.

In the local context, blood donation remains a relevant concern in Naga City, where hospitals and health institutions depend on an adequate and safe blood supply for patient care. Tertiary educational institutions in the city provide a promising setting for donor recruitment because they include large numbers of young and potentially eligible donors. However, student participation may be limited by fear, lack of confidence, insufficient information, inconvenience, or lack of exposure to organized blood donation activities. The problem addressed in this study centers on the need to identify which factors encourage or discourage students from donating blood and whether these factors are associated with actual blood donation behavior. Understanding these issues is necessary for designing student-centered blood donation programs that are not only informative but also accessible, motivating, emotionally meaningful, and institutionally supported.

This study therefore aimed to examine the motivators, deterrents, and related factors associated with blood donation behavior among students in selected tertiary educational institutions in Naga City. Specifically, it sought to: (1) describe the demographic profile of the respondents in terms of age, sex, year level, marital status, and religion; (2) determine the motivators influencing students' blood donation behavior in terms of personal, social and interpersonal, institutional and environmental, awareness and knowledge-based, and psychological factors; (3) identify the deterrents influencing students' blood donation behavior, particularly fear of needles, blood, or the procedure; fear of adverse reactions; concern about negative health effects; temporary health or eligibility deferrals; and lack of knowledge about the donation process; and (4) examine the relationship between respondents' demographic profile, motivator factors, deterrent factors, and blood donation behavior. The reference studies used to support this introduction were drawn from the provided manuscript reference list.

## II. METHODOLOGY

The methodology of this study employed a descriptive-correlational research design to determine the motivators and deterrents influencing blood donation behavior among students in selected tertiary educational institutions in Naga City.

This design was appropriate because it examined existing relationships among variables without manipulating any conditions.

The study involved both donors and non-donors, and data were gathered through a structured researcher-made questionnaire developed from related literature and anchored on the Health Belief Model and Theory of Planned Behavior.

The research instrument consisted of two parts: the first collected demographic information (age, sex, year level, marital status, and religion), while the second measured motivators and deterrents using a five-point Likert scale ranging from 1 (Very Low Influence) to 5 (Very High Influence).

The questionnaire was pilot-tested with 21 respondents to ensure clarity and reliability, yielding a Cronbach's alpha of at least 0.70, indicating acceptable internal consistency. Validated items were used in the final survey to ensure reliability of the measurement of constructs.

Data were collected via an online survey using Google Forms, yielding 585 usable responses from students at four selected tertiary institutions.

Descriptive statistics such as frequency, percentage, weighted mean, and ranking were used to describe the respondents' profile and levels of motivators and deterrents.

Inferential statistics, including Spearman's rho, Chi-square test of independence, Fisher's exact test, and Cramer's V, were used to determine relationships among variables at a 0.05 level of significance. Ethical standards were strictly observed, ensuring voluntary participation, informed consent, anonymity, and compliance with the Data Privacy Act of 2012.

## III. RESULTS

***Demographic profile of the respondents***

Table 1 shows that most respondents were aged 20–24 years (61.7%), followed by 15–19 years (34.2%), with very few aged 25 years and above. In terms of sex, females (67.0%) outnumbered males (33.0%). For year level distribution, respondents were relatively balanced across levels, with 1st year (29.4%), 4th year (25.5%), and both 2nd and 3rd year (22.6%) each. Regarding marital status, the majority were single (99.3%), while only a few were married or in other categories (0.3% each). In terms of religion, most respondents were Catholic (90.3%), while non-Catholics accounted for 9.7%.

The data indicate a typical composition of tertiary student populations in which young adults dominate, particularly those aged 20–24 years, which represents the standard college age group. The distribution also reflects a higher female participation rate, suggesting either greater willingness among female students to respond or a higher representation of females in the participating institutions. The relatively balanced distribution across year levels ensures that perspectives from different academic stages are represented, while the overwhelming proportion of single respondents is expected in a student population. The predominance of Catholic respondents reflects the region's religious demographic profile.



***Table 1.*** *Demographic Profile of the Respondents*

| Variable | Category | f | % |
|---|---|---|---|
| **Age** | 15–19 | 200 | 34.2% |
| | 20–24 | 361 | 61.7% |
| | 25–29 | 22 | 3.8% |
| | 30–34 | 1 | 0.2% |
| | 35–39 | 0 | 0.0% |
| | 40–44 | 0 | 0.0% |
| | 45–49 | 1 | 0.2% |
| **Sex** | Female | 392 | 67.0% |
| | Male | 193 | 33.0% |
| **Year Level** | 1st Year | 172 | 29.4% |
| | 2nd Year | 132 | 22.6% |
| | 3rd Year | 132 | 22.6% |
| | 4th Year | 149 | 25.5% |
| **Marital Status** | Single | 581 | 99.3% |

| | | | |
|---|---|---|---|
| | Married | 2 | 0.3% |
| | Others | 2 | 0.3% |
| **Religion** | Catholic | 528 | 90.3% |
| | Non-Catholic | 57 | 9.7% |

The demographic profile suggests that the study is grounded in a youthful, predominantly female, single, and Catholic student population. While these characteristics describe the respondents, they have limited explanatory power in predicting blood donation behavior compared to motivational and institutional factors. This implies that demographic variables function more as background descriptors rather than direct determinants of donation behavior in this study.

The findings are consistent with Singh et al. (2025), who reported that young adults and students constitute the majority of blood donation study populations due to their age suitability and health status. Similarly, Eltewacy et al. (2024) found that university samples are commonly dominated by young, single individuals, and while demographic factors may show some association with donation tendencies, they are generally weak predictors of actual donation behavior.

***Motivators influencing students' blood donation behavior***

Table 2 presents the summary of motivators influencing students' blood donation behavior across five domains.

In terms of personal motivators, the average weighted mean was 4.04, interpreted as high influence, with the highest-rated indicator being the desire to save lives and fulfill moral responsibility (WM = 4.40).

Social and interpersonal motivators obtained a moderate influence with an average weighted mean of 3.39, where the strongest factor was sense of community belonging and appreciation (WM = 3.94). Institutional and environmental motivators recorded the highest domain mean of 4.10, also interpreted as high influence, with clear information about the donation process as the top indicator (WM = 4.25).

***Table 2.*** *Summary of Motivators Influencing Students' Blood Donation Behavior*

| Motivator Domain | Average Weighted Mean | Interpretation | Highest-Rated Indicator |
|---|---|---|---|
| **Personal motivators** | 4.04 | High Influence | Desire to save lives and fulfill moral responsibility, WM = 4.40 |
| **Social and interpersonal motivators** | 3.39 | Moderate Influence | Sense of community belonging and appreciation, WM = 3.94 |
| **Institutional and environmental motivators** | 4.10 | High Influence | Clear information about the donation process, WM = 4.25 |
| **Awareness and knowledge-based motivators** | 4.03 | High Influence | Awareness of blood shortages, WM = 4.13 |
| **Psychological motivators** | 4.07 | High Influence | Empathy for patients, WM = 4.19 |

Awareness and knowledge-based motivators also showed high influence with an average weighted mean of 4.03, driven primarily by awareness of blood shortages (WM = 4.13). Psychological motivators likewise registered a high influence with an average weighted mean of 4.07, where empathy for patients emerged as the strongest factor (WM = 4.19). Overall, the results indicate that most motivator domains are perceived by students as highly influential in encouraging blood donation behavior, except for social and interpersonal factors which were only moderately influential.

The findings suggest that students are primarily driven by internal motivations such as altruism, empathy, and sense of responsibility, as well as external enabling conditions such as accessible and well-organized donation environments. This indicates that both psychological and institutional factors play a central role in shaping blood donation behavior, while peer and family influence appear less dominant in comparison.

These results align with Borsato et al. (2024) and Amoloza (2025), who emphasized that altruism and humanitarian concern are among the strongest predictors of blood donation behavior. Similarly, Kocic et al. (2024) and Davison (2021) found that empathy and social responsibility significantly motivate individuals to donate blood, while institutional accessibility and awareness campaigns further strengthen participation.

***Deterrents influencing students' blood donation behavior***

Table 3 presents the deterrents influencing students' blood donation behavior. The leading deterrent was fear of needles, blood, or the donation procedure, which ranked first with an IQR of 8.00.

This was followed by fear of adverse reactions such as fainting or dizziness, which ranked second with an IQR of 6.00. Concern about negative health effects ranked third with an IQR of 4.00, while temporary health or eligibility deferrals ranked fourth with an IQR of 3.00. Lack of knowledge about the donation process ranked fifth, with the lowest IQR of 1.00.

The results show that fear-related factors were the most prominent deterrents among students. Fear of needles, blood, the procedure itself, and possible adverse reactions appeared to create hesitation toward blood donation.

Health-related concerns and temporary ineligibility also served as barriers, although to a lesser extent. Meanwhile, lack of knowledge about the donation process ranked lowest, suggesting that students may already have some awareness of blood donation but may still experience emotional or physical concerns about the procedure.

***Table 3.*** *Deterrents Influencing Students' Blood Donation Behavior*

| Deterrent | IQR | Rank |
|---|---|---|
| **Fear of needles, blood, or the procedure** | 8.00 | 1st |
| **Fear of adverse reactions, such as fainting or dizziness** | 6.00 | 2nd |
| **Concern about negative health effects** | 4.00 | 3rd |
| **Temporary health or eligibility deferrals** | 3.00 | 4th |
| **Lack of knowledge about the donation process** | 1.00 | 5th |

These findings imply that students' reluctance to donate blood is influenced more by fear and perceived physical risk than by lack of information. Although knowledge remains important, addressing emotional barriers such as anxiety, fear of pain, and fear of fainting may be necessary to improve student participation. Blood donation programs should therefore include reassurance, clear procedural explanations, donor preparation, and supportive staff interaction to reduce fear and increase confidence among potential donors.

The findings are supported by Bani et al. (2024), who reported that fear of donation-related stimuli such as needles, blood, pain, and fainting remains a common barrier among blood donors. Similarly, Nureye and Tekalign (2019), Dorle et al. (2023), Eltewacy et al. (2024), and Kocic et al. (2024) identified fear, misconceptions, and concerns about adverse effects as major deterrents to blood donation participation.

***Relationship between respondents' demographic profile, motivator factors, deterrent factors, and blood donation behavior.***

Table 4 presents the relationship between the respondents' profile and blood donation behavior. Age was significantly related to blood donation behavior, with a Spearman's rho value of 0.212 and a p-value of < .001. Sex was also significantly associated with blood donation behavior, with a Chi-square value of

7.90, Cramer's V of 0.11, and a p-value of .019. Year level likewise showed a significant relationship, with a Chi-square value of 30.0 and a p-value of < .001. Meanwhile, marital status was not significantly related to blood donation behavior, with a Chi-square value of 4.08, Cramer's V of 0.059, and a p-value of .396. Religion was also not significant, with a Chi-square value of 0.065, Cramer's V of 0.033, and a p-value of .722.

***Table 4.*** *Relationship Between Respondents' Profile and Blood Donation Behavior*

| Variable | Test Statistic | p-value | Interpretation |
|---|---|---|---|
| **Age × Blood Donation Behavior** | Spearman's rho = 0.212 | < .001 | Significant |
| **Sex × Blood Donation Behavior** | $\chi^2$ = 7.90; Cramer's V = 0.11 | .019 | Significant |
| **Year Level × Blood Donation Behavior** | $\chi^2$ = 30.0 | < .001 | Significant |
| **Marital Status × Blood Donation Behavior** | $\chi^2$ = 4.08; Cramer's V = 0.059 | .396 | Not Significant |
| **Religion × Blood Donation Behavior** | $\chi^2$ = 0.065; Cramer's V = 0.033 | .722 | Not Significant |

The results indicate that age, sex, and year level have statistically significant relationships with blood donation behavior. This means that differences in students' age group, sex, and academic level may be associated with differences in their blood donation behavior. However, the reported association values suggest that the relationships are weak. On the other hand, marital status and religion were not significantly associated with blood donation behavior, indicating that these variables did not meaningfully differentiate students' donation behavior in this study.

These findings imply that while demographic characteristics may help describe patterns of blood donation among students, they are not strong predictors of actual donation behavior. The significant relationship between age and year level may be due to greater maturity, exposure to school-based health activities, or increased eligibility among older students. The significant association with sex may reflect differences in health perception, willingness, or participation tendencies. However, because the strength of association is weak, interventions should not rely solely on demographic targeting but should instead focus more on motivation, awareness, accessibility, and positive donation experiences.

The findings are supported by Singh et al. (2025), who reported that age and sex may influence blood donation patterns among student populations. Similarly, Korkut (2023) found that demographic factors such as age, sex, and educational level can affect blood donation awareness and participation. However, previous studies also suggest that demographic variables are inconsistent predictors of actual donation behavior, supporting the present finding that demographic characteristics have only limited influence compared with motivational and contextual factors.

Table 5 presents the relationship between motivator domains and blood donation behavior. Overall personal motivators showed a significant positive relationship with blood donation behavior, with a Spearman's rho of 0.185 and a p-value of < .001. Social and interpersonal motivators were also significantly related to blood donation behavior, with a Spearman's rho of 0.081 and a p-value of .050. Institutional and environmental motivators showed a significant relationship as well, with a Spearman's rho of 0.135 and a p-value of .001. Awareness and knowledge-based motivators were significantly associated with blood donation behavior, with a Spearman's rho of 0.123 and a p-value of .003. Psychological motivators also had a significant relationship, with a Spearman's rho of 0.111 and a p-value of .007.

The results indicate that all motivator domains were significantly associated with students' blood donation behavior. Among the domains, personal motivators had the strongest relationship, followed by institutional and environmental motivators, awareness and knowledge-based motivators, psychological

motivators, and social and interpersonal motivators. However, although the relationships were statistically significant, the correlation values were weak. This means that motivators contribute to blood donation behavior, but they do not fully explain students' actual decision to donate blood.

These findings imply that students' blood donation behavior is influenced by a combination of personal, institutional, informational, psychological, and social factors. Personal reasons such as emotional satisfaction and positive prior experiences may encourage students to donate, while supportive institutional conditions, awareness of blood shortages, and empathy toward patients may further strengthen their willingness.

Since the associations were weak, blood donation programs should not rely on only one type of motivator. Instead, they should combine personal encouragement, clear information, accessible donation opportunities, supportive environments, and positive donor experiences.

***Table 5.*** *Relationship Between Motivator Domains and Blood Donation Behavior*

| Motivator Domain | Spearman's rho | p-value | Interpretation |
|---|---|---|---|
| **Overall personal motivators** | 0.185 | < .001 | Significant |
| **Overall social and interpersonal motivators** | 0.081 | .050 | Significant |
| **Overall institutional and environmental motivators** | 0.135 | .001 | Significant |
| **Overall awareness and knowledge-based motivators** | 0.123 | .003 | Significant |
| **Overall psychological motivators** | 0.111 | .007 | Significant |

The findings are supported by Ferguson et al. (2020), who emphasized that blood donation is influenced by different types of motivation, including emotional, value-based, and personal factors. M'Sallem (2022) also found that motivation plays an important role in donor return behavior, especially when supported by socio-cognitive factors from the Theory of Planned Behavior.

Similarly, Martín-Santana et al. (2021) reported that service quality and donor satisfaction influence donor loyalty, while Samreen et al. (2021) found that knowledge and awareness are associated with blood donation beliefs and practices.

Table 6 presents the relationship between deterrents and blood donation behavior. Fear of needles, blood, or the procedure showed a Spearman's rho of 0.010 with a p-value of .809, which was not significant. Fear of adverse reactions had a Spearman's rho of 0.046 and a p-value of .270, also not significant. Concern about negative health effects recorded a Spearman's rho of 0.042 with a p-value of .308, while temporary health or eligibility deferrals had a Spearman's rho of 0.039 with a p-value of .351. Lack of knowledge about the donation process showed a negative Spearman's rho of -0.026 with a p-value of .526. All deterrents were interpreted as not significant.

***Table 6.*** *Relationship Between Deterrents and Blood Donation Behavior*

| Deterrent | Spearman's rho | p-value | Interpretation |
|---|---|---|---|
| **Fear of needles, blood, or the procedure** | 0.010 | .809 | Not Significant |
| **Fear of adverse reactions** | 0.046 | .270 | Not Significant |
| **Concern about negative health effects** | 0.042 | .308 | Not Significant |
| **Temporary health or eligibility deferrals** | 0.039 | .351 | Not Significant |
| **Lack of knowledge about the donation process** | -0.026 | .526 | Not Significant |

The results indicate that none of the identified deterrents had a statistically significant relationship with students' blood donation behavior. Although fear of needles, fear of adverse reactions, health concerns, temporary deferrals, and lack of knowledge were perceived as possible barriers, they did not

significantly affect actual donation behavior among the respondents. The very low correlation values also show that the relationship between these deterrents and blood donation behavior was weak or negligible.

These findings imply that while students may recognize certain fears and concerns related to blood donation, these barriers may not be strong enough to prevent actual participation. It is possible that positive motivators, such as altruism, empathy, awareness, institutional support, and previous donation experience, outweigh the effects of deterrents. Therefore, blood donation programs should still address fears and misconceptions, but greater emphasis may be placed on strengthening motivators and creating positive, safe, and convenient donation experiences.

The findings are supported by Hristova et al. (2025), who reported that barriers to blood donation among young adults do not always serve as the strongest predictors of actual donation behavior. Similarly, Bani et al. (2024) found that fear of needles, blood, pain, and fainting are common concerns among donors, but their influence may vary depending on donation experience and the presence of stronger motivational factors.

## IV. CONCLUSION & RECOMMENDATION

The study concludes that blood donation behavior among students in selected tertiary educational institutions in Naga City is influenced more by positive motivators than by deterrents. Most respondents were young, female, single, and Catholic, with age, sex, and year level showing significant but weak relationships with blood donation behavior. All motivator domains—personal, social and interpersonal, institutional and environmental, awareness and knowledge-based, and psychological factors—were significantly associated with blood donation behavior, although the relationships were weak. In contrast, deterrents such as fear of needles, fear of adverse reactions, health concerns, temporary deferrals, and lack of knowledge were not significantly associated with actual donation behavior. This suggests that while students may recognize barriers to blood donation, their participation is more likely shaped by altruism, empathy, awareness, institutional support, accessibility, and positive donation experiences.

It is recommended that tertiary institutions, in partnership with hospitals, blood banks, and organizations such as the Red Cross, implement regular campus-based blood donation programs that are accessible, safe, well-organized, and student-centered. These programs should provide clear information on eligibility, procedures, donation sites, and blood shortages; ensure clean facilities, professional staff, short waiting times, and supportive donor care; and use empathy-based campaigns that highlight the life-saving impact of blood donation. Schools should also encourage repeat donation by giving recognition, certificates, follow-up reminders, and positive feedback to donors. Since deterrents were not significantly related to behavior, interventions should not focus only on reducing fear, but should prioritize strengthening motivation, improving donor experience, and making blood donation a convenient and meaningful part of student life.

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