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Intergenerational family communication about mammography: young women's perceptions, intentions and experiences

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Intergenerational family communication about mammography: Young women’s perceptions, intentions and experiences

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Abstract

Early detection of breast cancer through regular mammograms is crucial to reducing the mortality rate, yet almost 50% of target women (aged 50-69 years) fail to have regular mammograms. Young women aged 18-39 years (N = 60) participated in a two-stage study that explored family communication as a vehicle for mammography promotion to target women. Intention to initiate such a conversation was measured and predicted using the Theory of Planned Behaviour (TPB) framework. The TPB variables together produced a model that predicted behavioural performance, with intention being the only independent predictor. Young women’s anticipatory perceptions and actual experiences of initiating a conversation about mammography were also explored qualitatively. Barriers included a sense of being ill-informed, and a desire to avoid awkwardness and worry. Perceived advantages included a more supportive and open relationship with the female relative, learning more about mammography from an experienced female, and prompting a family member to consider regular mammography a health priority. Intergenerational family communication appears to be a viable vehicle for mammography promotion.

Breast Cancer in Australia

Breast cancer is the cause of the largest number of cancer related deaths amongst Australian women. One in 11 women will suffer breast cancer in their lifetime, with over 70% of these cases occurring in women over 50 years of age (AIHW, 2006). Although the incidence rate of breast cancer in Australia is climbing, the mortality rate is declining, which is partially attributable to early detection through regular mammographic screening of asymptomatic women (Klemi et al., 2003). BreastScreen Australia actively recruits target women (aged between 50 - 69) for participation in free screening mammograms on a regular basis (recommended timeframe is every 2 years). While numerous studies report that women express clear positive attitudes towards mammography, such as a belief in the efficacy of early detection and prevention of death (e.g., Nekhlyudov, Ross-Dengan, & Fletcher, 2003), only 56% of target women are currently attending for regular screening in Australia (AIHW, 2006). Promoting screening mammography to target women is clearly a priority.

Family Communication

There is much evidence to suggest that social support and interpersonal influence not only have a direct impact on health and wellbeing (see Berkman & Glass 2000 for a review), but may also be effective in promoting healthful behaviour (Nollen, Catley, Davies, Hall, & Ahluwalia, 2004; Eng, 1993). This paper focuses on family communication as a vehicle for health promotion. More specifically, the focus is on intergenerational interpersonal influence between female family members in order to promote mammography to target women.

Traditionally, family communication research has investigated and evaluated what may be termed ‘downward’ communication, i.e., communication and its effects from the older generations, down through the younger generations (e.g., Chaffee, McLeod, & Atkin, 1971). In recent years, several researchers (Kunke, Hummert, & Dennis, 2006; Saphir & Chaffee, 2002) have identified a gap in the literature and in our knowledge about ‘upward’ family communication: younger family members communicating with older family members, and the influence of this communication on the older generation. Some literature exists about the role of family communication in relation to a variety of health issues such as breastfeeding of infants (e.g., Rempel & Rempel, 2004), teenage sexuality and safe sex practices (e.g., Furstenburg, Herceg-Baron, Shee, & Webb, 1984), organ donation (e.g., Morgan, 2005), and genetic counselling and risk (see Wilson et al., 2004 for review of this area). However, little work has been done in any field examining upward family communication as a vehicle for health promotion.

The current study aims to explore the utility of an upward family communication intervention to promote mammography to target women. Adult daughters of target women may be influential vehicles for promotion of this crucial secondary preventive health behaviour. A daughter’s intention to engage in a conversation about mammography...
with an older female family member may be best measured and predicted using a Theory of Planned Behaviour framework.

**Theory of Planned Behaviour**

Research into the Theory of Planned Behaviour (TPB; Ajzen, 1985) as a model for predicting and promoting health behaviour has gained momentum in recent decades, particularly among social and health psychologists. The TPB posits that intention to perform a particular behaviour is the best predictor of actual performance of the behaviour. Intention in turn is determined by perceived control over the behaviour, perceptions about social norms relating to the behaviour (subjective norms), and attitude towards the behaviour. The TPB is diagrammatically represented in Figure 1:

![Figure 1: Model depicting the Theory of Planned Behaviour](image)

The TPB is the best motivational model of health behaviour (Armitage & Conner, 2000). Meta-analytic reviews indicate that intention accounts for an impressive 20-30% of variance in behaviour (e.g., Conner & Armitage, 1998). The TPB has been applied to numerous health behaviours such as attendance at routine health checks (Sheeran, Conner, & Norman, 2001), ad testicular screening (Brubaker & Wickersham, 1990). The current study sought to apply the TPB to a novel arena: intergenerational family communication about preventive health, specifically mammography. We tested the TPB constructs and model to determine its appropriateness for future use in intergenerational family communication interventions.

**Method**

**Subjects**

Participants in this two-stage study were undergraduate students who participated either for course credit or small incentives (coffee vouchers and $5 department store vouchers). Participants (N = 60) were all female, and of non-screening age (18-39 years, M = 21;05).

**Materials**

**Stage 1 Questionnaire** This questionnaire assessed TPB variables in relation to initiating a conversation about mammography with an older female family member. Items assessing attitude (five items), perceived behavioural control (six items), subjective norm (two items) and intention (three items) were included, all of which used a 7-point Likert scale. Items were based on previously used scales (e.g., Orbell, Hodgkins, & Sheeran, 1997; Sheeran & Orbell, 2000). Items were presented in a random order, and the position of the positive and negative anchors on the Likert scales were counterbalanced.

Participants were also asked to specify which older female family member they are most likely to discuss health issues with, and they were also asked two open-ended questions: “What do you believe are the disadvantages of your initiating a conversation about mammography with your older female family member?” and “What do you believe are the advantages of your initiating a conversation about mammography with your older female family member?”

The questionnaire concluded by encouraging participants to consider initiating a conversation about mammography with their nominated older female family member.

**Stage 2 Questionnaire** This questionnaire was designed to check whether participants engaged in the desired behaviour after participating in Stage 1, and to gather information about their experiences of this process. Participants were asked to report whether or not they initiated a conversation about mammography with an older female family member. All participants (regardless of whether or not they engaged in the desired behaviour) were asked to comment on any factors they perceived would have made initiating the conversation easier, and any perceived barriers or difficulties.

**Demographic Details Form** Participants completed a short demographic form that included details, such as age, household income, and breast cancer family history.

**Procedure**

**Stage 1** Participants were tested up to 10 at a time in a classroom setting. After generating a unique participant code to ensure anonymity of the data, participants completed the Stage 1 questionnaire. This was followed by two other tasks (another questionnaire and a computer task) that were part of a different study. The participants' final task was to complete the demographic details form, and at the conclusion of this stage they were reminded they would be contacted via email to return for Stage 2.

**Stage 2** Stage 2 occurred six to eight weeks after Stage 1 in a small group setting. (maximum four participants at a time). Participants completed the Stage 2 questionnaire, which was followed by a debriefing and provision of two copies (one each for themselves and their conversation partner) of a
mammography brochure issued by BreastScreen NSW.

Results
Fifty-six participants returned for Stage 2. From this sample, 35.7% (N = 20) reported that they did initiate a conversation with an older female family member about mammography after participating in Stage 1. A one-way ANOVA was performed on the full Stage 1 sample (N = 60) with conversation (yes/no) as the independent variable, and intention scores as the dependent variable. There was a significant difference in intention scores between those who did (M = 14.05) and did not (M = 10.25) initiate a conversation \( F(1, 54) = 10.446, p = .002 \).

A logistic regression analysis was performed on the sample of participants who returned for both Stages (N = 56). Initiation of a conversation was regressed on a model comprising TPB variables. A logistic regression procedure was used as the outcome variable was dichotomous (yes/no). The -2 log-likelihood value of the constant-only model was 72.30, as compared to the -2 log-likelihood value of 58.34 when the TPB variables were entered in the model, which was a significant reduction, \( \chi^2(4) = 14.66, p = .005 \). The TPB model was significantly better at predicting conversation than a constant-only model. Consistent with Ajzen’s TPB, intention was the only significant independent predictor of behaviour (initiation of a conversation), B = -.308, Wald statistic 7.027, \( p = .008 \). Also consistent with the TPB, all other variables failed to independently predict behaviour (Wald statistic range .03-.2.29, all \( p > .05 \)).

Qualitative data was initially coded by the first author (each question coded separately), and themes were identified within each category. At Stage 1 participants were asked to anticipate advantages and disadvantages to initiating a conversation, and at Stage 2 were asked to reflect on facilitators and barriers to the conversation.

Stage 1: Perceived Disadvantages
Twenty participants (33%) reported no perceived disadvantages, which may be reflective of socially desirable responding. A small number of participants were unconvinced about the relevance or purpose of initiating a conversation, and thus reported their unwillingness rather than stipulating perceived disadvantages. For the remainder of the young women, the prominent themes for the perceived disadvantages were as follows:

Awkwardness or Discomfort Many participants anticipated that it would be an awkward conversation to initiate, and either they or their family member would feel uncomfortable with this topic of discussion. The young women also regularly commented that this disadvantage was not reason enough to avoid the conversation:

Some awkwardness but there’s not really anything to lose.\(^{(200388FUD)}\)

They might be uncomfortable but it’s worth it.\(^{(220987CA)}\)

Worry, Stress, and Distress Young women seemed particularly concerned about upsetting their family member by discussing a topic they perceived to be emotive and stressful. This perception of worry took two forms. The first was a concern that reminding their family member about a personal or family breast cancer experience would be upsetting:

My mum’s sister found out last year she had breast cancer so it may scare my mum a little...\(^{(280594BUT)}\)

The second form was a concern about eliciting worry about the young women’s health, and arousing suspicions about why they were raising this topic of conversation:

The fear that I could be signifying that I might have cancer...\(^{(161187NAS)}\)

Sharing Misinformation Several of the young women recognised their own lack of knowledge and awareness, and were conscious of not wanting to provide inaccurate or incomplete information to their family member. One participant summed up the essence of this concern as follows:

I don’t know much about what is involved.\(^{(1000985MEN)}\)

However, some young women did not consider potential disadvantages to their family member, and instead focused on disadvantages to themselves. In such instances, the daughters commented on their family member’s lack of knowledge and awareness about mammography, and reported they were wary of getting bad or biased advice:

She believes mammograms are dodgy and that they can do more harm than good.\(^{(010785URB)}\)

Stage 1: Perceived Advantages
Many young women seemed to report the perceived advantages with more conviction than the disadvantages. Prominent themes for the perceived advantages were:

Benefit to Self Most young women commented on the potential to gain insight from their family members into their own family history of breast cancer, and the process and benefits of mammography. There was a distinct bias in the data towards perceived benefit to self, as opposed to benefit to the family member:

She would be able to tell me where/how a mammogram would be available and support me.\(^{(010785URB)}\)
Benefit to Family Member  Young women did identify potential advantages for the family member in having this conversation, such as increasing her awareness and knowledge about the benefits of regular screening and early detection, prompting her to book in for a mammogram, and encouraging her to take the age-based screening recommendations seriously.

To encourage them to continue with regular mammographies (sic.) to ensure their health is maintained and that breast cancer, if it develops, is detected early.(2211885SO)

Remind her to book in for one.(200988MAA)

Note however that almost half the references to perceived advantages to the family member were accompanied by a comment about a perceived advantage to self also.

Relational Benefit  Many participants acknowledged that discussing such a personal topic openly with their older relative would have a positive impact on their relationship:

allowing them to feel as though open communication about any concerns is encouraged.(130388RAD).

Stage 2: Facilitators  While several young women reported it was sufficiently easy to initiate a conversation with an older female family member about mammography, there were numerous consistent themes that arose when participants were asked what could have made the process easier.

External Initiator or Prompt  The perceived need for an external initiator (e.g., older female family member herself, or a health professional) or a prompt (e.g., a television advertisement or brochure) was a strong and consistent theme. In particular, young women were identifying mass media messages or a family friend who had experience with breast cancer or breast screening as potentially helpful conversations starters or reminders.

If there was info on it like an ad on T.V.or something so I could lead on from there.(270888SHE)

If it has come up in conversation or was initiated by something e.g., seeing it on the news, hearing about it or even a friend having it done, we'd have had no trouble talking about it.(251287EIS)

More Information  Young women also consistently reported that being better informed about mammography would have made initiating the conversation easier, particularly if some persuasion was necessary:

If I had more information about the benefits. (010785URB)

Maybe knowing some more facts to make squashing your boobs more justified.(281085EDW)

Relationship Factors  Younger women spoke of the importance of a closer relationship with their older female family member in order to make initiating the conversation easier. This closeness was referred to in terms of both proximity and intimacy:

If the family member lived close by and I spoke with her face to face at regular intervals.(261166SIN)

A better, more open relationship.(100985MEN)

Other, more minor themes were the presence of health problems, family history, and more time to have personal conversations without interruption.

Stage 2: Barriers  No novel themes emerged in response to this question. Instead, themes paralleled those for the anticipated disadvantages, or were a “lack of” the things previously identified as facilitators.

Discussion  The TPB model was successful at predicting performance of the desired behaviour. Initiation of a conversation with an older female family member about mammography was predicted by Azjen’s TPB model. Consistent with this theory, intention was the only significant, independent predictor of behaviour. Further, young women who initiated a conversation had significantly higher intention scores at Stage 1 than those who did not initiate a conversation.

An aim of this study was to explore the utility of the TPB as a model for use with future family communication preventive health interventions. The results indicate that the TPB is a viable model to apply to this novel health arena.

The qualitative data complemented the quantitative findings. One salient perceived disadvantage to initiating the conversation was the elicitation of awkwardness, worry, or distress, however many participants also reported that it was “worth the risk.” This may relate to subjective norms, a TPB predictor variable. If a young woman perceived this topic to be taboo or too private to discuss, this may reflect her ideas about how common it is to discuss such an issue with relatives.

Further, the conviction with which the young women described the perceived advantages is indicative of positive attitudes towards performing the behaviour, another TPB predictor variable. While many young women emphasised beneficial consequences for themselves, it was also apparent that there was a level of awareness of the potential positive impact the conversation could have for the older
female family member, such as reminding them to book in for a mammogram, and encouraging them to take their breast health and family history seriously.

A particularly notable result of this study is the apparent willingness of the young women to engage in such a conversation, provided that they have adequate information to equip them for a meaningful exchange. It was clear that young women felt they needed more information about the benefits and process of mammography before they could encourage their family members to screen. In addition, many young women referred to mass media channels as avenues they would attend to for such information. Rogers and Story (1987) suggest that while mass media campaigns can impact positively on knowledge, attitudes, and intentions, they are less effective at facilitating behavioural change. Thus, many communication scholars have argued that while mass media preventive health campaigns are an effective initial strategy, interpersonal message delivery should be emphasised as the mode of behaviour change (e.g. Valente & Fosados, 2006). The results of the current study further justify this strategy, and more specifically, justify the continued exploration of intergenerational family communication as a vehicle for mammography promotion.

References


