Electronic Effects Of Word Of Mouth And Perceived Value On Blood Donor Intention: Theory Of Planned Behavior

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Abstract
The research aims to find out whether electronic word of mouth (E-WoM) and perceived value can be a starting factor in an effort to increase blood donor intention using the expansion of the Theory of Planned Behaviour (TPB) to attract potential donors, especially in the West Java region. The data was collected using a questionnaire shared online with social media users who knew that the Indonesian Red Cross (PMI) was an altruistic agency dealing with blood donors. Data was processed using the structural equation modelling (SEM) approach with the partial least squares method (PLS). Using the help of SmartPLS software, the research found that electronic word of mouth, emotional value, altruistic value, and functional value significantly influenced attitude and succeeded in becoming a starting factor in efforts to enhance blood donor intention. The research also revealed that social value does not support the formation of attitudes that mean people donate blood not for social recognition. The findings provide managerial implications to altruistic institutions in developing appropriate promotion strategies for recruiting potential donors based on the findings, theoretically contribute to the development of TPB theory, and are expected to be a reference for future research related to blood donor intention.

Keywords: Theory Of Planned Behaviour, Blood Donor Intention, Perceived Value, Electronic Word of Mouth, E-WoM.

INTRODUCTION

The need for blood transfusions can be caused by bleeding, injury, medical therapy, or specific diseases that require regular blood supply, such as thalassemia. (Agustina, 2018). Budiman (2021) mentions that the blood needs of thalassemia patients reach 240,000 blood bags per year for only 10,000 patients with this disease. Another cause of increased blood needs is the increased need for blood for the innovation of surgical, haematological, and oncological therapeutic methods. To meet the huge need for such blood transfusions, of course, there must be a well-managed supply of blood. According to Nua (2021), the standard condition of the best blood supply in a region is 2.5% of the population in the region, which means that the blood supply needs in Indonesia are more than five million blood turkeys per year (Nua, 2021). (Lucyati, 2017). Blood supply needs in West Java have not yet reached the standard. (Lucyati, 2017). PMI UTD Kota Bandung only processed about 277 thousand blood bags in 2021 (UTD PMI, 2021). Other sources reveal that the supply of blood in West Java has just reached 454 thousand (Lucyati, 2017). This blood shortage is a concern for patients in hospitals who need blood. (Djuadi, 2020). Creating and increasing blood donor intentions to increase blood supply is a serious problem for agencies that facilitate blood collection in Indonesia and around the world. (Haryanto & Setyanta, 2018). The problem demands that researchers today focus more on the blood donor's intention and its usefulness to understand the motivation that sparked a donor's interest in donating blood. (Suemnig et al., 2017). The penetration of social media in the world continues to increase, with social media users by 2021 reaching 4.2 billion people, or more than half the world's population. (Bagoes, 2021). Internet users in Indonesia who follow information developments for some reason will number 212.35 million people by 2021. (Kusnandar, 2021). Information through social media spreads widely, quickly, and repeats from
user to user, and unconsciously drives the emergence of electronic word of mouth (E-WoM), with the presence of the influence of social media, the spread of E-Wom becomes easier compared to conditions before the existence of E-Wom, such as the dissemination of digital content that facilitates the visualization of the experience perceived rather than just listening to the stories of others, donors can devote their feelings and experiences through the social media that will later become positive information, potential donors may acquire information and develop positive attitudes (attitude) towards blood donor activities which further enhance the intention (intention) to donate their blood (Arta & Yasa, 2019). Altruistic services institutions often rely on the impact of positive E-Wom to build community motivation for altruistic service. E-Wom then becomes an important concept to become one of the recruitment strategies. (Rohman, 2021). According to Kasraian et al. (2020), altruism is the biggest reason young people donate their blood.

Istanto et al. (2020) argue that a good insight into reading and conveying E-WoM will help recruit and retain donors to support goals and improve well-being. Previous researchers have stated that the word-of-mouth form of communication is the key driver for customers in shaping attitudes in line with guiding behavioural intentions. (Chiou and Cheng, 2003; Chevalier and Mayzlin, 2006; Xia and Bechwati, 2008; Jalilvand et al., 2012). The other party also stated that comments in the internet media strongly influence attitudes towards brands, as the existence of positive comments encourages a more desirable attitude and the presence of negative comments has a negative influence on rands. (Lee et al., 2009). One theory used to understand interest in blood donation is the Theory of Planned Behaviour (TPB), which explains that a person's behavioural intentions are shaped by three factors: attitude, subjective norm, and perceived behavioural control (Ajzen, 1991). The connection with the theory of TPB by Kassie et al. (2020) concludes that the positive attitude of a person towards a blood donor (attitude), the willingness to accept the opinion of others to encourage the donation of his blood (subjective norma), and the behaviour control to be willing to donate his blood easily (perceived behavioural control) make a person increasingly interested in donating blood (intention to do so). Variably, the research related to intention using TPB has been successful between 51% and 80.7%, where the organisation of someone is guided by three types of considerations, namely attitude, normative, subjective behavioural control, and Perceived Behave Control.Nystran & Olsen (2019) research discusses how perceived value can control and influence attitudes that end up increasing intention. Zhang et al. (2021) studied functional motivation as a self-efficacy for predicting repetitive behaviour using the Theory of Planned Behaviour (TPB). (L. Zhang et al., 2021).

Apart from the focus of the Zhang et al. (2021) study that examines blood donor intention by considering experienced donors, the study involves experienced donors and non-donors or donors who have never donated their blood as the subject of the study on attitude, and their interest in donating their blood is also involved in donating their blood again in the future. The aim is not only to focus on existing donors but also to try to increase the number of donors. Studies by Fauzi et al. (2022); Johnston et al. (2023); Raza & Farrukh (2023); and Breda et al. (2023) reveal that attitude is the strongest predictor in the TPB model, so it is necessary to predict the correct outcome because the attitude variable plays an important role in creating or enhancing intention.
RESEARCH METHODS

This study uses non-probability sampling. The population of respondents to this study is everyone who knows the Indonesian Red Cross (PMI) West Java as a social institution that deals with blood donors. This study uses a sample of respondents. Sampling is done using non-probability sampling techniques, such as purposive sampling. The collection lasted seven days, and the questionnaire will be distributed and opened from June 29, 2022, to July 6, 2022.

The measurements were made against nine variables in the study: electronic word of mouth, emotional value, social value, altruistic value, functional value, attitude, subjective norm, perceived behavioural control, and blood donor intention using the attitude scale of the respondents’ answers. All statements of each variable are measured with 5 points on the Likert scale (from 1= very disagreeable to 5= verified).

Of the 537 respondents surveyed, the number of respondents was dominated by the gender of women, i.e., 339 respondents, or 63% of the total respondents. Respondents of male gender were 198, or 37%, of the population surveyed, so it can be said that most of the respondents in the blood donor intention research conducted were women.

Data analysis methods describe the statistical methods used in the testing of hypotheses as well as their limitations on the basis for decision-making to accept or not accept the research hypothesis. The data that has been collected is then analysed with descriptive statistics and quantitative analysis. Data from 537 respondents was then measured for validity and reliability using the analytical software SmartPLS Version 3.0, which focuses on three things: internal consistency reliability, convergent validity, and discriminant validity.

RESULT AND DISCUSSION

1. Descriptive Analysis
   a. Descriptive Statistical Analysis Electronic Word Of Mouth (Ewom)
      The descriptive analysis of this study uses the mean and standard deviation of 537 responses from respondents. The statistics of the E-WoM variable were measured using three statements, namely the level of knowledge related to blood donation experience, recommendations of other people to donate blood, and knowledge relating to the positive aspects of donating blood. It is known that the average respondent's response to the e-Wom variable of 4.064 indicates that respondents have known or visited the good experiences of others with blood donor experiences on PMI from social media and have received recommendations from others to do so using the PMI donor blood services, as well as have learned positive things about the services of PMI blood donors from the social media, with the standard deviation showing varying rates of response.
   b. Descriptive Statistical Analysis of Emotional Value (EV)
      For the descriptive results of emotional values (EVs) of respondents obtained overall that the emotional value variable is at the level of good at 4.066 which means that the potential donor feels that by donating his blood will make him feel comfortable, well-being, happy, calm, relieved, and makes him proud. This shows that there is hope of the candidate donor to get that feeling emotionally after donating the blood.
   c. Descriptive Statistical Analysis of Social Value (SV)
      The results of the statistical analysis of descriptive social values showed that the average answer value for the social value variable was 3.665 which means that potential donors felt that by donating their blood they could become more accepted in the social environment, improve the way others viewed them, and one way to gain recognition in a social environment.
d. Descriptive Statistical Analysis of Altruistic Value (AV)

The results of the descriptive statistical analysis of altruistic value (AV) showed that the average value for the variable was 4.062 meaning that potential blood donors felt that the blood donor was a form of shared responsibility for others. The altruistic value variable has a variable standard deviation which means the answers to these variables are also variable.

e. Descriptive Statistical Analysis of Functional Value (FV)

Results of respondents to the descriptive functional value showed that the average value for the functional variable was 4.092 meaning that potential donors felt that donating blood would not interfere with the time they had, they also thought that doing blood donation interfere with their existing schedules, and they assumed that donation of blood through a trusted altruistic institution such as PMI would run comfortably with the facilities and utilities owned by the institution. The degree of diversity of responses for functional values is also quite variable, indicated by standard deviations with varying values.

f. Attitude-Descriptive Statistical Analysis

For the results of respondents regarding descriptive attitude, the average answer value for the attitude variable was 4.090, which means that potential donors felt that blood donation was a good idea and worth doing. Donors also believed that blood donation was not a scary activity; on the contrary, they felt that blood donation was a fun activity, and they also liked things related to blood donation activities. The level of diversity of answers for the attitude variable also varies greatly, with standard deviation values varying in size.

g. Subjective Norm (SN) Descriptive Statistical Analysis

The results of the descriptive subjective norm (SN) statistical analysis given by respondents showed that the average answer value for the subjective norm variable was 4.024, which means that prospective donors received ideas from people who were important to them to carry out blood donation activities; even their parents thought that they had to donate blood. The level of diversity of answers for the subjective norm variable is also quite diverse, with varying standard deviation values.

h. Descriptive Statistical Analysis of Perceived Behavioural Control (PBC)

The descriptive statistical results of perceived behavioural control (PBC) show that the average answer value for the PBC variable is 4.275. Potential donors feel confident about donating blood, and they also think that donating blood is not a difficult activity but rather an easy thing to do. The level of diversity of answers for the PBC variable is also quite diverse, with varying standard deviation values.

i. Descriptive Statistical Analysis of Blood Donor Intention (BDI)

The results of the statistical analysis of Blood Donor Intention (BDI) show that the average answer value for the BDI variable is 4.108, which means that potential donors have the desire, determination, and intention to donate blood. The level of diversity of answers for the BDI variable also varies, as shown by various standard deviation values.

2. Results of Inferential Analysis Using SmartPLS

a. Testing Hypotheses Using Bootstrap/Path Analysis

Bootstrapping is done to give the standard error of the estimated coefficient and assess the level of significance (Hair et al., 2016). Subsamples are created with observations taken randomly (with replacement) from the original data set. To ensure the stability of the results, the number of subsamples must be large (Hair et al., 2016). The bootstrapping setting in this study uses a sub sample of 5000 with a standard error (α) of 0.05 (pengaturan default aplikasi SmartPLS). The value seen at this bootstrap stage is the value of the t value to determine whether the hypothesis submitted is accepted or not, also to look at the P value to know the degree of significance in the research model. Hair (2014) explains the critical t values
(theoretical t) are 1.65 (α = 0.1); 1.96 (α = 0.05); and 2.57 (α= 0.01). This study shows the bootstrap results of the tested model, showing that any indicator can support this study model with a high significance value, marked by a P value < 0.01; and t value (empirical/calculated t) greater than its critical/theoretic t value (1.96(α = 0.05).

b. Hypothesis Test Results

<table>
<thead>
<tr>
<th>Table 1. T Value and P Value</th>
<th>T Values</th>
<th>P Values</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Word of Mouth -&gt; Attitude</td>
<td>4.255</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Emotional Value -&gt; Attitude</td>
<td>4.422</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Altruistic Value -&gt; Attitude</td>
<td>5.394</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Social Values -&gt; Attitude</td>
<td>0.991</td>
<td>0.322</td>
<td>Not supported</td>
</tr>
<tr>
<td>Functional Value -&gt; Attitude</td>
<td>7.170</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Attitude -&gt; Blood Donor Intention</td>
<td>7.464</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Social Norm -&gt; Blood Donor Intention</td>
<td>5.678</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Perceived Behavioral Control -&gt; Blood Donor Intention</td>
<td>2.786</td>
<td>0.005</td>
<td>Supported</td>
</tr>
</tbody>
</table>

On the basis of Table 1, the following details are discovered:

1) The relationship between electronic word of mouth and attitude has a t value of 4.255 (greater than theoretical t = 1.96) and a p value of 0.000 (smaller than 0.1), indicating that the coefficient is significantly different from zero, supporting Hypothesis 1.

2) The relationship between emotional value and attitude has a t value of 4.422 (higher than the theoretical t = 1.96) and a p value of 0.000 (less than 0.1), indicating that the coefficient is significantly different from zero. As a result, Hypothesis 2 is supported.

3) The t value for social value is 0.991, which is lower than the theoretical value of t = 1.96, and the p value is 0.322, which is higher than 0.1. This demonstrates that Social Value does not significantly affect attitude, hence disproving Hypothesis 3.

4) Altruistic Value > Attitude has a t value of 5.394 (higher than theoretical t = 1.96) and a p value of 0.000 (smaller than 0.1), indicating that the coefficient is significantly different from zero. As a result, Hypothesis 4 is supported.

5) Functional Value > Attitude has a t value of 7.170 (higher than theoretical t = 1.96) and a p value of 0.000 (smaller than 0.1), indicating that the coefficient is significantly different from zero. As a result, Hypothesis 5 is supported.

6) The relationship between attitude and blood donor intention has a t value greater than the theoretical value of t = 1.96 and a p value less than 0.1, indicating that the coefficient is significantly different from zero, supporting Hypothesis 6.

7) Subjective Norm > Blood Donor Intention has a t value of 5.678 (greater than theoretical t = 1.96) and a p value of 0.000 (smaller than 0.1), which indicates that the coefficient is significantly different from zero, and thus Hypothesis 7 is supported.

8) Perceived Behavioural Control > Blood Donor Intention has a t value of 2.786 (greater than theoretical t = 1.96) and a p value of 0.005 (smaller than 0.1), which indicates that the coefficient is significantly different from zero, and thus Hypothesis 8 is supported.
Discussion

1. Descriptive Statistics

The mean and standard deviation of the processed responses from the 537 respondents are used in the descriptive analysis in this study. The standard deviation measures the degree of variance in respondents' answers, whereas the mean represents the average number of responses (Sekaran & Bougie, 2016). The standard deviation is used to show how diverse the responses of respondents are for each statement item in the variable. The higher the number shown by the standard deviation, the more varied the answers provided by respondents in the statement. The average number of responses is used to describe the actual level of each statement item in the variable on average. For each variable examined, the following descriptive statistics are provided.

- **Hypothesis 1:** Electronic word-of-mouth influences attitudes favourably.

  The outcomes of the experiments conducted reveal that Electronic Word Of Mouth (E-WoM) significantly improves attitude. More people will believe that giving blood is a good idea as more people learn about other people’s positive experiences with it. Whether a potential donor has never donated blood or has donated blood before, the process of information exchange in social networks or online can shape attitudes and give birth to favourable perceptions about blood donation. People can express their opinions, information, and views about products, services, or experiences on digital platforms including social media, online forums, and review websites.

  The findings of this study are consistent with earlier studies by Kumar & Kudeshia (2016), Sunderman (2018), and Veronica & Kusdibyo (2021). Ewom is effective at fostering the creation of attitudes in situations when the dissemination of information via social media affects potential donors who watch or listen to the content. Providing encouraging information on blood donation initiatives in order to influence potential donors' first views and attitudes. While this study focuses mainly on the realm of blood donation, Kudeshia & Kumar (2016) and Veronica & Kusdibyo (2021) looked at how ewom effects intention in the purchase sector. This demonstrates how successful E-WoM is at finding potential donors.

  The findings of the research project point to a novel discovery in the field of blood donation: E-WoM can influence the attitude of the blood donor. The E-WoM variable has been successful in emerging as one of the key determinants of attitudes that may eventually result in a person's intention to give blood.

- **Hypothesis 2:** Attitude results are positively impacted by emotional value.

  According to the tests that have been done, emotional value (EV) significantly improves attitude. More people will think that giving blood is a pleasurable action if they think that doing so will bring about sentiments of solace, prosperity, joy, peace, relief, and pride. Emotional value has been successful in establishing itself as a factor that promotes the development of attitudes among potential contributors. This study supports a number of previous investigations (Gursoy et al., 2011; Ha & Jang, 2013; Sheth et al., 1991). EV is a trigger to elicit the affective state of potential donors in order to ascertain their attitudes towards blood donation activities, which supports the claim made by Previte et al. (2019). The statement item that says giving will help the donor feel at ease has the greatest indicator score for the EV variable. This
demonstrates that prospective donors wish to experience pleasant emotions and a sense of calmness following their blood donation.

The best basis for emotional worth in assessing the mindset of potential donors is the peace that they anticipate. One of the crucial moments for subsequently being able to generate or give rise to the intention to donate blood is this circumstance.

- **Hypothesis 3: Social Value influences attitude outcomes in a favourable way.**
  According to the results of the tests, Social Value does not significantly improve Attitude. For example, even though a person may believe that giving blood will improve his or her reputation and help them fit in with others (social value), this does not necessarily translate into a positive attitude towards giving blood. According to Yu & Lee (2019), the purchase experience may play a moderating function in elucidating the influence of social value on attitude.

  Because people in society are governed by a number of applicable social norms, they must abide by these in order to be accepted by society, according to Sheth et al (1991), social value can be obtained when customers, or in this case potential contributors, feel linked to other people. The findings of the research that has been done refute the claim that societal values encourage the development of attitudes towards blood donation among potential donors. The existing hypothesis may not be supported by the social value variable since blood donors or future donors may not place much significance on maintaining their social standing.

- **Hypothesis 4: Altruistic value influences attitude in a favourable way.**
  The outcomes of the experiments conducted reveal that altruistic value has a considerable favourable impact on attitude. More people will like giving blood as they become aware of how giving blood is a way to be responsible for helping others. Altruistic motivations are unquestionably the main theme of numerous conversations around blood donation, and this study is no exception. According to the study's findings, potential donors' attitudes towards their desire to donate blood can improve as a result of their sense of altruism.

  This is consistent with a number of earlier research (Asamoah-Akuoko et al., 2021; Piersma et al., 2017). Research by Previte et al. (2019) and Chell & Mortimer (2014) is also supported by altruistic ideals that help attitudes form. Giving blood is a selfless or selfless act whose goal is to serve the needs or interests of others. The rise of views towards the intention to engage in blood donation activities is being driven by altruistic principles.

  Donors-to-be believe that their contributions can assist alleviate the current blood shortage problem. Blood is donated by potential donors for charitable causes in an effort to meet the minimal requirements, which are still far from being met. In order to make it easier for those who require blood when urgent blood demands arise, potential donors are aware of the significance of achieving blood stock standards.

  Giving blood is regarded as a way for us to carry out our common obligation to assist those who are in need. Potential contributors may take pleasure in charitable endeavours and appreciate the human worth of doing good deeds if perceived altruistic value is high enough.

- **Hypothesis 5: Functional Value influences Attitude Results favourably.**
  The results of the studies conducted indicate that Functional Value significantly improves Attitude. The more comfortable individuals are with the amenities and services offered by organisations that provide blood donation services, the more satisfied people will be with blood donation activities. This backs up the study done by Andrianto (2020). According
to the findings, functional value scored highest in terms of motivating potential donors' views. This entails demonstrating that the strongest motivation for a person to adopt a mindset and give rise to the intention to donate blood is functional value. Potential donors may see the functional value in the form of improved health or other advantages following blood donation. One of the factors for potential donors when donating blood is the effectiveness of the time required, where the blood donation process shouldn't interfere with potential donors' schedules. In addition, the facilities offered by charitable organisations for blood donation must be pleasant for both the service provided and the facilities used by potential donors.

- Findings from Hypothesis 6: Attitude influences blood donors' intentions favourably
  According to the results of the experiments, attitude significantly influences blood donor intention in the favour. The more individuals like blood donation events and believe that donating blood is a good idea, the more likely it is that they will do so. In experiments conducted to determine what factors influence the inclination to donate blood, attitude received the highest result. People who might donate blood believe it to be entertaining. Additionally, they want to enjoy blood donation activities and believe that giving blood is a wise decision. This study's findings concur with a number of earlier investigations (Aschale et al., 2021; Charsetad, 2016; Kassie et al., 2020b; Parash et al., 2020). Potential donors' views are influenced by social information in the form of Ewom and their values, which ultimately leads to the intention to donate blood.

- Hypothesis 7: Blood Donor Intention Results are positively impacted by Subjective Norm.
  The results of the experiments conducted indicate that Subjective Norm significantly improves Blood Donor Intention. The desire to donate blood increases with the number of referrals from family and friends that you do so. The findings of various investigations (Aschale et al., 2021; Charsetad, 2016; Kassie et al., 2020b; Parash et al., 2020) support this as well.
  This demonstrates that the intention to donate blood can also be motivated by one's sense of responsibility for doing an action (in this example, donating blood). It is the perception of potential donors that they hold normative beliefs, which are expected in line with the person's overarching reason for donating blood. Blood donation is an act of kindness, and doing good deeds is a moral obligation for everyone. In Indonesian society, doing good deeds is practically a cultural norm; as a result, potential donors feel compelled to participate in blood donation activities. blood, which ultimately may inspire the desire to donate blood.

- Findings support Hypothesis 8: Perceived behavioural control influences blood donors' intentions favourably
  According to the results of the tests, perceived behavioural control significantly increases the likelihood that someone will donate blood. It backs up claims made by Aschale et al. (2021), Charsetad, (2016), Kassie et al. (2020), and Parash et al. (2020). A person's intention to donate blood will be more strongly motivated the higher their level of self-assurance and confidence in doing so. One of the elements that can influence someone's intention to do something is control over behaviour. In this study, potential blood donors had enough behavioural control to feel comfortable doing so and thought that giving blood was a simple and helpful action. The intention that will emerge will increase with increased behaviour control.
CONCLUSION

From the research that has been carried out it can be concluded that:

1) The impact of electronic word of mouth on attitude is really favourable.
2) Attitude is significantly positively impacted by emotional value.
3) Social Values do not significantly affect attitude in a favourable way.
4) Attitude is significantly influenced favourably by altruistic values.
5) Attitude is significantly positively impacted by functional value.
6) Attitude significantly influences blood donors’ intentions in a favourable way.
7) The intention of blood donors is significantly positively impacted by subjective norm.
8) Perceived behavioural control significantly increases the intention to donate blood.

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