Lifestage differences in young UK women’s reasons for research participation

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ABSTRACT

Lifecourse epidemiology suggests that preconception is a valuable opportunity for health promotion with young women. Yet young women are less likely than older women to be research participants, limiting evidence about their needs and risks. Marketing data indicate that young adults are not engaged with one advertising strategy because they transition through three life stages: (1) limited independence and focus on own interests, (2) increased independence and time with peers, (3) establishing a home and family. The aim of this study was to explore whether these marketing lifestage categories could inform the tailoring of strategies to recruit young women.Three focus groups per lifestage category were conducted (49 women aged 16 to 34 years). Lifestage category (1) was represented by further education students, category (2) by women in workplaces, and (3) by mothers. Questions explored participants’ lifestyles, identity, reasons for participation in the current study and beliefs about researchers. Three major themes were identified through framework analysis: Profiling how young women spend their time; Facilitators of participating in research; and Barriers to participating. Students and women in work valued monetary remuneration whereas mothers preferred social opportunities. Participants’ perceived identity influenced whether they felt useful to research. All groups expressed anxiety about participation. Altruism was limited to helping people known to participants. Therefore, the marketing categories did

not map exactly to differences in young women's motivations to participate but have highlighted how one recruitment strategy may not engage all. Mass media communication could, instead, increase familiarity and reduce anxiety about participation.

INTRODUCTION

Lifecourse epidemiology recognises that there are periods in a woman's lifetime where interventions to promote health can make significant differences to her own health, and also to that of future generations (Stephenson et al., 2018). One such period is pre-conception. Lifestyle behaviours such as poor nutrition can have negative consequences in early pregnancy (Bédard et al., 2017). Not all women plan pregnancy and some risks, such as obesity, cannot be addressed by adopting health behaviours only at the time of conception (Stephenson et al., 2018). Moreover, if healthier behaviours become embedded in everyday life, inter-generational patterns of harm could be reduced (Flemming et al. 2018).

Young adulthood is a valuable stage to focus on lifestyle behaviour change since this is when young women may be leaving parental homes and making independent lifestyle decisions (Barker et al., 2018). Yet, young women are less likely than older women to take advantage of health-related activities, such as cervical screening, or to participate in health research to identify needs, target interventions and inform services (Howcutt et al., 2017a; NHS Digital Screening and Immunisations Team, 2017).

Currently, strategies to engage women in harm prevention activities and health research tend to adopt a one-size fits all approach, such as generic letters and leaflets coming from national agencies. While this is practical, allowing automatic mailings based on limited information such as postcode or an individual's age and gender as recorded in health service records, it may lead to under-representation of young women. In other hard-to reach-groups targeted approaches are adopted, such as translated and culturally sensitive information for health screening in different ethnic groups (Public Health England, 2018). Such targeted approaches have not been developed in other hard-to-reach groups such as women at a specific adult age.

Young women's participation in research is valuable if interventions are to be tailored appropriately for their specific needs and lifestyles at important lifecourse stages, such as when these young adults are starting to make decisions about their own health. Yet it is difficult to study reasons for participating in research studies using quantitative measures because these are also prone to nonresponse bias. For example, Glass et al. (2015) in Australia conducted a survey about reasons for participation in health research, using two samples (1) a general population and

(2) previous study participants. They achieved only a 44.5% response rate from the general population and only 11% of these respondents said that they would be unwilling to take part in future health research. Yet these findings are likely to be an overestimation of the willingness to participate since that people who did not respond to Glass et al.'s survey would also be less likely to be willing to participate in other studies. Indeed, Glass et al. achieved a much higher response rate in the sample of people who had previously volunteered in a research study. Therefore, our study aims to contribute new knowledge to the literature about research recruitment by using qualitative methods which do not rely on the assumptions of probability sampling but which can also explore the barriers to participation in greater richness.

In a previous paper (Howcutt et al. 2017b), we proposed a framework based on a model of consumer-decision making (Belch et al., 2012), viewing participants as active information-seekers who look for ways to perform current goals. The framework conceptualises recruitment as five stages: motivation to notice messages, perception of information, attitude formation, integration of interest in study and action, and post-study evaluations. We argue that the first stage (motivation) is particularly vital, because strategies to increase recruitment will not be effective if the impetus to attend to recruitment information is lacking.

Marketing principles further suggest that researchers need to be aware of factors competing for an audience's attention and interest (Schuster, 2015). The value that young women put on their time and aspects of their life may be significantly different to that of older women. Consumer research may offer an understanding of the priorities of adults of different ages. *wOOt! Media* (2013) researched the spending choices of young adults. By recording purchases, they suggested that it is challenging to market products to young adults because even during the narrow age range of 16 to 34 years, people transition through three stages relating to changing levels of independence and responsibility. Purchasing patterns reflect a shift from individual interests to purchases that facilitate spending time with others within the peer group, to a final move towards purchases for the family.

This study explored what motivates women in the UK, aged 16 to 34 years to participate in health research relating to health behaviours, using qualitative methods.

The aim was to find out whether life stages could usefully guide how to present recruitment information about health research to engage this underrepresented group.

METHODS

Study design

A qualitative descriptive design was used, with focus groups as the method of data collection. We selected a descriptive approach over a more interpretative qualitative analysis because our research question required us to identify factors which could encourage or discourage participation. The aim was not to explore how participants' attitudes were constructed and negotiated.

Participants

Focus groups were conducted with three different groups of young women identified by marketing research categories (wOOt! Media 2013). The marketing lifestage categories were named 'All about me', 'All about us' and 'All about them'. The 'All about me' group were living with parents or in shared accommodation and were still in education with limited independence and responsibility, who used money and time to further personal interests such as sport and music, the 'All about us' category were newly independent who were focused on spending time with peers, and the 'All about them' category grouped people who were themselves independent but starting to establish their own home and family. In our sample, mothers of young children were recruited to represent 'All about them' since they were more likely to be focused on others' needs. The young women were recruited from one further education (FE) college ('All about me'), two businesses ('All about us'), one children's centre and two mothers' support groups ('All about them'). SJH and SBB independently coded a selection of transcripts from each of the three lifestage categories to check the credibility of the decision to view the life stages as different to one another.

The study was introduced informally to the groups where access was allowed or managers known to the women passed on the study information. All participants received a written information leaflet in English and they were supported by trusted people from the organisations with reading of the information if functional English literacy was limited. Consent and the eligibility of participants was checked by SJH via email, text or through informal discussion.

Development of the topic guide

We conducted a literature review of theories of research participation and trials of strategies to increase the recruitment of women to health research (Howcutt et al. 2017b). Following this reading of evidence, the questions were designed to focus conversations around the following areas:

1. how participants would use an hour of free time - to understand their priorities for their time and effort;

2. their reasons for participation in the current study and their sources of concern before participation - to allow participants to explain their cost-benefit appraisal in a familiar context;

3. participants' perceptions of researchers and research - to investigate more abstract attitudinal factors in the cost-benefit appraisal regarding participation.

Data collection

Each focus group lasted between 60 and 90 minutes. After two groups with larger numbers of women (of 8 and 11 women in groups CS1 and CS2 in Table 1)), we reduced the size of the groups to 3-6 women to give each participant more opportunity to express their ideas within the time available. Group discussions were in English and were audio-recorded and transcribed verbatim. The focus groups with college students were held in college classrooms. Two of the focus groups with women in work were at the workplace but one was held at a social venue close to the work setting. Two of the mothers' groups took place in a home while one was in a Children's Centre to facilitate childcare. The focus groups took place between December 2015 and August 2016. Data collection for each lifestage category was stopped after no new ideas were identified in the last transcript for that lifestage. This decision resulted in three groups for each lifestage and the stopping point was checked and agreed with SBB.

Data analysis

Thematic coding was managed using framework analysis (Ritchie and Spencer, 1994). The analysis was conducted, as outlined by Gale, Heath, Cameron, Rashid, and Redwood (2013), using NVivo version 11.3.2.779 to organise the data into matrices and to link summaries in the matrices to the full transcripts. Initial codes were identified after a critical review of the literature (Howcutt et al. 2017b). Further themes were added after familiarisation with the data through transcription, conducted by SJH and hearing/reading the data multiple times. New codes were added where the initial set was insufficient. The data were sorted into the matrix by selecting short excerpts which illustrated themes and electronically linking the excerpts to the original transcript, to maintain the data integrity. To ensure rigour, the team developed an 'inquiry audit' (Lincoln and Guba, 1985) to evaluate decisions. After SJH had coded the nine groups, SBB independently analysed four transcripts. These codes were compared against those identified by SJH and inconsistencies were resolved. Once the interpretation phase of the analysis had been conducted, SJH and LAS presented the analysis and findings to JB for feedback on the analysis and interpretation.

Ethical considerations

The study was approved by Oxford Brookes University Research Ethics Committee (UREC No. 150953) in October 2015. Participants consented in writing, and they received a £15 shopping voucher. Participants have been assigned initials to de-identify excerpts used to illustrate the findings. Audio recordings and transcripts, with identifying information removed, were stored in a secured computer folder following university data management procedures.

RESULTS

Forty-nine women participated in nine focus groups, three for each lifestage. The sociodemographic characteristics and size of the groups are presented in Table 1.

Table 1: Sociodemographic characteristics of the nine focus groups included in the framework analysis (values in the table refer to the number of women)

		Age in years			Main work role				Educational level					Relationship status		
Group label	**Group size**	**16-20**	**21-25**	**26-34**	**Education**	**Caring Role**	**Work**	**Unanswered**	**No formal education**	**2**	**3**	**4 and over**	**Unanswered**	**Single**	**In a relationship**	**Cohabiting or married**
CS[a] 1	8	8	0	0	6	0	0	2	0	0	8	0	0	5	3	0
CS 2	11	10	1	0	9	0	0	2	0	1	9	0	1	5	6	0
CS 3	4	4	0	0	4	0	0	0	0	4	0	0	0	1	3	0
WW[b] 1	4	2	1	1	0	0	4	0	0	2	2	0	0	0	3	1
WW 2	4	0	0	4	0	1	3	0	0	2	2	0	0	0	2	2
WW 3	5	1	3	1	0	0	5	0	0	0	5	0	0	0	3	2
M[c] 1	6	0	2	4	0	6	0	0	0	3	2	1[d]	0	2	0	4
M 2	4	2	0	2	1	0	3	0	0	1	3	0	0	2	0	2
M 3	3	0	0	3	0	0	2	1	0	0	3	0	0	0	0	3
Total	49	27	7	15	20	7	17	5	0	13	34	1	1	15	20	14

[a] College students for the 'All about me' lifestage

[b] Women in work for the ‘All about us’ lifestage

[c] Mothers of for the ‘All about them’ lifestage

[d] Participant still met the selection criterion for education

The college students were undertaking courses in hair and beauty, media makeup and childcare. One working group involved women who assisted children with disability; the two remaining groups held junior administrative roles in a large organisation. One mothers’ group was recruited by a Children’s Centre manager, while the remaining groups were friendship groups who had met at a Children’s Centre.

This section presents the findings of this study under the following major themes: Profiling how young women spend their time; Facilitators of participating in research; and Barriers to participating in research:

Profiling how young women spend their time

This theme describes how young women spend their time to understand competing activities that may lead to them declining an invitation to take part in research, to identify where research can be advertised to optimise uptake, and to identify what modifications may be required to tailor studies to the life profile of participants.

Differences between life stages were apparent in women’s choices for free time, yet these differences did not match those suggested by the *wOOt! Media* (2013) life stages. Instead of a focus on personal interests such as music and sport, participants in the ‘All about me’ group, seemed to prioritise spending time with others. Group activities (such as eating or shopping), seeing friends and family were enjoyed. Even when spending time alone, social connection was sought. There were frequent references to using mobile devices and social media to see what other people were doing and to communicate:

K: Like Facebook you've got Messenger to talk to people and Instagram we can like look at different people's posts, stuff like that. [CS 1]

Moreover, when describing themselves, participants in the ‘All about me’ group often defined themselves through their relationships with other people (cousins, friends and siblings), rather than by talking about their interests or activities outside of college.

In contrast, participants in the ‘All about us’ group, would choose interest-related activities, as they started to form their own identity in the adult world, not prioritising social activities with peers as suggested by the marketing life stages. Outside of work, the ability to choose the activity and to spend time alone was valued:

HY: I'm so anti-social. I have to spend all my minutes slash hours, slash days with people that when I get an hour to myself, no-one's getting in that! [laughs] That’s my hour! [WW 2]

Activities included walking, music, fitness, gaming, and reading. These interests influenced choices in television, reading, and social media. In contrast to the participants in the ‘All about me’ focus groups, who used media to share time with others, the participants in the ‘All about us’ groups were using these platforms to find information about their interests, to follow public figures that they wished to emulate and to find entertainment. The main use was not about maintaining social networks:

C: … I follow like quite famous people or like for me I follow a lot of fitness girls, a lot of them and just look at new workouts and stuff like that…obviously I see them doing that thing and I want to do it because obviously because I see them do it and people liked it…’ [WW1]

For participants in the ‘All about them’ life stage, there was a common need to spend time alone. While the marketing lifestage categories implied that the women would be totally focused on others’ needs, the new mothers wanted to shop, go to the gym, read or bathe without children. At the same time they were vulnerable to loneliness. They craved social interaction with those at a similar life stage:

V: I enjoy my own company. And having a little toddler all day... The thought of an hour quiet by myself is just bliss. [M 3]

T: …I get really, really lonely. Like today I've just had me and my son all day…I have to fill my day with people around me. [M 3]

Yet, as was suggested by the marketing life stage descriptions, the mothers appeared to feel pressure to attend to the needs of others and the home. Being busy appeared central to their view of being a good mother, and their talk of doing something for themselves was characterized by expressions of guilt:

A: … I can't sit down during the day.

H: I feel guilty.

A: I do, really guilty and if I did sit down, I would be 'Oh yeah, that's got to be done'. I can't do it. [M 2]

Consequently, talking about free time was difficult for some mothers. Feelings of guilt influenced by the social norms surrounding motherhood could therefore create a tension between messages about doing research to provide gain for the women themselves and their self-identity. However, the opportunity to combine participation with the company of other mothers might be engaging.

Facilitators to participation in research

Financial remuneration

The marketing lifestage categories suggested that the women would be attracted to different things according to their changing priorities during young adulthood.

When asked for their reasons for participating in the focus groups, the financial remuneration (shopping vouchers) was cited by both the ‘All about me’ and the ‘All about us’ groups as the primary reason. Other free items, such as chocolate, were also valued:

J: Voucher.

G: That was mine [reason for participating] as well.

J: I think it's probably everyone's

*C: Chocolate [*CS 2]

Remuneration was not typically the main reason for taking part in the ‘All about them’ focus groups. More important was the chance to spend time with other mothers:

C: …it’s a nice way to get together and to help out as well. [sounds of agreement].

A: Good answer.

H: And to meet with other mummies I thought was quite nice. I liked that idea. [M 1]

The shopping vouchers were appreciated but, while the vouchers or other tangible rewards were always stated immediately by the other life stage groups, the ‘All about them’ groups tended to mention these as an afterthought or as something for other women and not them.

B: I think that it was the last lines of R's text. Before I'd even got to that line I was thinking 'Yeah, you know, I'll come around and do it.' and then I was like 'Oh and I can get a voucher! Double bonus!' [M 3]

Therefore, there was not a clear distinction between all three lifestage categories in what was perceived as a suitable reward for participation; the differences related instead to whether the women were caring for others or not in their day to day lives.

Helping others

Once again, the reason for participating in the study was not perceived in the same way across the three lifestage groups. Reasons for participation were sometimes expressed by the 'All about us' and 'All about them' groups as a desire to help another. Yet despite the occasional reference to helping the researcher, the desire to help was typically phrased as the wish to help a named person known to them. In the 'All about us' groups the 'other' was a person in authority, perhaps because of how the invitation had been cascaded within workplaces.

K: Well we're brown nosers [sycophants] really aren't we? [Manager's name] we said yes! Please like us! [WW 1]

But for the 'All about them' groups the person helped was within their peer/social network and there was no sense that a power difference was influential. For the students in the 'All about me' life stage, their reason for doing the research was sometimes described as wanting to help the researcher. When helping was phrased as a need to help other women as a cause or research in general in the college students, this was mocked by the group.

Novelty and avoiding the mundane

All three life stage groups saw research participation as something novel but the attraction was slightly different for each category. The desire to do something new was discussed by the 'All about me' and the 'All about them' groups because the research presented a welcome relief from normal routines. Nevertheless, the escape was different for the two life stages. For the students it was relief from boredom of college life but for the mothers it was not having to be responsible for others:

B: In the evenings would be… because it's a nice break, not having to put the kids to bed. [M 3]

For the 'All about us' group it was the novelty and intrigue that attracted them to help out:

R: I don't think you ever really get given opportunities to do stuff like this otherwise but I would have never had the opportunity to sit in and do some research. [WW 3]

These differences between the three lifestage categories could be helpful for researchers wanting to tailor advertisements. However, while the differences could be anticipated for the 'All about me' and 'All about them' groups, the interest in the 'All about us' group in doing something new to see what it was like was more surprising and not so closely linked to their daily activities.

Barriers for participation in research

Power imbalances as a deterrent

When discussing the participants' perception of researchers and research, there was evidence that power imbalances were perceived which made young women feel vulnerable or inadequate. The distance between participants and researchers was apparent in all three life stages.

The 'All about me' groups talked about research participants in the third person as people with more life experience or time than them. Alternaltively they spoke in the first person, describing themselves as people who are manipulated by researchers for their own ends:

C: What you want to get out of us, and you're sort of out to get what you want out of us.

J2: Manipulateable. [Participant laughter] [CS 2]

The 'All about us' and the 'All about them' groups defined research participants by comparing them to researchers. Research participants were described as less knowledgeable than researchers and for some women this created anxiety about what would happen during participation.

H: On the way here, I was slightly worried that it would be, really quite, oh dear I did say to you [points to friend] 'well I did have a wine' [laughs]. All these clever questions but, no, I didn't really think that I knew exactly what was going, going to be said or anything. [M 2]

The distance between researcher and participant was also evident when the women described a researcher. All groups started with a stereotypical image of a "Person with a white coat and a clipboard" (CS 1), but the women swiftly provided elaboration. In most cases the descriptions of researchers were negative, using language to suggest that researchers would be very driven to complete their research:

CT: Like stuck in their ways sort of thing. Like just get their research done, that's it.

J: I think nosey. Well they know what they want to find out, so they are going to try to get it, worm it out any way. [CS 2]

However, some participants had experienced research in the ‘All about us’ and the ‘All about them’ groups and they described researchers positively, shifting group opinion. The strong difference between the more stereotypical images and the ones based on real people suggest the value of the experience of participation or of researchers for reducing this barrier to participation:

A: I took part in a research, well the same one that you did 'Into Bio' study when I had [child’s name]. Um... I had to go and have scans every. That's why I took part because you had scans every 4 weeks wasn't it? And they were all lovely, there was no pressure to do anything. [M2]

Research provoking anxiety

All groups described anxiety surrounding the safety of responding to invitations. There was considerable mistrust across all three lifestage groups about unsolicited contact. This worry was expressed more in the ‘All about me’ and the ‘All about us’ groups. Some reported mistrust of email recruitment, while others debated the trustworthiness of social media. Previous expectations about communication methods could also create mistrust of advertisements:

E: Not email. I think it's spam. ... If it was on Twitter, I'd scroll past it but Facebook...Yeah. Cos they seem to have much more like ads for rubbish. [Sounds of agreement]. Whereas Facebook it's more like news articles, stuff you'd be more interested in. [WW 1]

The ‘All about me’ and the ‘All about us’ groups discussed how researchers could reassure them. Endorsements by medical institutions were particularly trustworthy for these two life stages:

C: If someone was from the NHS or something and had a badge.

H: If it was a leaflet in a GPs like. [WW1]

Some participants in each of the life stage categories also expressed anxiety about meeting a stranger for the first time; they believed that being in a group was important. Their discourse implied that being together would provide confidence, even when the topic of the conversation was sensitive:

CT: You don't really want to go in a room when you don't know each other. If you're like talking about personal things. If you're with friends, then you'll probably do it. [CS 2]

C: I think a group's more relaxed. One to one you feel like that person is just grilling you. Personally. [WW 1]

In two of the 'All about them groups' a concern was expressed about confidently going out alone. They echoed the preference for group participation, or for the researcher to come to them.

T: See I'm going out. I can't go out by myself. Like I mean if I've got my son and that's helped me to become more confident… I think it's nice in a group but I'd prefer someone, if I was doing it by myself, I'd prefer someone to come to me than for me to go out and meet somewhere because I would get quite anxious about driving somewhere, getting there on time. [M 3]

Therefore, while there were small differences between different lifestage categories in the reasons for anxiety, there were common ideas expressed across the groups. Researchers need to be mindful that research participation is new to many participants and the first experience of participation may create anxiety in multiple ways. The opportunity to meet a researcher or past experience will be helpful to reduce this anxiety.

DISCUSSION

This study provides insight into how young women spend their time to explore competing calls on their attention, and identifies barriers and facilitators to their participation in research. We proposed that a challenge for the recruitment of young women to health research could be that their priorities are changing as they adopt adult identities. Motivations for participation in health research did vary according to the three life stages categories described but not always in ways anticipated and there were also overlaps between groups.

Marketing research suggests that advertising is effective if it promotes something that fulfils existing goals (Christensen et al., 2009). The differences between the life stages in what might compete for young women's attention support a similar strategy for recruitment to health research. Providing social opportunities might motivate participation because being with others is important to college students and mothers. In contrast, to reach women within the 'All about us' life stage, targetting places such as gyms and online communities could be more effective. Alternatively, using popular public figures followed by young women at this lifestage could be useful because such 'celebrities' could serve as benchmarks of social norms. This use of celebrities has already been adopted successfully by e-cigarette marketers to create the acceptance that e-cigarettes are part of everyday fashion and lifestyle for young adults (de Andrade et al., 2013).

Remuneration as a motivating factor was different among the groups of women, with the division between women with children and women without. Shopping vouchers were less engaging for mothers than for the other groups. Social opportunities were a greater attraction. Previous research has found unexpected variability in the effectiveness of remuneration (Mercer et al., 2015) and some research has noted that non-monetary gains such as improved healthcare, in the form of more frequent tests or discussions with professionals, might be perceived as more valuable (Katz et al., 2019). Indeed, the women in this study suggested several non-monetary factors were attractive such as novelty and escape from usual or boring activities.

The differences between the three lifestage categories have also highlighted the influence of the women's perceptions of their identity. The women talked in strong language about the gap that they felt between themselves and researchers which seemed to create feelings of ineligibility and anxiety about ability. In addition, the mothers seemed to be directed by social norms of the activities expected of mothers, such as selflessly managing tasks for their families. Such norms about how to be a 'perfect' mother are known to be powerful, influencing women's identity, cognition and behaviour (Meeussen and VanLaar, 2018). Knowledge of identity-related discourses could, therefore, help researchers to provide clearer messages about who is needed and valued in the research. Awareness of role identity could also help invitations for participation to avoid alienating messages, such as asking people whether they have free time, if this is a source of guilt.

Similarly, this research has shown how an understanding of participants' perceptions of research and the identity of research participants is valuable. Young women within the 16 to 34 year age groups may be feeling that they are adopting adult roles at different stages. Johnson and Mollborn (2009) found that people who had finished education or who were from families experiencing economic hardship were more likely to feel older than their chronological peers. This could present a challenge if survey research is perceived as an 'adult' activity or if advertising materials appear to be targeted towards adolescents if the potential participants feel that they have matured beyond that younger lifestage. The importance of speaking to specific identities to engage participants in research, presents a challenge for mass media advertising for studies because the advertisement's audience may not be known (as in social media advertising where recipients can share with their own personal networks). Other researchers have found unanticipated ethical issues arising from advert contents creating offence and dislike of research when adverts have reached social media accounts of people who perceive the invitation to be categorising their identity incorrectly (Fileborn, 2016).

However, there were also commonalities across the life stages of young women, which challenge the usefulness of the consumer research categories. Altruism has often been cited as a reason for participation; but similar to other research (McCann et al., 2010; Mein et al., 2012), ‘helping out’ causes were rarely stated, or could be mocked. Therefore, promoting altruism to increase response via mass media campaigns (as suggested by Williams, Entwistle, Haddow, & Wells, 2008), may not work. Instead, requests from individuals known to the women were more motivating, indicating that involving key informants in communities could be a useful way to disseminate invitations to participate. This finding also supports existing evidence that altruism takes many forms (Carrera et al., 2018) and that a shared connection with others related to the research can be influential in the decision to participate.

Anxiety about participation was expressed in all life stages. This anxiety related to perceived differences in power or ability between researchers and participants. The women used stereotypical views of researchers to guide responses. Contact with ‘real’ researchers seemed to sway group opinion. This implies that researchers should be more visible to hard-to-reach groups so that potential participants draw on more positive and realistic images. To reduce reliance on stereotypical constructs in decision-making requires information about individuals within the unfamiliar groups (Bodenhausen, 2005). Yet, this process may also require participants to have more time to process this information so that they do not fall back on the quick and dirty heuristic of stereotyping.

Strengths and limitations

A strength of this study has been the involvement of a population which does not typically participate in health research. The focus group method was selected to provide a supportive environment and the participants apparently valued friends’ company, as peer recruitment occurred. Invitation sharing also improved the groups’ diversity. The study engaged women that the original invitation did not reach including participants with lower functional literacy and limited English. The focus group method seemed to empower participants, as was evidenced by their willingness to mock answers which they felt were not authentic.

The choice of a qualitative descriptive design could be viewed as a limitation because this design impacts on the generalisability of the findings, such that probabilistic generalisability is not possible. Nevertheless, we have tried to provide evidence to facilitate naturalistic generalisation (Smith, 2018) by providing a large number of extracts so that the reader can see whether the data and our interpretations fit with their own experiences of working with young women. The use of a descriptive rather than an interpretive analysis of the data could also be judged to be a limitation of this work.

Much has been learned from these women, but participants struggled to articulate ideas. This challenge may have increased because English was a second language for some participants in the ‘All about me’ groups, although all of the students did have sufficient English proficiency to meet the college entry requirements. More often the difficulty appeared to be the abstract nature of the questions that was problematic since the questions were sometimes exploring participation in future, unfamiliar research activities. Their conversations were more fluent outside of the research. Consequently, meanings were sometimes subtly expressed and generated between several speakers. Therefore, it has been difficult to reflect the ideas through short quotations. This observation is relevant because it emphasizes how articulating answers in health research could be difficult. Researchers, therefore, need to work with potential participants to understand how to facilitate expression. For example, group data collection could be valuable because the women can help each other to build responses.

Another analytical difficulty was that participants adopted multiple identities; for example, mothers within workplaces valued social interaction above personal interests, unlike the other group members within the working life stage focus groups. However, these overlaps do not negate the usefulness of the life stage categories. They further demonstrate how differences in life priorities are an important consideration when designing research recruitment approaches.

CONCLUSIONS

The aim of this research was to evaluate the usefulness of the marketing lifestage categories to inform tailoring of recruitment strategies to increase participation of young women in health research. However, these focus groups suggest that the life stage categories indicated by the marketing research by *wOOt! Media* (2013) does not provide a reliable framework to help researchers to anticipate the differing needs of young women aged 16 to 34. However, the categorisation of women by life stage was useful to illustrate that a ‘one size fit all’ is not likely to optimise recruitment of more young women to research about their health.

Awareness of young women’s developing identity, and attentiveness to the facilitators of and barriers to research in these groups at the time of the research can help researchers to adopt the participant-perspective needed to tailor recruitment strategies. Therefore, a recommendation of this paper is that researchers must make time during study planning to become very familiar with the possible transitions and complexities in the identity of their intended participants at the time of the study. This investigation of identity could involve eligible women in the design of the recruitment strategy and study tasks but could also involve an examination of how eligible groups of young women want to be represented in advertising materials and how they network with their peers.

At the same time the difficulty of using one recruitment strategy to engage a wide range of young women suggests that mass media approaches to share study invitations or advertisements may not be effective. The differences in women’s perceived social roles and priorities during young adulthood mean that it would be difficult to tailor advertising materials with sufficient sensitivity so that the wording or images does not offend or send messages that the recipient is not the right person for the research. Instead mass media may be more useful to increase knowledge and awareness about research and researchers so that young women have more accurate information and are less reliant on negative stereotypical assumptions.

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