Snowballing Via Facebook: A Novel Way to Recruit Millennial Nursing Student Research Participants

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Snowball sampling is a method of convenience sampling (Cohen & Arieli, 2011, p. 424) and is an example of a non-probability method, which does not recruit a random sample (Sadler, Lee, Lim, & Fullerton, 2010, p. 370). Non-probability sampling can be accidental or purposive.

Respondents to recruitment via social media do not represent a random sample, and this form of purposeful sampling can also be thought of as selection bias. Selection bias occurs in recruitment via social media, because it favours in its initial stages those who access on-line sites. However, research recruitment utilising social media can be argued to be an example of the adaptability and flexibility inherent in non-probability sampling strategies in the use of snowball recruitment strategies (Sadler et al., 2010, p. 371).

Only those who participate in on-line forums such as Facebook are initially included in snow-ball recruitment via social media. However, those who do not use such social online forums can still be recruited via recommendation and provision of the link to the on-line survey. It can be completed independently of membership of any on-line forum.

A potential problem with snowball sampling is `gatekeeper bias'. Snowball sampling relies on others to facilitate contact between the researcher and potential research participants, and gatekeepers may have their reasons for referring or not referring the researcher to potential participants (Cohen & Arieli, 2011, p. 428). These reasons may vary from the mundane (lack of time, forgetfulness) to unconscious bias (reflecting societal stigma for example) to conscious curating for the sites perceived 'fit' for the requested research recruitment.

Concerns have been raised that online data collection is less reliable (Antoun, Zhang, Conrad, & Schober, 2016), however more recent research has shown that online data collection is comparable in terms of validity and reliability (Denissen, Neumann, & van Zalk, 2010, p. 565). Validity is the degree to which the survey questionnaire will measure what it is supposed to measure and reliability the overall consistency of a measure.

Snowball sampling represents a method of choice for accessing marginalised populations (Cohen & Arieli, 2011). Nurses, although ubiquitous within health care, can be argued to represent a marginalised or oppressed population (Cox, 2016; Kuokkanen & Leino-Kilpi, 2000; Matheson & Bobay, 2007). Their participation in research is not unfettered and their role as gate-keepers for patient research is well documented (Kars et al., 2016). However, it can be argued that the participation of nurses themselves as participants in research, as the focus of the research project, is itself subject to gate-keeping in traditional practice domains.

In keeping with observations from oppressed group behaviour, these gate-keepers are frequently other nurses (Matheson & Bobay, 2007). Clearly in the hierarchical work place of health services, senior nurses exercise control over the flow of information to other nurses. It can also be speculated that the elements of anti-intellectual culture that characterise some of the nursing profession (Miers, 2002; Pringle,
may also serve to discourage participation in research projects between nurses of similar seniority. Elements of this cultural characteristic of the nursing profession are witnessed in the persistence of the so-called "Theory - Practice gap" and continuing arguments to return nursing preparation to the workplace (El Haddad, Moxham, & Broadbent, 2013).

Social media acts as a disrupter to these prior patterns of nursing relationships. In terms of nursing, as previously noted social media has been adopted avidly. Social media offers the researcher access to nurses in ways not previously available. Traditional gatekeepers have been disempowered. The flow of information (about research participation) responds to fresh gatekeeping imperatives (Christensen, Bohmer, & Kenagy, 2000; Weeks, 2015).

Nurses who have enthusiastically adopted social media as a professional platform are usually believed to be millennials – that is those born between 1982 and 2004, also known as Generation Y (Gen Y). General Australian social media profiles support this (Australian Bureau of Statistics (ABS), 2016). Marketing analysis of the profile of Facebook users – Facebook being the largest social media platform – reveal that there are 17 million Australian monthly users (Cowling, 2017). The typical user is a female at 76% of all females compared to 66% of males (Unknown, 2017). Further, millennials represent the largest group of Facebook users at 29.7% (Unknown, 2017). It is reasonable to suspect that Facebook use by nurses also reflects these uses of social media. However, research of the nursing demographics of social media use is largely unreported (Green, 2017).

Social media is being adopted as a component of routine formal nursing and health public communication profiles. Formal nursing organisations such as educational providers, regulation authorities and industrial bodies all maintain social media profiles. So a number of nursing social media sites, are traditional nursing groupings. These contrast to a broad range of spontaneously and non-traditional nursing groups that form other users of social media.

What are the values that guide those gate-keeping these sites? Is it uniformly the case that access is unmoderated for research postings? Do acceptance requirements for membership of some ‘closed’ sites represent a new consideration for researchers in recruiting representative samples?

These issues will be addressed in this paper.

Title:
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Keywords:
Recruiting participants, Snow-ballling research technique and Social media

References:


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Abstract Summary:

Snowballing is a recommended research method that has received a powerful up-date. Nurses are inveterate users of social media - FaceBook hosts thousands of nursing sites world-wide. This offers a powerful research method to achieve participation in research projects. Does it risk over-use and skewed participant profiles or an unparalleled opportunity?

Content Outline:
Snowballing is critiqued as a recruitment method for research participants. Nursing participation in social media is explored for its potential to access research participants. The limitations of adopting this method of recruitment are suggested to be minimal.

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**Any relevant financial relationships?** No  
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