An examination of responses to surveys among Filipino-Australian migrants

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**Abstract**

**Aim** The aim of the study was to explore the response behaviour of Filipino migrants to health survey questionnaires.

**Background** Surveys are frequently used to collect data in nursing and health research. Although hardcopy surveys are commonly used, the web-based delivery format is gaining popularity. The inclusion of open-ended questions (OEQs) in surveys allows respondents to freely express their views, and can be useful for those who can articulate their thoughts in writing. However, little is known about survey response behaviours of people from culturally and linguistically diverse (CALD) backgrounds who have functional English language skills, such as Filipinos.

**Data sources** Survey data collected as part of a study on health-seeking behaviours of Filipino migrants to Australia.

**Method** Characteristics of participants who responded to the online and paper-based surveys were analysed and compared.

**Discussion** A total of 552 respondents were recruited, of whom 428 (78%) completed the questionnaire online. The overall response rate to the OEQs was 69%. Respondents that completed paper-based questionnaires (AOR: 1.95, 95% CI: 1.17-3.26) and those with university education (AOR: 4.38, 95% CI: 2.97-6.45) were more likely to complete the OEQs.

**Conclusion**

Among Filipino migrants with high self-rated English language skills, web-based administration elicited a good overall response; however, hardcopy respondents were more
likely to complete the OEQs, which may be due to higher participant engagement.

Furthermore, those with university level education may be more empowered and self-advocating, were more likely to complete the OEQs.

**Implications for research/practice**

The high response rate to online survey questionnaires indicates that among CALD migrants with functional English, the web-based survey platform is a feasible method of data collection. As such, translation to native language may not be required.

**Keywords:** Open-ended questions, survey, culturally and linguistically diverse, migrants, online, hardcopy
Introduction

Globalisation and international migration resulted in a surge of cross-cultural research related to the health needs of culturally and linguistically diverse (CALD) migrants from non-English-speaking countries (Komaric, Bedford, & van Driel, 2012; Lee, Sulaiman-Hill, & Thompson, 2013). Inherent to migrant populations is the wide diversity of English language skills including non-English speakers, those with functional English, and those who are fully proficient in the English language. As one of the biggest migrant groups in an English-speaking country like Australia, Filipino migrants are recognised to have high self-rated English language skills demonstrated by reading and writing more in English than in their native Filipino language (Maneze, Salamonson, Attwood, & Davidson, 2014) (Maneze et al., 2014). Therefore, addressing the health information needs of this CALD migrant group may be less resource-intensive as translations of health information may not be required.

Furthermore, the ubiquitous availability of internet access in recent years is enabling the dissemination of health information as well as facilitating the administration of online health surveys to this target migrant group with functional English skills. Internet connectivity has been reported to be high in populations with English language proficiency like the Filipino migrants (Department of Immigration and Border Protection, 2014). Hence, harnessing this advantage using either hardcopy or web-based surveys would facilitate research into the health of CALD migrants, however the feasibility and acceptability of this method of data collection has not been extensively explored among this migrant group. Furthermore, there is a paucity of published research on the response behaviours of CALD migrants to close- and open-ended survey questions administered in diverse formats.
Closed-ended questions (CEQs) in surveys provide a set of response options, thus imposing a lesser cognitive and time demand on participants (Aday & Cornelius, 2011). From the researcher’s perspective, the standardised nature of CEQs enables a prescribed coding procedure, and generally would take less time to code and analyse (Niedomysl & Malmberg, 2009). However, CEQs are unable to elicit information beyond the researcher-imposed pre-determined constructs. On the other hand, OEQs provide respondents the opportunity to elaborate on their thoughts regarding a topic which may not be captured by fixed response questions. This capacity is advantageous in nursing and health research areas that are exploratory in nature.

Previous studies have reported that despite the recognised benefits of OEQs, their use among CALDs with functional English may not be appropriate due to limited vocabulary and an inability to fully express themselves in their second language (Geer, 1988; Scholz & Zuell, 2012), particularly among those with lower levels of education. Nevertheless, there is little empirical data to support this supposition.

This paper aimed to examine response behaviour of CALD participants with functional English language skills to OEQs administered using the online and hardcopy formats in community settings. Specific study objectives were to: i) compare response rates between the two survey delivery modes; and ii) examine demographic differences in OEQ responders and non-responders.

**Method**

This analysis was conducted as part of a larger study that examined socio-demographic and psychosocial factors influencing health-seeking behaviour (HSB) of Filipino migrants in Australia. A questionnaire, written in English, included socio-demographic
questions, the validated 6-item English Language Usage Scale (ELUS-6) (Maneze et al., 2015), which measured the English language acculturation, and two OEQs exploring the facilitators and barriers to HSB. In this paper, we focused only on participants’ response behaviour to the OEQs.

Snowball and convenience sampling methods were used to recruit participants to the study from November 2010 to May 2011. Respondents were included if they were: a) of Filipino heritage; b) over 18 years of age; and c) living in Australia. Advertisements placed in Filipino specific radio stations, print and e-media were used as recruitment channels. Filipino community organisations were approached to invite members to participate. Potential participants were given the choice of answering a hardcopy questionnaire or be emailed a link to a secure web-based platform containing the questionnaire. A social media (www.facebook.com) webpage was also created to advertise and display a link to the survey. Participants were asked to distribute the questionnaire or link to Filipino family and friends in Australia. They were assured that all responses were anonymous and that responses to the OEQs could be written in any Filipino language or English. Pilot testing of the hardcopy questionnaire was conducted with 20 participants which showed that most of the participants completed the CEQs and responded to both OEQs in English.

Ethics approval was obtained from two universities (H8617, HREC 2013000645) and the local health service (HREC 13/016).

Data analysis

Survey data from the CEQs from both the hardcopy and online forms were entered and exported into Statistical Package for Social Sciences (SPSS) software Version 22 (IBM Corp., 2013). Frequencies and percentages were used to summarise categorical variables
and median, standard deviation and range were used to summarise the three continuous variables (age, duration of stay and English language usage scale scores). As these continuous variables were not normally distributed, they were dichotomised at the median to examine for group differences. All bivariate analysis analyses were performed using Pearson’s chi-square test. To examine socio-demographic predictors of OEQ responders, only variables that were statistically significant in the bivariate analysis were entered into the multivariate logistic regression analysis using the simultaneous entry method. A threshold $p$ value of $< 0.05$ was considered statistically significant.

**Results**

Table 1 summarises the characteristics of the 552 respondents. The median age was 46 years and approximately two-thirds (67%) were female. More than three-quarters (77%) of the participants had tertiary education or higher. The median duration of stay in Australia was 20 years. Although most of the respondents (81%) spoke both the native Filipino language and English at home, nearly half (45%) reported that they mainly used English, particularly in reading, and obtained a high ELUS-6 (acculturation) score greater than the median score of 20.

**Characteristics of hardcopy versus online responders**

Over the six months recruitment period, a total of 428 (78%) completed the online and 124 (22%) completed the hardcopy questionnaires. Figure 1 shows the group comparison of the demographic characteristics of online and hardcopy responders. Those who completed the online survey were: a) more likely to be females ($p = 0.016$); b) less likely to have a university degree ($p = 0.014$); c) had higher levels of English language use ($p < 0.001$); and d) had longer durations of stay in Australia ($p = 0.030$).
Group comparisons: Characteristics of OEQs responders

The overall response rate to the two OEQs among those who completed the questionnaire was 69%. The average number of words in the OEQ responses was 16 (SD: 18.1) with an equal number of participants responding to the two OEQs. Notably, those who completed the hardcopy format were significantly more likely to complete the OEQs (81% versus 65%, $p = 0.001$), but there was no significant difference in the number of free text responses in the two groups. With the exception of one respondent who mixed Tagalog (the Philippines’ native language) with English, all OEQ responses were completed in English. Participants with higher educational levels (university degree or higher) were more likely to respond to the OEQs than those without a university degree ($p < 0.001$). No other demographic group differences were found.

In the multivariate logistic regression analysis, two independent predictors of response to OEQs were: a) those with a university degree or higher (adjusted odds ratio: 4.38, 95% CI: 2.97 to 6.45); and b) those who completed the hardcopy survey (adjusted odds ratio: 1.95 95% CI: 1.17 to 3.26) as presented in Table 2.

Discussion

A large number of participants who met the inclusion criteria were recruited over a relatively short period of time which suggests the feasibility of the use of online recruitment in CALD populations with functional English language skills, such as the Filipino migrants to Australia. Although there is a perception that younger people access the internet more than people in older generations (Smith, Hewitt, & Skrbiš, 2015), and therefore a response bias towards younger people, no age difference in the online survey participation was observed. This was consistent with Lissitsa et.al. (2015) who found that the elderly are increasingly
using the internet. Likewise, Hiller and Franz (2004) observed that settled migrants have higher internet use for communication and re-connecting to their ethnic identity.

This study further showed that acculturation, as conventionally evaluated by proxy measures, such as the increasing use of the host language and longer duration of stay (Thomson & Hoffman-Goetz, 2009), raised the likelihood of participating in the online health survey. The more frequent the host language use by the acculturating group and the longer the length of residence indicate higher interaction with the host population and therefore, more confidence in participating in surveys in English, particularly when online anonymity of responders was assured. Interestingly, those with university education or higher were less likely to participate in the online survey. This could be due to greater work commitments or a perception that the online survey was trivial which is consistent with the findings of Hargattai (2010) that educational level was negatively associated with non-capital enhancing activity. However, in the hardcopy questionnaire, the OEQs were more likely to be completed by those with higher education. A possible explanation for this pattern could be that those who were more educated were more articulate and comfortable in expressing their opinions in written form in the second language (although in this study, participants were instructed that answers maybe written in the Filipino language or in English). While this may account for some cases, Geer et.al (1988) argued that the more likely reason for non-response to OEQs was disinterest in the topic rather than lack of articulation skills. He suggested that participants were likely to respond to OEQs in a survey when the subject is personally relevant. The high response rate elicited by the OEQs in this study showed high interest in the topic and willingness to contribute to the research. However, the study found more responders to pen and paper survey than online. This finding is consistent with
that of Nulty (2008) whose review attributed such rates to the influence of physical or perceived interaction with researchers. The lack of comfort in the use of online platforms or low keyboard and computer skills might have also been factors in the lower response rate to OEQ among online responders in this older population. However, while there were more responders to OEQs in the hardcopy questionnaires, this study found no significant difference in the length of response provided between hardcopy and online responders.

This study also provided evidence that surveys targeting CALD migrants with functional English language skills can be administered in English. Language is a central issue in surveys regarding migrant health and the limited resources for translation is reported to be one of the main reasons for exclusion of CALD migrants who are not English proficient (Garrett, Dickson, Whelan, & Whyte, 2010). This is particularly the case when health surveys include OEQs because of the high potential for non-response due to perceived limited ability to self-express in English thus under-representing those with lower levels of education. The complexity of the issue needs to be explored more extensively. This study provided preliminary data that suggests that among Filipino migrant who are confident in English writing and reading, non-translation questionnaires may be justified.

**Strengths and limitations of the study**

The main limitation in the study was the sampling method. Snowball sampling was used which limited the control and monitoring of the number of people who received the link and responded to the online questionnaire. Therefore, the response rate was not calculated. Furthermore, online, self-selection bias may also be a limitation in this study as only those with computer skills, were well-versed in internet surveys, or who had higher levels of education were more likely to complete the survey. A strength of this study was
the sample size and the demographic diversity of respondents. This would not have been possible if reliant only on face-to-face recruitment.

**Conclusion (So What? or Implications for cross-cultural research)**

In surveys among CALD participants with functional English language skills and higher acculturation levels, online recruitment and using non-translated questionnaires can elicit a good response rate. However, completion of OEQs favours those with higher levels of education and is more likely with physical interaction or research engagement, as in hard-copy administration. Future research should investigate a more objective measure of response rate by technical monitoring of online access to the survey and comparing response rate and quality of response with translated questionnaires.

**Reference**


Table 1  Demographic characteristics of the sample  \( n = 552 \)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>( n ) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, median (( SD )) years (Range: 18 to 91)</td>
<td>46 (13.7)</td>
</tr>
<tr>
<td>Sex: Female, ( n ) (%)</td>
<td>316 (67)</td>
</tr>
<tr>
<td>Educational attainment: Tertiary level or higher, ( n ) (%)</td>
<td>363 (77)</td>
</tr>
<tr>
<td>Language spoken at home: speaks both Filipino and English, ( n ) (%)</td>
<td>383 (81)</td>
</tr>
<tr>
<td>English language usage (ELUS-6) score: median (( SD )) (Range: 8 to 30)</td>
<td>20 (4.7)</td>
</tr>
<tr>
<td>Duration of stay in Australia, median (( SD )) years (Range: 0-42)</td>
<td>20 (9.5)</td>
</tr>
<tr>
<td>Sources of OEQ responders</td>
<td></td>
</tr>
<tr>
<td>o Online responders, ( n ) (%)</td>
<td>280 (74)</td>
</tr>
<tr>
<td>o Hard copy responders, ( n ) (%)</td>
<td>100 (26)</td>
</tr>
<tr>
<td>Number of words response to OEQs , mean, (( SD )), (Range: 1 to 172)</td>
<td>16 (18.1)</td>
</tr>
<tr>
<td>Comments related to health-seeking behaviours (HSB)</td>
<td></td>
</tr>
<tr>
<td>o Facilitators to HSB, ( n ) (%)</td>
<td>378 (69)</td>
</tr>
<tr>
<td>o Barriers to HSB, ( n ) (%)</td>
<td>375 (68)</td>
</tr>
</tbody>
</table>
Figure 1  Group comparisons: Characteristics of Hardcopy versus Online Responders

- Age (>46 years): Hardcopy 45.7% vs Online 50.9% (p = 0.334)
- Gender (Female): Hardcopy 58.1% vs Online 69.9% (p = 0.016)
- Education: University or higher: Hardcopy 75.0% vs Online 63.1% (p = 0.014)
- English language usage: High: Hardcopy 32.0% vs Online 50.5% (p < 0.001)
- Duration of stay: >20 years: Hardcopy 36.9% vs Online 48.8% (p = 0.030)
- Responses to OEQs: Hardcopy 80.6% vs Online 65.4% (p = 0.001)
<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient (B)</th>
<th>Standard error (SE)</th>
<th>Adjusted odds ratio (95% CI)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest education level: Tertiary level or higher</td>
<td>1.48</td>
<td>0.20</td>
<td>4.38 (2.97 to 6.45)</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Hardcopy survey format</td>
<td>0.67</td>
<td>0.26</td>
<td>1.95 (1.17 to 3.26)</td>
<td>0.010*</td>
</tr>
</tbody>
</table>

* Significant at p < 0.05

Nagelkerke R square = 0.165