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Is removing blood donation barriers a donation facilitator?
Australian African migrants’ view
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Abstract
Purpose – The aim of this study was to assess whether the removal of blood donation “barriers” facilitates blood donation intentions, using a sample of African migrants, and to identify the implications for social marketing. African migrants are currently under-represented as blood donors in Australia. Some members of the African community have unique donation needs that can only be served by this community.

Design/methodology/approach – Interviews were conducted with 425 people from the African community in Victoria and South Australia. Factor analysis was performed on the barriers and the removal of barriers. Item groupings for both constructs differed, suggesting that barriers and their removal are not necessarily opposite constructs.

Findings – The cultural society factor was negatively associated with blood donation intention (i.e. a barrier), whereas engagement and overcoming fear were positively associated with blood donation intention (i.e. facilitators). Cultural issues and lack of understanding were not seen to impede blood donation. Additionally, the removal of cultural barriers did not facilitate increases in blood donation intentions. Thus, the removal of barriers may not be sufficient on their own to encourage donation.

Research limitations/implications – This only examines the issue with regards to whether the removal of barriers is a facilitator of blood donation with one group of migrants, and relationships may vary across other migrant and non-migrant groups.

Practical implications – Policymakers often use social marketing interventions to overcome barriers as a way of facilitating blood donation. This research suggests that removing barriers is indeed
important because these barriers impede people considering becoming blood donors. However, the findings also suggest that the removal of barriers is insufficient on its own to motivate blood donations (i.e. the removal of barriers is a hygiene factor). If this is the case, social marketing campaigns need to be multifaceted, removing barriers as well as leveraging facilitators, simultaneously.

**Social implications**
This work identified that the impact of barriers and their removal may facilitate effective social marketing campaigns in differing ways, in the context of blood donation.

**Originality/value**
How barriers and their removal impact social marketing activities (i.e. blood donation behaviour) has generally not been explored in research.

**Keywords**
Facilitators, Social marketing, Consumer attitudes, Blood donation, Removal of barriers, Motivate blood donations

**Paper type**
Research paper

**Introduction**
Social marketing seeks to encourage people to engage in behaviour change in a way that brings about a positive societal outcome (Kotler and Zaltman, 1971). Many of the initiatives seek to motivate people to undertake individual actions that they might not normally do, such as recycling, increasing exercise, stop smoking and agreeing to donate organs after their death. It is argued by Rothschild (1999) that this requires consumers to have motivations to act, ability to undertake the behaviour and opportunity to undertake the behaviour, and that these three factors interact. Having a motivation to undertake an action is a critical component in behaviour change. However, there may be individual or intuitional barriers to making these changes (Wymer, 2011). In many cases, social marketing interventions seek to remove these barriers. For example, having local municipalities weekly collect recycling materials was initially designed to make recycling easier for consumers (Shrum et al., 1994) and increase their opportunity to recycle. Increasing consumers’ ability or opportunity, however, may not necessarily increase behaviour; rather, the lack of these may simply serve as an impediment to behaviour change. This paper seeks to examine how consumers view a barrier and its removal. That is, is the removal of a barrier sufficient to increase behaviour or is the removal a requirement to allow consumers to consider undertaking the behaviour, thereby making the removal of the barrier a hygiene factor (i.e. necessary to facilitate behaviour change). Should this be the case, then social marketers need to focus on a broader set of engagements to facilitate desired behaviour change (Rothschild, 1999).

This study examines barriers and their removal in the context of blood donation within one Australian migrant community and discusses the implications for social marketing of encouraging blood donations identified previously (Beerli-Palacio and Martín-Santana, 2009; Holdershaw et al., 2011; Kidwell and Jewell, 2003). Migrant participation in blood donation is important, as Australia is a highly multi-cultural community with more than 40 per cent of people either being born or having a parent born overseas (Australian Bureau of Statistics, 2012-2103). Minority populations have been found to be under-represented in blood donation in Australia, Germany, United Kingdom, America (Flood et al., 2006; Shaz, and
Hillyer, 2010; Boenigk et al., 2014; Lattimore et al., 2014). Increasing diversity of the donor pool is important for supplying the needs of people who have diseases that require frequent blood transfusions, such as sickle cell disease and thalassaemia, within the African community. Having targeted blood transfusions reduces the probability that people will become sensitised to blood types which sometimes occurs as a result of multiple transfusions (MIMI Project, 2013) and is improved if the recipient and donor are from the same racial background (Yazdanbakhsh et al., 2012). Globally, it is, therefore, important to have a diverse range of donors allowing for matched transfusions, including minority and migrant groups (MIMI Project, 2013; Boenigk et al., 2014). Given that Australia wants to be self-sufficient with regards to meeting its blood needs (Flood et al., 2006), it is important to increase participation from migrants within South-East Asia, the Middle East and Africa, which are growing populations in Australia but are under-represented in the donor pool (Francis et al., 2015). Of course, any strategy that can increase the participation in the blood donation process, more generally, would be equally important.

The objective of this study is to assess whether the removal of blood donation “barriers” facilitates blood donation intentions, using a sample of African migrants, and to identify the implications for social marketing. The context being explored is that of blood donation intentions within the African migrant community in Australia. The paper discusses the implications of the results for effective social marketing more widely.

**Migrants and blood donation**

As was identified above, having migrant participation in blood donation is important for the effective operation of the health system, in particular, ensuring any unique needs of migrant communities can be met (MIMI Project, 2013; Boenigk et al., 2014). Blood donation has been examined by a range of marketing (Bagozzi, 1981) and social marketing scholars (Beerli-Palacio and Martín-Santana, 2009; Holdershaw et al., 2011; Kidwell and Jewell, 2003). From a social marketing perspective, having migrants participate in activities such as blood donation has a range of additional secondary benefits such as facilitating social capital and social inclusion (Alessandrini et al., 2007, Polonsky et al., 2011a), which is very important for migrant communities (Grassineau et al., 2007). However, in some countries such as Australia, African migrants have reported that they have experienced discrimination within social and commercial activities, which impedes their social inclusion and, in turn, may negatively affect their blood donation behaviours (Polonsky et al., 2011a). Many studies have investigated the barriers and facilitators that inhibit and encourage blood donation (Bednall and Bove, 2011). Studies in this area are varied in their methodological approaches, terminology of constructs, contexts (e.g. whole blood, plasma, platelets) and participants (e.g. new, lapsed, deferred or repeat), which makes comparing and summarising the research difficult. For example, barriers and facilitators can be quite different, depending on a person’s donation career (Masser et al., 2008; Bednall and Bove, 2011); hence, knowing whether the study sample consists of first-time donors, repeat donors, non-donors, lapsed or deferred donors is important. This is, of course, made even more complex when exploring blood donation globally, as there may be different institutional, cultural or historical factors that impact the blood donation process in a given country, limiting the ability to extrapolate results across studies and countries.

Bednall and Bove (2011) conducted a meta-analysis of factors acting as barriers and facilitators of blood donation and blood donation intentions. They classified factors that they identified with a similar meaning and identified ten deterrent categories – low self-efficacy, low involvement, inconvenient, lack of knowledge, insufficient incentives, lack of
marketing communications, negative service staff, fear and negative attitudes, personal values and norms. They also identified ten factors that facilitate blood donation – convenience, pro-social motivations, personal values, reputation of collection agency, perceived need, indirect reciprocity, intrinsic motivation, social norms, incentives and marketing communications. Many of the barriers and facilitators identified are similar to those reported earlier reviews of the blood donation literature in 1977 by Oswalt (1977) and Piliavin (1990) and, thus, seem to be recognised as being important within the literature. Bednall and Bove’s (2011) review found that barriers were less significant in impacting behaviour and intentions across studies than facilitators. The deterrent of low self-efficacy was most commonly reported in the studies they reviewed, with commitments from work or home being barriers. Other deterrents included low involvement (donation not top of mind), inconvenience (restrictive opening hours), lack of marketing communications (lack of reminders to donate), incentives (either not wanted or not sufficient) and fear. Bednall and Bove (2011) identify that simply because a barrier or facilitator is more frequently studied does not necessarily mean that empirically, it has a greater influence on intentions and behaviour than other less studied factors. Nor does this indicate whether with the removal of deterrents, people would be more likely to donate blood, which is the focus of the research in this paper. However, the fact that several of the issues identified were suggested as being a barrier for blood donation, where the removal of these issues was examined as a facilitator. For example, lack of convenience was a barrier, and convenience was a facilitator; lack of marketing was a barrier, and effective marketing was a facilitator. Thus, it could be inferred that the removal of barriers would seem to increase behaviour, although this was not explicitly tested in previous research.

It has been suggested that cultural variations with regards to blood donation intentions and motivations may exist (Boenigk et al., 2014; Glynn et al., 2003; Grassineau et al., 2007; Polonsky et al., 2011a; Tran et al., 2012). For example, Tran et al. (2012) undertook 33 interviews with members of the black community in Canada, including donors, leaders and blood agency personnel. They identified that trust (regarding authorities and medical profession) was a barrier for donation, with informants believing their blood is not wanted. Facilitators for donation included awareness about sickle cell anaemia and how blood donation is important. Similarly, Polonsky et al. (2011b) used a qualitative approach with nine focus groups of African migrants in Australia and found a range of factors that impeded donation including their perception that African migrants’ blood would not be wanted by the majority of locals. Boenigk et al. (2014) examined a large panel of secondary data of over 11,000 German blood donors of whom 1,726 had migrant backgrounds. They found that demographic factors did not influence donation behaviour, including religion. The three factors that were found to positively influence migrant donation behaviour were “trusting others”, regular use of Internet and an ability to speak German. Grassineau et al. (2007) researched African migrants in France and found a range of barriers and facilitators of blood donation behaviour. They found that there were misconceptions about the blood donation process including concerns regarding potential sale of blood, understanding the fate of the blood, the policy of Islam concerning donation, fear of discovering illness and potential of catching a disease. None of these authors investigated the impact of the removal of barriers with regard to intent to donate blood, although several authors were involved in targeted social marketing intervention to increase levels of blood donation within the various communities.
**Facilitating behaviour change**

As was identified earlier, social marketing frequently targets both barriers and facilitators when seeking to bring about behaviour change (Wymer, 2011). The role of barriers is important when considering models for behaviour change, and social marketing frequently seeks to “remove as many of these barriers as possible” (McKenzie-Mohr, 2013, p. 9) that prevent people engaging in the targeted activity (Wymer, 2011). There are a number of behaviour change models which include factors such as “perceived behavioural control” (theory of planned behaviour) and self-efficacy (social cognitive theory), which refer to the confidence a person has, that they can perform a given behaviour. Within Rothschild’s (1999) motivation opportunity and ability perspective to social marketing, self-efficacy and perceived behavioural control could relate to an individual’s perception of their ability to undertake a given behaviour, although this could also interact with individual’s perception that they have the opportunity to engage in the targeted activity (i.e. if there is not a blood donation centre available in the person’s area, an eligible potential donor still cannot give). Thus, social marketing activities that remove real or perceived barriers should allow people to undertake the targeted behaviours (McKenzie-Mohr, 2013; Wymer, 2011) but may still not be sufficient to encourage people to donate (i.e. not all eligible potential donors who have access to a donation centre will donate).

The impact of barriers and their removal can also be examined with regard to other factors in behaviour change models, such as their subjective norm (i.e. a view that others in their peer group view the behaviour positively). Given minority groups are low in participation with regard to blood donation, it is likely that potential donors do not have a high perceived subjective norm with regards to donating blood, although Polonsky et al. (2011a) found that African migrants were positively disposed to donate blood. Hence, if ones perceived subjective norm is a barrier and it was removed (i.e. people believed their community valued blood donation), this should increase the likelihood of behaviour change.

To develop a successful social marketing campaign, it is important to address barriers at the individual and structural level (Wymer, 2011, McKenzie-Mohr and Schultz, 2014) that prevent them from engaging in a given behaviour (in this case, blood donation). However, if facilitating factors are increased, but barriers are not addressed, then the social marketing activities may not yield any positive behaviour change, and the same would apply in instances where barriers are removed but facilitating factors are not increased (McKenzie-Mohr and Schultz, 2014).

The existence of one issue has been found to constitute a barrier in some studies, but the lack of this barrier (or the opposite condition) has been considered a facilitator (Bednall and Bove, 2011; Wagner and Manolis, 2012; Ngoma et al., 2013). For example, although fear has been shown to be a significant barrier to give blood for some potential donors (Wagner and Manolis, 2012), other studies have suggested that donation intentions and behaviour will increase if individuals can overcome their fear associated with donating blood (Ngoma et al., 2013). Within the wider research on motivations (i.e. acting to facilitate behaviour), researchers have identified that the lack of a barrier does not necessarily act as a motivator, but rather, the existence may be a hygiene factor (Ewen et al., 1966). The concept of hygiene factor is that something that needs to exist for a response to occur, but the factor is not sufficient on its own to facilitate that behaviour. As Rothschild (1999) suggested, people need to have the opportunity to undertake a given behaviour, and as such, the removal of a
barrier may serve as this opportunity, but the people still need to have the motivation and ability to participate as well. The current study examines whether the removal of blood donation “barriers” facilitates blood donation intentions, using a sample of African migrants in Australia, and to identify the implications for social marketing of such a relationship. It is hypothesised that the barriers examined will negatively impact on blood donation intentions and that the removal of these barriers will positively impact on blood donation.

Methodology
The research was couched within a larger cross-sectional, mixed method study looking at blood donation attitudes and intentions among sub-Saharan African migrants in Australia. The first phase of the study was qualitative, and the results have been reported elsewhere. The second phase involved quantitative data collection and forms part of this study. The study was carried out in Victoria and South Australia. The survey was administered in face-to-face mode by trained bilingual workers who engaged with potential respondents through relevant community groups. A steering committee of community African leaders was established to guide the study. Using members of the community as bilingual workers and having community members on the project steering committee ensured wider community participation in the design, management and survey responses. The use of bilingual workers allowed people who had low levels of English literacy to be included, as these people are often overlooked in health-related literature (Renzaho et al., 2012). The study questionnaire was administered in English, French, Arabic and relevant African languages. Bilingual workers were trained to ensure equivalence of content across languages. The bilingual workers were also trained in data management and ethical practice to ensure that the work complied with the ethics approval which was provided by the Australian Red Cross Blood Service Ethics Committee and the authors’ University.

Survey items
The questionnaire included 14 barriers associated with intentions to donate blood as identified in a review of the literature. These included 14 items related to barriers to blood donation and 14 items related to the removal of these barriers (see the questionnaire below for the list of items), where the latter (i.e. removal of barriers) might serve as facilitators of blood donation. It was not possible to include all barriers and facilitators of blood donation previously identified in the literature. Those included were identified in qualitative research associated with earlier phases of the larger project and were aligned to the literature focussing on culture, knowledge of the Australian blood donation system and issues around fear of donating blood (discussed in more detail below):

(1) Barriers:
• Cultural and societal issues (six items):
  – Blood donation is bad for my health.
  – Cultural reasons prevent me from giving blood.
  – Religious reasons prevent me from giving blood.
  – I think blood that is being stored for later use is wasteful.
  – My elders do not approve of me donating blood.
• My spouse does not approve of me donating blood.

• Fear (three items):
  – It is painful.
  – I am scared of needles.
  – I am not strong enough to give blood.

• Lack of proper understanding (three items):
  – I don’t know what happens to the blood after it is donated.
  – I don’t know where the blood donation centre is.
  – I feel my blood will not be appreciated.

• Barrier items dropped:
  – I don’t want to find out if I have any disease.
  – I am not sufficiently rewarded.

(2) Facilitators:

• Engagement (four items):
  – Someone from the blood service came and talked with your community about blood donation.
  – You could give blood together with other members of your community at the blood donation centre.
  – You could give blood together with other members of your community at your local community centre (e.g. church, mosque).
  – You could meet someone whose life was saved through receiving blood donation.

• Cultural and societal issues (three items):
  – You received incentives like food when donating blood.
  – There were no religious barriers to you giving blood.
  – There were no cultural barriers to you giving blood.

• Overcoming fear (three items):
  – You could find out about your health through a free exam.
  – You were not scared of needles.
  – You were healthier.

• Facilitator items dropped:
  – You knew what happened to blood after it is donated.
  – You knew your blood was appreciated.
  – Your elders approved of you donating blood.
  – Your spouse approved of you donating blood.

(3) Blood donation intentions:

• I intend to donate blood in the next year.
• I will donate blood in the next year.
• I would like to donate blood in the next year.

We sought to have matched items and included items evaluating barriers, as well as items related to the removal of that barrier (i.e. a facilitator). For example, “Religious reasons prevent me from giving blood” is the barrier item and “There were no religious barriers to you giving blood” is the removal of the barrier item. Given the targeted sample were African migrant communities, we also sought to include cultural/social factors as barriers (and the removal of these factors as facilitators), as these have been identified in the past affecting
blood donation within African communities (Umeora et al., 2005). We also sought to include items related to a lack of understating of the Australian blood donation process as a barrier (and the removal of these factors as a facilitator). Understanding of the Australian process and system is important, as it relies on voluntary donation (Flood et al., 2006), whereas in Africa, direct replacement and paid donation are more frequent (Farrugia et al., 2010). The final set of barriers related to fear of the blood donation process (and the removal of fear was included as a facilitator). Fear and related factors have consistently been identified as a barrier to donation and intentions to donate (Bednall and Bove, 2011; Bednall et al., 2013; Wagner and Manolis, 2012). The dependent variable was measured using three items related to respondents’ intention to donate blood (Masser et al., 2008). The items used and composite constructs are reported in the above-mentioned questionnaire.

Study sample
In total, 483 respondents were interviewed, 57 had incomplete surveys (i.e. 10 per cent or more data missing) and were omitted, leaving 425 completed responses as the usable sample within this study. The sample demographics of the usable responses are reported in Table I. The sample is slightly skewed towards male respondents (56.2 per cent), with the majority in the 25-44 years of age category (52.7 per cent). Respondents were generally recent migrants (i.e. 55.1 per cent were in Australia for 5 years or less), and most arrived in Australia as refugees (74.6 per cent); both of which are consistent with the general pattern of African migration to Australia (Hugo, 2009). Respondents arrived in Australia from a cross-section of countries across Africa. Respondents had most recently lived in urban areas (68.6 per cent), refugee camps (18.9 per cent) and regional/rural areas (12.5 per cent) prior to migration. The majority of respondents had secondary education or less (56.2 per cent) and are evenly split between being unemployed (43.3 per cent) and having some employment (44.0 per cent). With regards to religion, the majority were Christians (71.5 per cent), followed by Muslims (23.1 percent) and then other religions (6.6 per cent). Overall, most had never given blood (82.8 per cent), either in Australia or in their home country.

Analysis
Exploratory factor analysis was undertaken on the 14 items assessing barriers and 14 items assessing facilitators. Items that had low loadings (<0.4) or high cross-loadings (<0.4) on multiple factors were excluded. The factor analysis resulted in three factors of barriers – cultural and societal issues (six items), fear (three items) and lack of proper understanding (three items) – and three factors of facilitators – engagement (four), cultural and societal issues (three) and overcoming fear (three). Table II provides the summary statistics for the variables.
A summated score was created for each of the six refined measures – three barriers and three facilitators. These six summated items were then assessed as independent variables within a regression analysis in SPSS. The dependent variable was a summated measure of intention to donate blood (Masser et al., 2008), and this measure was found to also be reliable (alpha ($\alpha$) = 0.95)
Table I. Demographic and socio-economic profile of study participants (Renzaho and Polonsky, 2012)
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>186</td>
<td>43.8</td>
</tr>
<tr>
<td>Male</td>
<td>229</td>
<td>56.2</td>
</tr>
<tr>
<td><strong>Age in years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-24</td>
<td>127</td>
<td>29.9</td>
</tr>
<tr>
<td>25-44</td>
<td>224</td>
<td>52.7</td>
</tr>
<tr>
<td>&gt;45</td>
<td>74</td>
<td>17.4</td>
</tr>
<tr>
<td><strong>Mean (SD)</strong></td>
<td>33.0</td>
<td>(12.3)</td>
</tr>
<tr>
<td><strong>Length of stay in Australia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years or less</td>
<td>234</td>
<td>55.1</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>191</td>
<td>44.9</td>
</tr>
<tr>
<td><strong>Mean (SD)</strong></td>
<td>6.5</td>
<td>(5.2)</td>
</tr>
<tr>
<td><strong>Migration status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refugee</td>
<td>317</td>
<td>74.6</td>
</tr>
<tr>
<td>Family sponsored/reunion</td>
<td>80</td>
<td>18.8</td>
</tr>
<tr>
<td>Other</td>
<td>28</td>
<td>6.6</td>
</tr>
<tr>
<td><strong>African region of origin</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Africa</td>
<td>146</td>
<td>35.8</td>
</tr>
<tr>
<td>Eastern Africa</td>
<td>159</td>
<td>39.0</td>
</tr>
<tr>
<td>Western Africa</td>
<td>78</td>
<td>19.1</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>25</td>
<td>6.1</td>
</tr>
<tr>
<td><strong>Area lived in prior to migration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refugee camp</td>
<td>80</td>
<td>18.9</td>
</tr>
<tr>
<td>Large city/town</td>
<td>291</td>
<td>68.6</td>
</tr>
<tr>
<td>Rural/village</td>
<td>53</td>
<td>12.5</td>
</tr>
<tr>
<td><strong>Educational attainment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary or less</td>
<td>239</td>
<td>56.2</td>
</tr>
<tr>
<td>Tertiary/TAFE</td>
<td>186</td>
<td>43.8</td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>184</td>
<td>43.3</td>
</tr>
<tr>
<td>Employed full-time/part-time</td>
<td>187</td>
<td>44.0</td>
</tr>
<tr>
<td>Other</td>
<td>54</td>
<td>12.7</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>98</td>
<td>22.1</td>
</tr>
<tr>
<td>Christian</td>
<td>304</td>
<td>71.5</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>5.41</td>
</tr>
<tr>
<td><strong>Previously given blood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>352</td>
<td>82.8</td>
</tr>
<tr>
<td>Yes (Australia)</td>
<td>10</td>
<td>2.4</td>
</tr>
<tr>
<td>Yes (elsewhere)</td>
<td>63</td>
<td>14.8</td>
</tr>
</tbody>
</table>

**Results**
The regression results (Table III) suggest that these six variables explained 31 percent of the variance in the blood donation intention. In examining the barriers, past research would suggest that these would all be negative and statistically significant. However, only cultural
and societal issues were statistically significant and negatively associated with blood donation intention (i.e. a barrier), as was suggested in the past literature. The fear barrier and the lack of proper understanding barrier were not statistically significant, which is inconsistent with the past research looking at how these might influence donation intentions. In examining the removal of the barriers (i.e. facilitators), the past research would suggest that these would all be positive and statistically significant. The results in Table III indicate that engagement (i.e. removing understanding as a barrier) and overcoming fear were statistically significant and positively associated with blood donation intentions. However, the removal of cultural and societal issues was not statistically significant.

Table II. Descriptive statistics and correlations

<table>
<thead>
<tr>
<th>Factor</th>
<th>Items</th>
<th>Average composite mean (SD)</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural and societal issues</td>
<td>6</td>
<td>1.99 (0.74)</td>
<td>0.85</td>
</tr>
<tr>
<td>Fear</td>
<td>3</td>
<td>2.32 (0.97)</td>
<td>0.75</td>
</tr>
<tr>
<td>Lack of proper understanding</td>
<td>3</td>
<td>2.51 (0.89)</td>
<td>0.53</td>
</tr>
<tr>
<td>Engagement</td>
<td>4</td>
<td>3.39 (1.09)</td>
<td>0.88</td>
</tr>
<tr>
<td>Cultural and societal issues</td>
<td>3</td>
<td>3.11 (1.16)</td>
<td>0.83</td>
</tr>
<tr>
<td>Overcoming fear</td>
<td>3</td>
<td>3.50 (1.01)</td>
<td>0.77</td>
</tr>
<tr>
<td>Donation intentions</td>
<td>3</td>
<td>3.2 (1.06)</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Table III. Relationship between intention to give blood and barrier and facilitator of blood donation (N= 425)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean (SD)</th>
<th>Regression coefficients (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Barrier</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural and societal issues</td>
<td>1.99 (0.74)</td>
<td>−0.24 (0.06)**</td>
</tr>
<tr>
<td>Fear</td>
<td>2.32 (0.97)</td>
<td>−0.03 (0.06)</td>
</tr>
<tr>
<td>Lack of proper understanding</td>
<td>2.51 (0.89)</td>
<td>−0.02 (0.06)</td>
</tr>
<tr>
<td><strong>Facilitator</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>3.39 (1.09)</td>
<td>0.30 (0.05)**</td>
</tr>
<tr>
<td>Cultural and societal issues</td>
<td>3.11 (1.16)</td>
<td>0.06 (0.04)</td>
</tr>
<tr>
<td>Overcoming fear</td>
<td>3.50 (1.01)</td>
<td>0.22 (0.06)**</td>
</tr>
</tbody>
</table>

**Notes:** ***Significant at the 0.01 level; **significant at the 0.05 level

Discussion
The results, based on this sample of migrants from Africa, do seem to suggest that there are indeed differences between barriers and their removal. First, the results of the factor analysis defining the barriers and their removal identified slightly different factors, suggesting barriers and their removal grouped together differently. This is a preliminary indication that barriers and their removal may have differing effects on potential donors and appears to support the view that some barriers (and their removal) may act as hygiene factors. If this is the case, then it means that addressing these hygiene factors alone is not sufficient to facilitate or motivate people to donate.
Implications for practice

For social marketers, particularly those interested in promoting blood donation within this population, the results of the regression analysis have some important implications. First, the cultural and societal issues were the only significant barriers to blood donation. This is in contrast to the qualitative research with Australian African migrants who found that cultural factors did not impede their blood donation intentions (Polonsky et al., 2011b). In looking at the items in this factor, it might be suggested that the items could also be related to social norms which have been identified as a significant factor in inhibiting/driving blood donation generally (Bednall and Bove, 2011; Bednall et al., 2013). Social norms have also been identified as being important within the theory of planned behaviour (Armitage and Conner, 2001a). Social norms are also important amongst African communities in developed countries (Grassineau et al., 2007) and in Africa (Umeora et al., 2005), as African communities tend to be more collectivist than the populations in developed countries. Possibly, what is equally interesting is the fact that fear was not seen to be a barrier to blood donation intentions, nor was a lack of understanding of the blood donation process. This is inconsistent with past research which has identified that these factors reduce blood donation intentions (Bednall and Bove, 2011; Bednall et al., 2013).

With regards to focussing on the removal of barriers acting as facilitators of blood donation intentions, the results of the regression suggest that these too have differing effects. Engagement in a discussion of blood donation has a positive impact on blood donation intentions, although this factor is not the direct removal of a barrier. The components (i.e. items comprising the factor) of this dimension seem to be more about marketing communication, facilitating opportunities to donate and making blood donation a community event, rather than an individual event. One potential link back to African donation processes may be the fact that in a direct replacement model, frequently used in Africa, there is a targeted appeal from a known person to facilitate donation. Thus, there is an appeal to help that person, that person’s relatives or someone else known to the donor (Farrugia et al., 2010; Tagny et al., 2009). This may suggest that engagement is capturing a desire to be socially connected, which has been reported to be a critical facilitator or driver of blood donation within the African community in other countries (Grassineau et al., 2007) and has been reported to also affect intentions to donate in Australia (Polonsky et al., 2011a).

Although the results of this study suggest that cultural factors are a barrier (i.e. reduce donation intentions), their removal did not have a positive impact on intentions to donate blood. As such, cultural forces may be a hygiene factor, in that potential migrant donors need to feel that donating is not inconsistent with their home country values. Finally, although fear was not seen as a barrier to donation, not being afraid was seen to increase blood donation intentions. This does seem inconsistent with past research that found that fear serves to impede donation (Wagner and Manolis, 2012; Bednall and Bove, 2011; Bednall et al., 2013). However, this difference may relate to the slightly different composition of the two fear measures within this research, where in the facilitator component, fear includes obtaining information about one’s heath, which was not exactly matched in barrier grouping. In addition, obtaining health information has been identified as a facilitator of blood donation intentions (Bednall and Bove, 2011; Bednallet al., 2013). As such, the discrepancy may relate to the composition of the two composite measures of the fear construct.
These results have important implications for blood services seeking to facilitate increased blood donations. In a practical sense when interventions are designed, they often focus on leveraging facilitators, which would still seem to be appropriate. However, policymakers often also frequently seek to use interventions to reduce or overcome barriers, as a way of facilitating donations. This research suggests that removing barriers is indeed important, but it is important because barriers removal is needed to allow people to consider blood donation (i.e. it is a hygiene factor), rather than to motivate them to donate. This is also consistent with Bednall et al. (2013), where they found that there were differences in facilitators impacting on blood donation intentions and behaviour, i.e. getting someone to think about donation does not always mean they will donate (Armitage and Conner, 2001b). If this is the case, it suggests that social marketing campaigns need to be multifaceted, removing barriers but also leveraging facilitators, simultaneously.

**Implications for theory**

Social marketing focusses on addressing both barriers to behaviour change as well as facilitating or motivating factors for behaviour change. In many instances, it is assumed that removal of barriers may on its own serve to facilitate behaviour change (Wymer, 2011). The results of this research suggest that this may, in fact, not be the case. That is, the removal of barriers may simply serve as hygiene factors that allow individuals to consider the behaviour. This would seem to be well-aligned with models such as motivation, opportunity and ability (Rothschild, 1999), which also suggest that behaviour change requires a complex set of issues to work together to bring about desired behaviours. The question for social marketing theory is how research can disaggregate these factors to identify whether removing a barrier increases one’s intention to change behaviour, or removing a barrier enables changes in behaviour to be considered. The distinctions between barriers and their removal will have significant implications for the design and implementation of social marketing activities in a wide range of areas.

**Future research**

This research was an initial examination of whether the removal of barriers is, in fact, a facilitator of a social behaviour change, in the context of blood donation intentions. There is a diverse range of opportunities for extension to identify whether removing barriers serves a similar hygiene role in other social marketing contexts. In the context of blood donation, there is also a range of avenues for expanding this in the future. Future research should be undertaken to examine the impact of barriers and their removal within multiple cultural groups in Australia, as well as within the wider community. This is important because one barrier and its removal may have a different impact on groups, making it difficult to develop effective social marketing that increase blood donation across all potential segments. There may also be different barriers that need to be considered by social marketers when targeting different sub-populations or target markets. Thus, future research could broaden the pool of barriers and their removal to include a wider set of factors. Finally, more research is needed to understand the impact of barriers and their removal as hygiene factors; that is, do some factors preclude individuals even considering blood donation or other pro-social behaviours? Should such factors exist, addressing them would be essential and would need to be done prior to increase the motivation to give. All this future research could then lead to a more complex modelling of blood donation
behaviour that includes barriers and their removal within one design, which can lead to more effective blood donation interventions.

References

About the authors
Michael Polonsky is Alfred Deakin Professor and Chair in Marketing. He has widely published in social and environmental issues in marketing. In 2010, he was named as the Elsevier Distinguished Marketer of the Year by Society for Marketing Advances for his 20 years of research in the environmental marketing area. He was also asked to contribute to an editorial in the 2013 special issue of the European Journal of Marketing on thought leadership in social marketing. His research into blood donation is part of a larger project in which he and his colleagues are working the Australian Red Cross Blood Service, looking at blood donation amongst African migrants and refugees. Michael Polonsky is the corresponding author and can be contacted at: michael.polonsky@deakin.edu.au
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