Response behaviour of Filipino migrants to health surveys: Implications for cross-cultural research in nursing and health

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Abstract

Aim The aim of the study was to examine the response behaviour of Filipino migrants to a health survey.

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, with the inclusion of open-ended questions (OEQs) allowing respondents to freely express their views. To date, little is known about the survey response behaviours of people from culturally and linguistically diverse (CALD) backgrounds with functional English language skills, such as Filipinos. There is some concern about the usefulness of OEQs administered to CALD participants due to their limited capacity to articulate their thoughts in writing.

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

Review methods Characteristics of participants who responded to the online and paper-based surveys were analysed.

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%, with higher completion rates among those who completed paper-based questionnaire (AOR: 1.95, 95% CI: 1.17-3.26), and those with university education (AOR: 4.38, 95% CI: 2.97-6.45).

Conclusion

Filipino migrants with functional English language skills responded well to the online survey, however paper-based administration elicited more OEQ responses attributed to higher participant-researcher interaction. Those with university level education may have more capacity to self-express in English and thus were more likely to complete the OEQs.

Implications for practice/research

A web-based survey platform is a feasible data collection method among Filipino migrants with functional English and the high response to OEQs suggests that translation to their first language may not be required.

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

Introduction

Globalisation and international migration have 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 largest 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). 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 Filipino migrants (Department of Immigration and Border Protection, 2014). and harnessing this advantage using either hardcopy or web-based surveys could 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 closed- and open-ended survey questions administered in diverse formats.

Closed-ended questions (CEQs) in surveys provide a set of response options, thus reducing the cognitive and time demands 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 with the opportunity to elaborate on their thoughts regarding a topic which may not be captured by fixed response questions and can be valuable 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 CALD groups 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 the response behaviour of CALD participants with functional English language skills to OEQs administered using both online and hardcopy formats in a community setting. 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 behaviours (HSBs) 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, Salamonson, et al., 2015), which measured the English language acculturation, and two OEQs exploring the facilitators and barriers to HSBs. In this paper, we focus 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. Filipino community leaders of organisations were approached to invite members to participate. Advertisements placed in Filipino specific national radio stations, print and e-media were used as recruitment channels. 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. Upon consent, potential participants recruited face-to-face by researchers were given the choice of answering a hardcopy questionnaire or be emailed a link to a secure web-based platform containing the questionnaire. Pilot testing of the hardcopy questionnaire was conducted with 20 Australian Filipino immigrants which showed that most of the participants completed the CEQs and responded to both OEQs in English.

Ethics approval was obtained from Western Sydney University (H8617), the University of Technology, Sydney (HREC 2013000645) and from the South Western Sydney Local Health District (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 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. Qualitative analysis of the OEQ responses is reported elsewhere (Maneze, DiGiacomo, Salamonson, Descallar, & Davidson, 2015), but briefly, 505 responses were classified as facilitators of health behaviours and 731 responses were classified as barriers from the open-ended responses. Respondents provided multiple answers to the

two OEQs which were coded by the researchers into four themes: 1) individual (personal) factors; 2) cultural factors; 3) environmental factors; and 4) health service access. All responses were written in English except for one participant who used both English and Tagalog (one of the languages in the Philippines) in their response.

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 words in the free text response to the OEQs in the two groups. With the exception of one respondent who mixed Tagalog 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

The target sample size was achieved 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 Filipino migrants to Australia. Although there is a perception that younger people are more likely to access the internet than older people (Smith, Hewitt, & Skrbiš, 2015), no age difference was detected in the online survey of this study. This was consistent with the findings of Lissitsa et.al. (2015), who reported an increase in internet usage among the elderly. Similarly, Hiller and Franz (2004) also recounted higher internet use among settled migrants who used this resource to communicate and reconnect with their ethnic identity.

This study further showed that acculturation, as conventionally evaluated using proxy measures such as increased use of the host language and longer duration of stay (Thomson & Hoffman-Goetz, 2009), raised the likelihood of participating in the online health survey. Language acculturation of the migrant group and longer duration of residence in the adopted country indicate higher interaction with the host population, which include interest and confidence in participating in surveys in the English language, particularly when online anonymity of responders was possible. Interestingly, those with university education or higher were less likely to participate in the online survey. This could be due to a perception that the online survey was trivial, which is consistent with the findings of Hargattai (2010)

who noted 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 with higher education were more articulate and comfortable to express their opinions in written form albeit in their second language. 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 the lack of language proficiency. They suggested that participants were likely to respond to OEQs in a survey when the subject was personally relevant. The high completion rates of the OEQs in this study indicated high interest in the topic and perhaps a willingness to contribute to the research. This finding is consistent with that of Nulty (2008) whose review attributed such rates to the influence of physical or perceived interaction with researchers.

This study also shows that surveys targeting CALD migrants with functional English language skills can be administered in English which may be the second language. Language is a central issue in research involving migrants with limited resources for translation reported to be one of the main reasons for exclusion of participants who are not proficient in English (Garrett, Dickson, Whelan, & Whyte, 2010). While the complexity of the issue needs to be explored more extensively, this study has provided preliminary data that suggests among Filipino migrants who are confident in English writing and reading, not translating 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 restricted the control and monitoring of the number of people who received the

link and responded to the online questionnaire. Furthermore, self-selection bias related to online surveys is also a study limitation as only those with computer skills, well-versed in internet surveys, or who have higher levels of education are more likely to complete the survey (ref). A study strength that needs to be noted was the sample size and the demographic diversity of respondents. This would not have been possible if the study was solely reliant on face-to-face participant recruitment.

Conclusion

In surveys among CALD participants with functional English language skills and higher acculturation levels, online recruitment and English language questionnaires can elicit a good response. However, completion of OEQs favours those with higher levels of education and surveys administered as hardcopy. Future research needs to investigate the quality of responses to translated and non-translated questionnaires among target groups with functional English language skills.

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Table 1 Demographic characteristics of the sample *n = 552*

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

Figure 1 Group comparisons: characteristics of hardcopy versus online responders

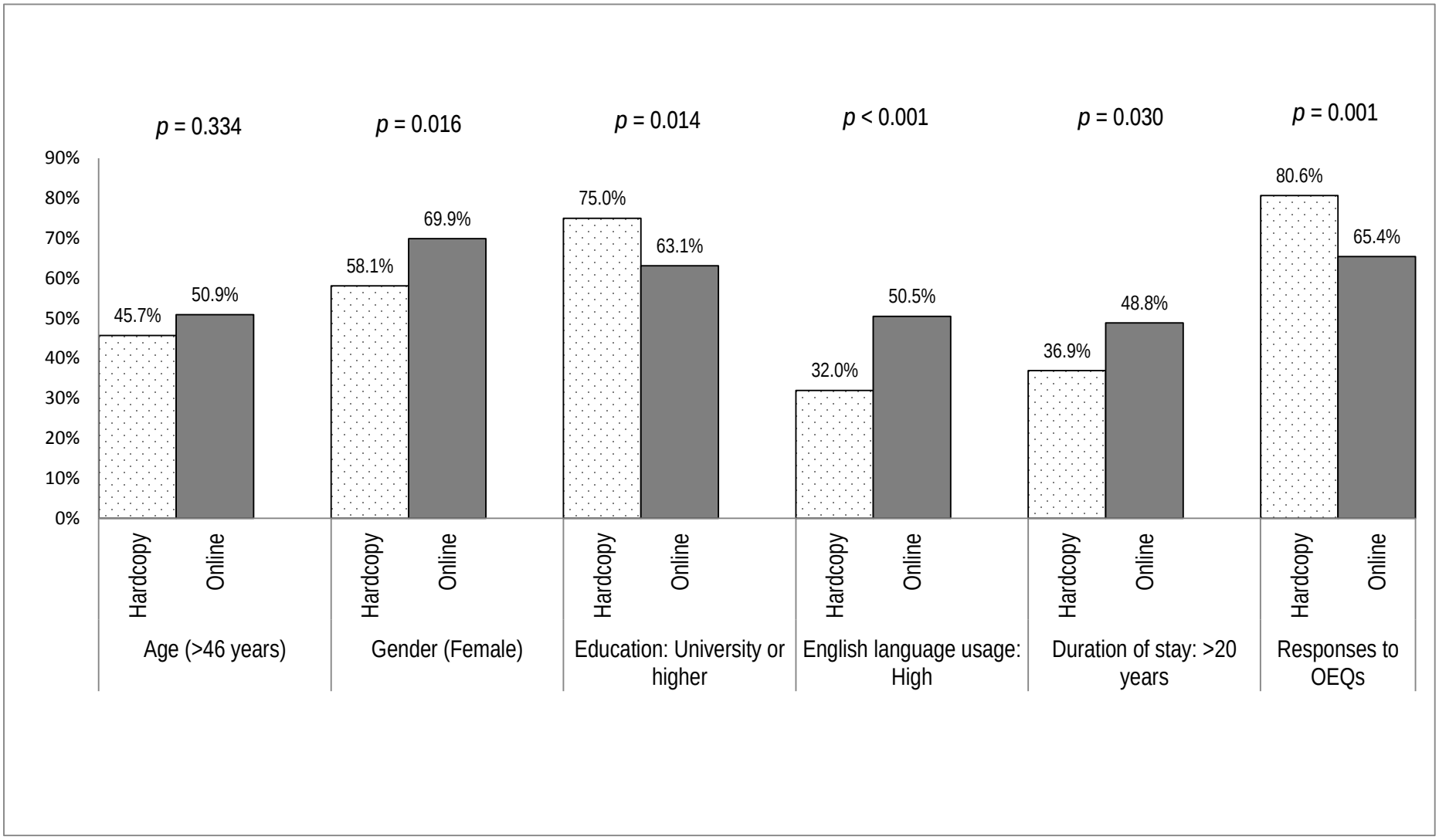

Table 2 Predictors of open-ended responders to health-seeking behaviour questions

Variables	Coefficient (*B*)	Standard error (SE)	Adjusted odds ratio (95% CI)	*p* value
Highest education level: Tertiary level or higher	1.48	0.20	4.38 (2.97 to 6.45)	<0.001*
• Hardcopy survey format	0.67	0.26	1.95 (1.17 to 3.26)	0.010*

* Significant at $p < 0.05$

Nagelkerke *R* square = 0.165