

Experience and Coping Strategy Based on the Theory of Planned Behavior among Young Blood Donors

Pengalaman dan Strategi Daya Tindak Berdasarkan Teori Tingkah Laku Terancang dalam Kalangan Penderma Darah Muda

JULIANA ROSMIDAH JAAFAR, SHEAU TSUEY CHONG, KHADIJAH ALAVI, WOUI-SEONG KAM

ABSTRACT

The recruitment of young people as first-time blood donors and their retention as Repeat Blood Donors (RBDs) could ensure a sustained supply of blood. Therefore, it is crucial to have a greater understanding on motivation factors, intention and continuous act of blood donation among young people. The aim of this study is to explore the experience and coping strategy among young blood donors based on the Theory of Planned Behavior. This study applied qualitative approach using in-depth interviews with eight RBDs (four males and four females), aged between 20 and 26 years old, identified amongst university students. The informants were recruited using snowballing technique with purposive criteria as RBD; non-first time donors and have donated more than one time within 12 months after the last donation. Each RBD had donated blood between three to six occasions as overall donations. Findings showed that perceived social support from peers as well as encountering friendly and competent phlebotomists were among the positive experiences associated with blood donation that encouraged donors to continue donating. Negative experiences act as barriers to blood donation and these include encountering certain adverse effects (i.e bruises, dizziness) of donating blood and feeling unappreciated by the phlebotomists. Positive experiences and coping strategies to overcome barriers implemented by the informants have led to a stronger intention to repeat blood donation. This study found that by having positive experiences during donating blood and coping with unpleasant experiences could help to retain the intention to donate blood in the future. Future research suggested is to explore the different types of bonding in social networks among blood donors that lead to the intention to donate blood.

Keywords: Students; young people blood donation; experience; intention

ABSTRAK

Usaha untuk merekrut golongan muda sebagai penderma darah pertama kali dan pengekalannya sebagai Penderma Darah Berkala (PDB) adalah untuk menjamin bekalan darah yang berterusan. Oleh itu, adalah penting untuk memahami faktor motivasi, niat dan tindakan menderma darah secara berterusan di kalangan golongan muda. Kajian ini bertujuan meneroka pengalaman dan strategi daya tindak dalam kalangan penderma darah muda berdasarkan Teori Tingkahlaku Terancang. Kajian ini menggunakan pendekatan kualitatif melalui temu bual mendalam dengan lapan orang PDB yang dikenal pasti dari kalangan pelajar universiti (empat lelaki dan empat perempuan), berusia dalam lingkungan 20 hingga 26 tahun. Informan diperolehi melalui teknik snowballing dengan kriteria sebagai PDB; bukan penderma darah pertama kali dan telah menderma darah lebih dari sekali dalam tempoh 12 bulan sejak pendermaan yang terakhir. Secara keseluruhan, setiap informan telah menderma darah di antara tiga hingga enam kali. Hasil kajian mendapati bahawa penerimaan sokongan sosial daripada rakan sebaya dan bertemu dengan phlebotomists yang peramah serta cekap merupakan antara pengalaman positif yang mendorong kepada pendermaan berterusan. Pengalaman negatif berperanan sebagai halangan untuk pendermaan darah dan ini termasuklah kesan negatif selepas pendermaan (contoh: lebam, pening kepala) serta rasa tidak dihargai oleh phlebotomists. Pengalaman positif dan strategi daya tindak untuk mengatasi halangan semasa menderma yang dilakukan oleh informan telah membawa kepada pengukuhan niat menderma darah pada masa akan datang. Cadangan untuk kajian akan datang ialah meneroka jenis jaringan sosial yang berbeza dalam kalangan penderma darah yang membawa kepada niat untuk menderma darah.

Kata kunci: Pelajar; golongan muda; pendermaan darah; pengalaman; niat

INTRODUCTION

“Homo economicus would not give blood unless he was paid enough money; real-life donors do not reason in this way.”

(Healy 2000)

An efficient strategy for recruitment and retention of voluntary non-remunerated blood donors is crucial in sustaining an adequate supply of blood. Recruitment programmes must deal with feelings of fear towards needles as well as any stigma associated to donating blood. However, the biggest challenge in ensuring an adequate supply of blood is in retaining donors as Repeat Blood Donors (RBDs). Based on the study done by Gonzalez, Sabino, Chen et al. (2008), the RBDs are those who are not the first timers and have donated more than one time within 12 months after the last donation. The RBDs are considered a stable source of blood supply and are cost-effective in terms of data management and campaign promotion (Ringwald, Zimmermann & Eckstein 2010).

Groups of young people have high potential as RBDs. They could provide nearly 40 years of blood donation service to society, assuming they begin to donate in their early 20s until 60 years old. In Malaysia, the blood supply is critical during the festive seasons due to lower response of blood donation as a result from “balik kampung” phenomena (Wooi Seong, Raffael & Ayob 2014). Therefore, by knowing the factors toward a consistent blood donation, it will help the organiser to execute more appropriate planning for targeting young people in blood donation campaign, specifically university students to become RBD.

MOTIVATION FACTORS FOR BLOOD DONATION

The motive for young people to participate in this activity, however, varies. Gaining new experience, pressure from peers and pursuing personal benefits such as free health check-ups were reported as the motivations for first-time donors to try this activity (Bani & Strepparava 2011). When donors involved consistently as a blood donor, they will develop their sense of identity as RBDs (Germain, Glynn, Schreiber et al. 2007). Having an identity as blood donor could increase the likelihood of a consistent donation in the future. In other words, stronger sense as blood donor could lead to a higher probability of repeating the action in the future. In order to motivate them to become a consistent blood donor, one of the factors

is the experience which the donors gained during the donation. Positive experience perceived by the donors during the procedure of blood donation was reported as a motivating factor to continue donating. In a study done by Nguyen, DeVita, Hirschler and Murphy (2010), they found that donors who were satisfied with the process of donating were more likely to continue their involvement in the future. Other motivating factors include having a positive attitude towards blood donation and a high degree of self-confidence (Merav & Lena 2011). Individuals with a positive perception of blood donation might perceived donating blood as an altruistic behavior, a social responsibility, or as a way to show empathic concern to others thus motivates them to donate again (Ferguson, Atsma, De Kort & Veldhuizen 2012; Steele, Schreiber, Guiltinan, Nass, Glynn, Wright & Garratty 2008).

Hence, perceiving positive value and encountering good experiences as a donor strengthen the motivation to donate again in the future.

EXPERIENCES DURING BLOOD DONATION: FACILITATING OR HINDERING FACTORS

Social networks such as peers could provide either as social support or pressure to donate blood (Masser, White, Hyde & Terry 2008; Hanson & France 2009). Social pressure or the perceived feeling to oblige other's expectation is also known as subjective norms. In coherent with Theory of Planned Behavior, subjective norms could be perceived as a motivator to enhance an intention (Ajzen 1991). The more individual perceives that he or she should be performing a behavior base on other's expectation, the stronger the intention will arise.

On the other hand, Bednall and Bove (2011) reported that donors who faced negative experiences, such as adverse reactions from donating blood, were likely to withdraw from future donations. Similarly, Newman, Newman, Ahmad and Roth (2006) who applied an interview approach with donors also found that adverse effects posed as a significant barrier to the intention toward future donations. Their study suggests that adverse reactions during and after blood donations, like fatigue, passing out, paleness of skin or sweating, will reduce the possibility of repeating blood donation in the future, even among experienced donors.

In a local study, Jaafar, Chong, Desa, Alavi and Kam (2018) found that donors' exhibited good

support not only to their nearest networking, such as family members or close friends during blood donation, but also towards other people they hardly knew. The support that the blood donors gave to other people during blood donation campaign helped them to maintain the positive feeling in the donation they made. They perceived this action as their role towards other people in motivating others to do good deeds. People who have voluntaristic behavior feel that they are under an obligation to motivate others to do the same act.

To obtain a clearer picture on the motivations for blood donation among young people that lead to the intention to blood donation, this study applied qualitative method through face-to-face interviews with RBDs in a university setting. Qualitative study using in-depth interview method could help to understand more on the phenomena studied, plus appropriate for content analysis (Bengtsson 2016). The method of qualitative study to explore the motivation of blood donation has been implemented in other researches as well (Toogeh, Mirrezaie, Tabatabaee, Saber, Hojjat-Assari & Shariati 2016; Asmawi, Osman & Norimah Said 2019). Therefore, to have a better understanding on the intention to donate blood, the objective of this study is to explore the motivation factors to donate blood among RBDs at university.

MATERIAL AND METHODS

This study was conducted during a blood-donation campaign at a public institute of higher education. During the blood-donation campaign, donors were given a request form to solicit participation in the study. However, due to the low rate of response from the students approached, a snowballing

technique was applied. Informants that had agreed to participate were requested by the researcher to help identify other RBDs among friends or acquaintances who might be similarly interested to participate in the study. By using snowballing technique in this study, eight RBDs were eventually identified for this study. In this study, the researcher has outline two purposive criteria for the RBDs recruitment; i) RBD has donated more than one time within 12 months after the last donation and ii) university students. The next step was to plan a suitable time and venue for the interviews. Three separate interview sessions were conducted in March 2012, with each interview lasting between 30 and 60 minutes. Discussion topics covered the experiences encountered in donating blood (whether before, during or after donations) and the intention to donate blood in the future. The interview sessions were audio-recorded and transcribed. Informants were given a copy of the transcripts to review in ensuring accuracy. The resulting study data was then analyzed using thematic analysis. To ensure data trustworthiness, the researcher applied both participant and literature review cross-checks.

RESULTS

INFORMANTS' BACKGROUND

This study involved eight Informants, all Malay university students, comprising four men and women respectively. The mean age for the sample was 23 years old (sd: 2.670). Each Informant reported as they have donated between three to six times as overall donations until March 2012. Table 1 below provides a brief description of the participants' profiles.

TABLE 1. Profile of Informants

Informant	Gender	Age	Number of donations	Blood Type
A	Male	20	4	B
B	Male	21	4	O
C	Female	20	3	B
D	Male	22	3	B
E	Male	26	6	B
F	Female	26	5	A
G	Female	23	3	O
H	Female	26	4	A

Utilizing the data from the study, the experiences of the Informants were categorized into two broad themes: i) *Motivation Factors* and ii) *Barriers and Coping Strategy*. Study findings were then discussed in accordance with these themes.

MOTIVATION FACTORS

The study showed that informants' positive experiences associated with blood donations, were motivation to repeat the act. Those positive experiences reported by the informants, are as follows:

Positive Feelings Arising from Donating Over the interview, several informants reported positive feelings arising from donating blood as indications of positive experiences. They related such feelings to actions that associated with the feeling of rewarding.

Informant E associated feelings of wellness and good health with donating blood:

I feel happy. Because when our blood was drawn, it feels like something new is injected into my body. For me the replenishment of blood inside me creates a positive feeling of increased health. In addition to feeling healthier there is the happiness from having donated. I do enjoy the experience of donating.

(Informant E, male, 26 y/o)

As for Informant H, she reported the feeling of satisfaction in donating her blood as she looks that act as a form of helping others:

When I donate, I feel satisfied. It's because I get to help people with sincerity.

(Informant H, female, 26 y/o)

These findings lend support to the point of view from previous researchers that by doing helpful activities, this act can influence people's emotions thus improve the performance of individual's well-being (Biringer, Davidson, Sundfor, et al. 2016); Ah, Omar & Azman, 2017). Whereas in the context of blood donation, Jaafar, Chong and Alavi (2017) reported that feeling of satisfaction in performing blood donation leads to positive experiences in this action. In this study, the respondents reported positive feeling due to the helping behavior through blood donation.

Networking with Peers. By having positive networking with peers that involved in any prosocial

behavior, this condition could result in a higher likelihood of doing the same activity with others (Esteve, Urbig, Van Witteloostuijn & Boyne 2016). This is because they may share similarity in interest among them, thus leads to the involvement in the same activity. A network of peers could be seen as a source of positive social pressure, through social support which may motivates one towards particular acts of volunteerism, such as blood donation (Saha & Chandra 2018). For the informants in this study, having friends who are not a blood donor could also be helpful during the donation. Thus this situation suggests that by having a network of supportive peers could be a good coping strategy to overcome the unpleasant feeling during blood donation.

It feels fun when surrounded by friends. We laugh and look to each other while donating blood. Yeah, it's a good feeling, that support, I mean.

(Informant D, male, 22 y/o)

Informant F too reported receiving the support of friends, both donors and non-donors as a good support to her during the entire process in blood donation:

We attended the campaigns and signed up. Some of the girls in our group were not donors, you know, but they were with us during the whole process. Donating in the company of these friends engendered a shared good spirit.

(Informant F, female, 26 y/o)

In this study, in addition to receiving support, providing support to peers during blood donations also constituted positive experiences for the informants. According to Informant C:

I once donated with my friend Liena, who was donating for her first time. She was afraid and wanted to sit next to me. I helped her. Her hands were cold so she held my hand. She said 'I'm afraid.' I said, 'It's alright, just relax.' After donating, I asked her, 'How was it? Was it ok?' She said, 'Ok.' 'Was it fun?' I asked her. 'It was' she said. After that I asked 'You want to do it again in the future?' She said yes. That's why I feel like I was providing her support.

(Informant C, female, 20 y/o)

These findings illustrate the emotional support experienced by informants within their respective social networks, in the form of actions and words. Not only that, informants also shared that they receive support from their networks by having companionship during blood donations. These supports were perceived by the informants of both genders, with both male and female donors

being positively influenced by peer support which prompted them to donate again.

Crowd Effect During Blood-Donation Campaigns. Crowd effect such as large numbers of people being present was also reported to have influence on the experience of blood donation among the informants. Informant D, E and F stated that the presence of a crowd during the campaign was somehow motivated them to participate as blood donor during that time. In other words, these informants were motivated to donate blood during the campaign held in the campus as they witness other blood donors in the event. For Informant E:

To me, my biggest influence is when I see a lot of other people donating. As a result, I too feel compelled to donate. Every time I see a crowd of people at a blood donation campaign, there is an urge to join in.

(Informant E, male, 26 y/o)

The presence of a crowd during the blood donation campaign as mentioned by the informants suggested that they felt other people have the same interest as they do, which is donating blood. This led to the positive feeling to join the crowd and did their part as blood donors.

Positive Experience with Phlebotomist. According to Informant E, having an experienced and skillful phlebotomist performs the procedure successfully enhances the donation experience. Informant E felt lucky that the procedure was performed by skilled and competent phlebotomists, unlike the experiences of other friends:

In all of my donations, the nurses assigned to me were pros; they easily found the vein in my arm. I only had to pump my fist for around 10 minutes, each time, to fill the bag. So I really didn't have any bad experiences during the procedures. It was different with my friends who had to deal with more junior and less skilled nurses, the ones that lacked experience in getting the right vein.

(Informant E, male, 26 y/o)

Based on the information by the informant, skillful phlebotomist could bring a positive experience to the blood donors. Other informants, however, shared that their positive experiences were related with a pleasant looking phlebotomist. For example, Informant A mentioned that his motivation to donate blood during the campaign was derived by the physical appearance of the phlebotomist. He admitted that this factor could be the motivating factor for him to donate blood:

I feel kind of attracted to the activity because the nurses are pretty, you know. That drives me to donate blood.

(Informant A, male, 20 y/o)

Based on the information provided by the informants, positive experience during blood donation could also be gained from the phlebotomist factor. It is suggested that a skillful phlebotomist could help to increase the positive experience for the blood donors. Feeling of anxiety, nervousness and worries are some of the common emotion face by the donors before donating blood. These emotions are also being reported as a common feeling among the RBDs (Wong, Chu & Lau, et al. 2018). Hence, it is crucial to have a skillful phlebotomist to ease the unpleasant situation during the procedure, especially for young donors.

BARRIERS AND COPING STRATEGY

Adverse Reactions. When informants were asked about obstacles to blood donation, most of them stated feeling fearful or anxious of the potential adverse reactions, each time they donate. These adverse reactions to donating blood, which potentially occur during or shortly after whole-blood donation, include dizziness, sweating, sudden weakness, hypotension or even fainting. In some cases, the sight of bags of blood, needles or other donors encountering adverse reactions might be an obstacle for future donations (France, France, Frame-Brown, Venable & Menitove, 2016).

In this study, Informants B, E and F reported they are facing unpleasant experiencing such adverse reactions of blood donation. For example, Informant B stated that:

I was afraid every time I wanted to donate blood. I can't say it was not present (the feeling). I was afraid of many things that might go wrong- passing out, vomiting. I didn't know what to expect. I tried as quickly as possible to regain my calm, to relax and donate and told myself that my fears were only in my mind."

(Informant B, male, 21 y/o)

For Informant C, every time she donated blood, she recalled having seen in the past some donors fainting and vomiting after donating, which gave rise to feelings of fear and anxiety. She stated:

I felt worried. Will it hurt? Because after donating blood, some people passed out, so, I was afraid. How will this go? What will happen to me? What should I do if it happens? Maybe I'll grab my friend's hand, hold her tight.

(Informant C, female, 20 y/o)

On the other hand, Informant E reported that though he experienced negative reactions after donating blood, that situation was merely natural reactions of his body to having donated:

That day, shortly after donating, I went to the mosque for Friday prayers. After praying, I did feel a bit dizzy. So after I got back home I just took a little rest. After that I ate some liver to help produce more hemoglobin in my body. It was nothing much. I know that it is usual for a donor to feel that. I know that I just need a good rest after donating. I know my body.

(Informant E, male, 26 y/o)

In this interview, even though the informants are repeated donors and regardless of their gender, they did share their feelings of nervousness, anxieties and worries during the procedure. The feelings did not differ from the first timer or novice blood donors. As mentioned by Merz, Ferguson and van Dongen (2018) experienced donors did encounter the same feeling as the novice donors during the execution of the procedure to donate blood. However, by having number of experiences dealing with the negative feelings, they have developed their own coping strategies (i.e being tolerance and be calm).

Negative Experience with Phlebotomist. Some informants described their unfortunate experiences with phlebotomists who had difficulty finding and accessing appropriate veins. In some cases, informants experienced multiple needle pricks.

For Informants E, F, G and H, these negative experiences were described through words such as “tragedy”, “worst procedure ever” and “tragic”. Informant F recounted:

The nurse had trouble finding the correct blood vessel. She tried one arm first and failing, she tried the other. My arm got bruised. It didn't heal even after a week. All because she didn't find the right blood vessel. They were supposed to find the correct blood vessel and not cause us undue trouble.

(Informant F, female, 26 y/o)

Informant H exercised tolerance in dealing with her particular experience:

I faced a tragic experience with this blood donation. Before this I have never felt any pain after the injection, but for the first time recently, I felt that the needle didn't enter at the correct spot and I could feel it in my epidermis. Maybe the staff was new, so she didn't really know how to handle the donation procedure. Even though I felt the pain, I tried to tolerate the situation.

(Informant H, female, 26 y/o)

Based on the information given by the informant, being tolerant with staff during the procedure could

serve as one of the coping strategy. Informant H mentioned that she tried to be tolerant with the condition she faced.

In this study, there are some informants reporting that they received unfriendly treatment from phlebotomists. For example, Informant A, recounted cold facial expressions that he received from the phlebotomist, which he perceived as demotivating:

We wanted to donate blood, so when we got that kind of treatment from the nurse, we felt sad and we also felt a little disappointed.

(Informant A, male, 20 y/o)

Despite that, Informant A did not share any adjustments he might have made to overcome the disappointment. Previous study has reported that a pleasant manner, a caring attitude and appropriate facial expressions from the phlebotomist can strengthen the intention to donate again among the donors (Waller, Mondy, Brama, et al. 2016). Encountering unpleasant situation during the donation, however could weaken the intention to donate in the future.

INTENTION TOWARDS DONATING BLOOD

The Theory of Planned Behavior (TPB) is a theory that relates motivating factors (attitude, subjective norms and perceived behavior control) towards the intention, thus lead to a performance of an action (Ajzen, 1991). According to this theory, intention leads to actual action and it is motivated by three factors, which are attitude, perceived behavioral control and subjective norms. Respectively, if a person perceives the act of donating blood as good and feels capable of controlling the situation, as well as driven by social pressure from the networks to perform the act, the intention to donate will be stronger. The stronger the intention to donate, the greater the probability of a person to do it. RBDs in this study reported as having a positive perception towards blood donations, having control over obstacles and receiving support. Other studies reported that by having good experiences donating blood, underlying positive attitudes were further strengthened, significantly increasing the intention to donate again in the future (Muhammad, Halain, Geok & Soh, 2018; Merz, Ferguson & van Dongen, 2018).

The intention to donate in the future was shown by these informants, through phrases such as “*continue to do so*”, “*I can do it*” and “*will donate*

again". Positive attitudes were shown by all the informants to continue donating. Even though some RBDs experienced discomfort during donations, it was not something they considered significant enough to alter their intention to donate in the future.

Figure 1. illustrates motivation and barrier factors identified from the interviews conducted, to donating blood:

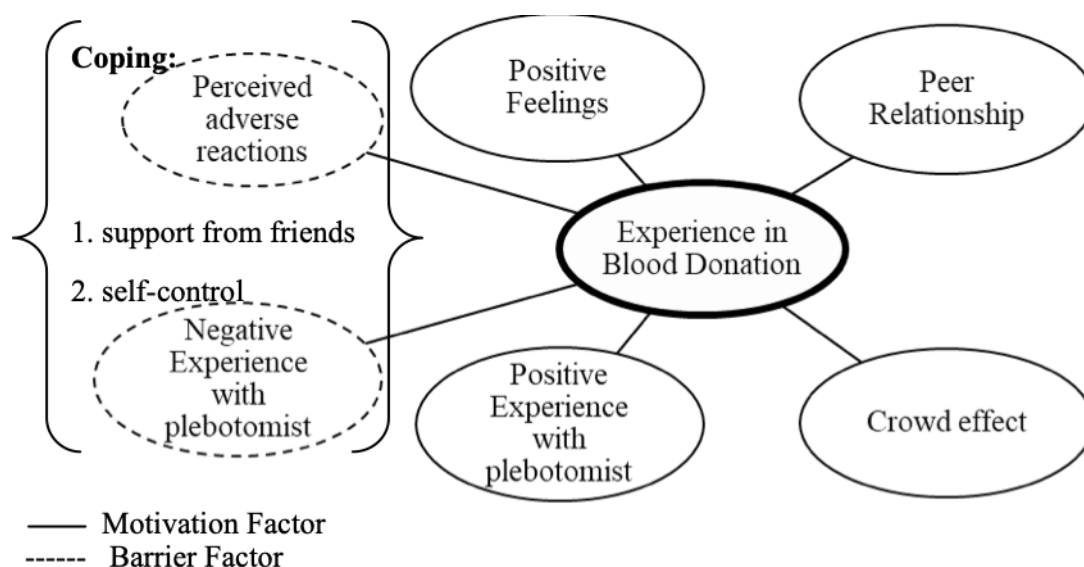


FIGURE 1. Motivation and Barrier Factors in Donating Blood

DISCUSSION

Experiences play a crucial factor in determining future donation. This aspect has been reported in previous studies to have significant contribution to the intention to donate blood in the future (Jaafar, Chong & Alavi 2017; Gilchrist, Masser, Horsley & Ditto, 2019). Negative experience such as facing a problem during the procedure could also be faced by either experienced or novice donors. In this present study, our RBDs reported facing unpleasant experience during the procedure and after the blood donation (i.e tiredness, dizzy). For these experienced donors, they understand these situations were caused by the donation as well as their busy lifestyle as university students. Thus these conditions lead them to exhibit extra care for themselves after the donation.

One of the interesting findings in this study shared by the informants is the influence from the donors networking. In this study, the networks among RBDs do not necessarily reflect similar interest or behavior among the members. The RBDs reported that they received good support from their blood donor buddies, as well as the non-donors. The RBDs with strong support from their networks exhibit positive experience during the procedure. These positive experiences are then being transformed into a drive that strengthens the intention to donate blood among the RBDs.

In this study we found that having a consistent involvement in blood donation were shown by the RBDs. Since blood donation is one of the most frequent program held in local universities, students are exposed to higher possibilities to be involved. At such, when students are involved in blood donation, it is most likely to be known by the other peers in their networking (lecturers, peers or family members). The situation will eventually lead to the perception that they (the blood donors) need to maintain their involvement as blood donors. This is because involvement in this activity will reflect a heroic image to the other people (Finck, Ziman, Hoffman, Phan-Tang & Yuan 2016). Hence, to maintain the positive image, donors will have to maintain their involvement in blood donation. In the same way, this study involves young blood donors in their 20s, there is a likely similar motivation of peer acceptance. Social image is significant for young people in terms of their relationship with other people (Kataria & Regner, 2012). At institutes of higher education, involvement in voluntary activities is related with positive image as university students. This positive image could affect their self-esteem in dealing with the society.

Based on the findings, it is important for the blood campaign organizer to use social networks of young people to recruit new blood donors. By using social networks that work through social media it

could attract more young people to participate in this activity. In this study, it was reported that the RBDs were motivated to donate and successfully carried out the procedure when they received strong support from the others, not only from blood donors but the other counterparts as well. For those who succeed in donating blood, organizer should highlight their achievements such as recorded success stories of them and use social media such as Twitter, Facebook or Instagram as a platform to spread the information. The effectiveness of using social media such as Facebook in spreading messages to other people has been reported in previous study (Shaari, & Sannusi, 2017; Kalaisilven, & Sukimi, 2019). For youth, technology has become parts of their life. Therefore organizer of any volunteer-based activities could use social media as a medium to engage with them. Other than that, the finding also highlights that regardless of the type of experience faced by the donors, the RBDs have a strong intention to donate again in the future. In other words, RBDs in our study showed that they will donate again in the future despite the unpleasant experiences they faced. Nevertheless, it should be noted that these RBDs are the experienced donors and could anticipate the negative effects after the donation. These RBDs apply their own coping strategies such as being calmer, relax themselves and change their mindset from negative to positive. Therefore, it is recommended that information on self-care for donors, especially novice blood donors to be delivered to those who come for blood donation. In Malaysia, it is a practice by the National Blood Centre to give successful blood donors a non-monetary gift as the token of appreciation (usually a packet of biscuits and certificate of appreciation). Based on this study, organizer of blood campaign could provide a brochure about coping strategies after the blood donation procedure along with the appreciation pack for the donors. For some donors, they might experience adverse reactions such as bruise or sore on arm, thus will lead to the feeling of anxiety (Chell, Waller & Masser, 2016). This situation could lead the donors to perceive this situation as negative experience especially novice, hence demotivate them to continue their donation. Therefore, knowledge on self-care after the blood donation should be disseminate to the donors to help them in preparing themselves after the donation. This could also be perceived as an acknowledgement of the donors for their altruism behavior.

This study has two limitations. Firstly, the researchers gained the data from a snowballing approach. The data were gathered from a blood donation campaign held at a local institution of higher education. Therefore, the findings cannot be generalized to overall blood-donors among university students. Finally, data collected came from a single race; the Malays. Findings may differ if it involves multi-racial blood donors. Nevertheless, in spite of the limitations, this study has highlighted factors that lead to strengthening the intention to donate blood among RBDs; donors' experiences and positive social support from the networks of young blood donors. Future research could explore more on the type of bonding in different networks among young blood donors to help to understand more on motivating factors towards the intention. Other than that, future research could explore more on how networks could influence the experience of donors through factors in TPB, which are attitude, subjective norms and perceived behavior control. The findings could help to provide a clearer picture on the motivation to maintain an intention for future blood donation among young people.

ACKNOWLEDGEMENTS

The authors wish to thank the National Blood Centre (NBC), Kuala Lumpur, Malaysia; the National University of Malaysia and the participants of this study for their contributions to the research.

ETHICAL APPROVAL

This research was conducted under the permission granted by the ethical board of the Malaysian Ministry of Health (NMRR 12-863-13361).

FUNDING

This research was funded by The Young Scholar Fund of the National University of Malaysia (GGPM 2013-013).

COMPETING INTEREST

None declared.

REFERENCES

- Ah, S. H. A. B., Omar, N., & Azman, Z. 2017. Penyertaan sosial dan indeks kesejahteraan sosial subjektif kanak-kanak miskin di Malaysia. *Akademika* 87(2): 105-118.
- Ajzen, I. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50(2):179-211.
- Asmawi, U. M. M., Osman, M., & Norimah Said, M. M. 2019. Barriers for blood donation in non-blood donors: A qualitative study. *Environment-Behaviour Proceedings Journal* 4(10): 59-64.
- Bani, M., & Strepparava, M. G. 2011. Motivation in Italian whole blood donors and the role of commitment. *Psychology, Health & Medicine* 16(6): 641-649.
- Bednall, T. C. & Bove, L. L. 2011. Donating blood: a meta-analytic review of self-reported motivators and deterrents. *Transfusion Medicine Reviews* 25(4): 317-334.
- Bengtsson, M. 2016. How to plan and perform a qualitative study using content analysis. *NursingPlus Open* 2: 8-14.
- Biringer, E., Davidson, L., Sundf r, B., Lier, H.  . & Borg, M. 2016. Coping with mental health issues: subjective experiences of self-help and helpful contextual factors at the start of mental health treatment. *Journal of Mental Health* 25(1): 23-27.
- Chell, K., Waller, D. & Masser, B. 2016. The blood donor anxiety scale: a six item state anxiety measure based on the spielberger state trait anxiety inventory. *Transfusion* 56(6pt2): 1645-1653.
- Esteve, M., Urbig, D., Van Witteloostuijn, A. & Boyne, G. 2016. Prosocial behavior and public service motivation. *Public Administration Review* 76(1): 177-187.
- Ferguson, E., Atsma, F., De Kort, W., & Veldhuizen, I. 2012. Exploring the pattern of blood donor beliefs in first-time, novice, and experienced donors: differentiating reluctant altruism, pure altruism, impure altruism, and warm glow. *Transfusion* 52(2): 343-355.
- France, C. R., France, J. L., Frame Brown, T. A., Venable, G. A. & Menitove, J. E. 2016. Fear of blood draw and total draw time combine to predict vasovagal reactions among whole blood donors. *Transfusion* 56(1): 179-185.
- Finck, R., Ziman, A., Hoffman, M., Phan-Tang, M. & Yuan, S. 2016. Motivating factors and potential deterrents to blood donation in high school aged blood donors. *Journal of Blood Transfusion* 2016:1-8.
- Gilchrist, P. T., Masser, B. M., Horsley, K. & Ditto, B. 2019. Predicting blood donation intention: the importance of fear. *Transfusion* 59(12) :3666-3673.
- Gonzalez, T. T., Sabino, E. C., Chen, S., Salles, N. A., Chamone, D. A., McFarland, W. & Murphy, E. L. 2008. Knowledge, attitudes and motivations among blood donors in Sao Paulo, Brazil. *AIDS and Behavior* 12(1): 39.
- Germain, M., Glynn, S. A., Schreiber, G. B., G linas, S., King, M., Jones, M. & Tu, Y. 2007. Determinants of return behavior: a comparison of current and lapsed donors. *Transfusion* 47(10): 1862-1870.
- Hanson, S. A., & France, C. R. 2009. Social support attenuates presyncopal reactions to blood donation. *Transfusion* 49(5): 843-850.
- Healy, K. 2000. Embedded altruism: blood collection regimes and the European Union's donor population. *American Journal of Sociology* 105(6): 1633-1657.
- Jaafar, J. R., Chong, S. T. & Alavi, K. 2017. Experience as factors associated with repeat blood donation among university students in Malaysia. *Southeast Asian Journal of Tropical Medicine and Public Health* 48(5): 1118-1126.
- Jaafar, J. R., & Chong, S. T. 2018. Sikap terhadap niat menderma darah dalam kalangan penderma darah bersela dan ulangan berkala. *Akademika* 88(2): 135-146.
- Kalaisilven, S. & Sukimi, F. 2019. Kawalan ibu bapa terhadap anak-anak dalam penggunaan media sosial. *Akademika* 89(1): 111-124.
- Kataria, M. & Regner, T. 2015. Honestly, why are you donating money to charity? An experimental study about self-awareness in status-seeking behavior. *Theory and Decision* 79(3): 493-515.
- Masser, B. M., White, K. M., Hyde, M. K. & Terry, D. J. 2008. The psychology of blood donation: Current research and future directions. *Transfusion Medicine Reviews* 22(3): 215-233.
- Merav, B. N. & Lena, G. 2011. Investigating the factors affecting blood donation among Israelis. *International Emergency Nursing* 19(1): 37-43.
- Merz, E. M., Ferguson, E. & van Dongen, A. 2018. Psychosocial characteristics of blood donors influence their voluntary nonmedical lapse. *Transfusion* 58(11): 2596-2603.
- Muhammad, S., Halain, A. A., Geok, K. & Soh, K. 2018. Knowledge, attitude and practice of blood donation among undergraduate students in a public university Malaysia. *International Journal of Pharmaceutical Research* 10(4): 47-52.
- Newman, B. H., Newman, D. T., Ahmad, R., & Roth, A. J. 2006. The effect of whole-blood donor adverse events on blood donor return rates. *Transfusion* 46(8): 1374-1379.
- Nguyen, D. D., DeVita, D. A., Hirschler, N. V., & Murphy, E. L. 2008. Blood donor satisfaction and intention of future donation. *Transfusion* 48(4): 742-748.
- Ringwald, J., Zimmermann, R. & Eckstein, R. 2010. Keys to open the door for blood donors to return. *Transfusion Medicine Reviews* 24(4): 295-304.

- Saha, S. & Chandra, B. 2018. Understanding the underlying motives and intention among Indian blood donors towards voluntary blood donation: A cross-sectional study. *Transfusion Clinique et Biologique* 25(2): 109-117.
- Shaari, A. H. & Sannusi, S. N. 2017. Power, dominance and homosocial solidarity in young men's cyber talk. *Akademika* 87(1):327-342.
- Steele, W. R., Schreiber, G. B., Gultinan, A., Nass, C., Glynn, S. A., Wright, D. J. & Garratty, G. 2008. The role of altruistic behavior, empathetic concern, and social responsibility motivation in blood donation behavior. *Transfusion* 48(1): 43-54.
- Toogeh, G., Mirrezaie, S. M., Tabatabaee, S. M., Saber, H. R., Hojjat-Assari, S. & Shariati, M. 2016. Women's blood donation: A qualitative study exploring the reasons for non-donation of blood among female staff at tehran blood transfusion center. *International Journal of Health Studies* 1(3): 24-28.
- Waller, D., Mondy, P., Brama, T., Fisher, J., King, A., Malkov, K. & Irving, D. O. 2016. Determining the effect of vein visualization technology on donation success, vasovagal symptoms, anxiety and intention to redonate in whole blood donors aged 18–30 years: A randomized controlled trial. *Vox Sanguinis* 111(2): 135-143.
- Wong, H. K., Chu, C. C. Y., Lau, C. W., Leung, J. N. S., Lee, I. Y. M. & Lee, C. K. 2018. Vasovagal reaction in blood donors: prediction and its impact on donor return. *ISBT Science Series* 13(4): 421-428.
- Wooi Seong, K., Raffael, V. & Ayob, Y. 2014. Adopting a proactive approach to blood shortages: experience from the National Blood Centre, Malaysia. *ISBT Science Series* 9(1): 189-192.
- Juliana Rosmidah Jaafar (Corresponding Author)
Centre for Foundation and General Studies
Infrastructure University Kuala Lumpur (IUKL)
Unipark Suria, Jalan Ikram-Uniten
43300 Kajang Selangor Darul Ehsan
Malaysia
Email: juliana.rosmidah@gmail.com
- Sheau Tsuey Chong,
Pusat Penyelidikan Psikologi dan Kesejahteraan Manusia
Fakulti Sains Sosial dan Kemanusiaan
Universiti Kebangsaan Malaysia UKM
43600 Bangi Malaysia
Email: stchong@ukm.edu.my
- Khadijah Alavi,
Pusat Penyelidikan Psikologi dan Kesejahteraan Manusia
Fakulti Sains Sosial dan Kemanusiaan
Universiti Kebangsaan Malaysia UKM
43600 Bangi Malaysia
Email: khadijah@ukm.edu.my
- Wooi-Seong Kam
Blood Services Group
Health Sciences Authority
Singapore
Email: kws78@yahoo.com

Received: 21 March 2017

Accepted: 18 May 2020