

Improving uptake and engagement with child body image interventions delivered to mothers: Understanding mother and daughter preferences for intervention content

Kirsty M. Garbett & Phillippa C. Diedrichs

Centre for Appearance Research, University of the West of England, United Kingdom

Correspondence to: Phillippa C. Diedrichs, Centre for Appearance Research, University of the West of England, Coldharbour Lane, Bristol, BS16 1QY, UK; phillippa.diedrichs@uwe.ac.uk; phone: +441173283756.

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Abstract

Mothers are a key influence on adolescent girls' body image. This study aimed to improve understanding of mothers' and daughters' preferences for content in body image interventions designed to assist mothers to promote positive body image among their daughters. British mother-daughter dyads ($N=190$) viewed descriptions of five evidence-based influences on body image (family, friends and relationships; appearance-based teasing; media and celebrities; appearance conversations; body acceptance and care). Mothers and daughters each selected the two most important influences to learn about in these interventions. Overall, both mothers and daughters most frequently opted for 'families, friends and relationships' and 'body acceptance and care', whereas 'media and celebrities' was their least preferred topic. While the overall sample of mothers and daughters agreed on preferences, Fisher's exact tests showed that within-dyad agreement was low. Recommendations for improving parent and child engagement with, and effectiveness of, child body image interventions delivered to parents are discussed.

Keywords: body image, intervention, mothers, parents, children, adolescent girls.

Mothers play a key role in influencing their daughter's body image (Rodgers & Chabrol, 2009). They can foster positive body image among their daughters by modelling positive attitudes and behaviours towards their own appearance (Abraczinskas, Fisak, & Barnes, 2012). To an extent, they can also protect their daughters from sociocultural appearance pressures (e.g., helping them to deconstruct unhelpful media messages) (Hart, Cornell, Damiano, & Paxton, 2015). Alternatively, maternal pressures on daughters to lose weight and appearance-related criticism prospectively predict body dissatisfaction and disordered eating among daughters (Francis & Birch, 2005; Presnell, Bearman, & Stice, 2004). Consequently, mothers have an important role in interventions that aim to improve body image among adolescent girls. Mothers can receive interventions to improve their body image so that they can role model positive body image, or, they can act as interventionists directly delivering techniques to foster positive body image among their daughters.

A recent systematic review of studies conducted between 1992-2013 found that involving parents in interventions designed to improve children's body image and prevent disordered eating can be effective (Hart et al., 2015). Of the twenty studies reviewed, three studies were sufficiently methodologically rigorous to isolate the effect of parental involvement on outcomes among children. Two studies found that parental involvement was beneficial for girls' body image. For example, Corning, Gondoli, Bucchianeri, and Salafia (2010) evaluated mothers' participation in four 90-minute workshops covering mother-daughter communication about body image and eating, and pressures from friends and the media. Their daughters did not receive any intervention. Daughters whose mothers received the intervention reported significant reductions in perceived maternal appearance pressures and their own drive for thinness. Hart et al. (2015), however, concluded that most studies suffered from small parent sample sizes, often due to difficulties with recruitment and retention. Furthermore, despite a call 15 years prior to engage parents in the design of body

image and eating disorder prevention interventions (Garber & Brooks-Gunn, 1996), they concluded that little research had met this call.

More research into parents' preferences for interventions designed to help them improve their children's body image (e.g., their preferences for intervention content, format, length, and delivery) may enhance intervention uptake and effectiveness. There is some evidence that interventions tailored to users' preferences are more effective (Noar, Benac, & Harris, 2007). For example, a recent study evaluating an online intervention for mothers that was designed to improve their own, and their daughters', body image found that individually tailoring the intervention to mothers' preferences for content significantly improved maternal engagement and psychosocial outcomes (Diedrichs et al., 2016). Involving 'end-users' in intervention design and development through consultation and participatory approaches has also been identified as crucial to the effectiveness and broad scale uptake of successful body image interventions delivered directly to adolescent girls and young adult women (Becker, Stice, Shaw, & Woda, 2009).

To date, however, there has been little published investigation of what parents and children prefer in interventions that aim to help parents to foster positive body image among their children. A recent study asked mothers what they thought made their pre-adolescent daughters feel good/bad about their bodies (McLaughlin, Belon, Smith, & Erickson, 2015). They also asked their daughters what made them feel good/bad about their own bodies. Encouragingly mothers' responses closely reflected empirically established risk factors for poor body image among adolescent girls, however, there was little concordance between mothers' and their own daughters' responses. These results suggest that in addition to assessing parent preferences for interventions, it may be important to establish if parents' preferences are in accordance with their child's perceived preferences for body image support from their parents, as this could have implications for intervention effectiveness. Specifically,

poor concordance within parent-child dyads may result in content being delivered to parents that is irrelevant and unimportant to their children, thereby potentially resulting in an intervention that is not acceptable and ultimately ineffective.

The current study aimed to increase understanding of mothers' and daughters' preferences for content in body image interventions designed to help mothers improve their adolescent daughters' body image. It also aimed to understand if mothers' and daughters' preferences are aligned. Specifically, we asked mothers what topics they would like to learn about, in order to help them support their daughters to have positive body image. Their daughters were also asked to indicate what topics they would like their mothers to support them with, in order to improve their own body image. Finally, we assessed concordance of preferences between the overall sample of mothers and daughters, and concordance within mother-daughter dyads. We did not have any formal hypotheses as this was an exploratory study and to our knowledge the first to explore parent-child preferences for body image intervention content.

Method

Participants

Mother-daughter dyads ($N=235$) were recruited from nine towns across the United Kingdom to take part in a "*website development study*" via telephone database sampling and approaching women face-to-face in shopping areas. Dyads were recruited for a larger study evaluating an online intervention for mothers that was designed to improve their adolescent daughters' body image (Diedrichs et al., 2016). Of the total sample recruited, 190 dyads reported their preferences for body image intervention content and their data is reported here. Mothers' mean age was 41.9 years ($SD = 4.96$, range = 31-54) and daughters' mean age was 13.0 years ($SD = 0.86$, range = 11-15). See Diedrichs et al. (2016) for detailed information on participant recruitment and demographics.

Measures

Mothers' preferences. Mothers were presented with a list of five topics that have been "*identified as important influences on body image and self-esteem among adolescent girls*". Each topic was accompanied by a 2-3 sentence description. The topics were empirically established influences on adolescent girls' body image that are commonly targeted in effective body image interventions for adolescent girls (Shroff & Thompson, 2006; Yager, Diedrichs, Ricciardelli, & Halliwell, 2013). Topics included: (1) *Families, friends and relationships* (i.e., exploring how family and friends can model body image behaviours and attitudes, and be a source of appearance pressures); (2) *Teasing and bullying* (i.e., exploring the impact of appearance-related teasing and developing strategies to promote resilience); (3) *Media and Celebrities* (i.e., critiquing media messages and developing resilience to unrealistic appearance ideals in media); (4) *Talking about appearance* (i.e., exploring how conversations about appearance, including "fat talk", can negatively influence body image, and developing strategies to avoid problematic conversations); (5) *Respecting and looking after yourself* (i.e., body acceptance and care strategies). In order to best support their daughters to have positive body image, mothers were asked "*Please select two topic areas from the list below that you would most like to learn about and rank these in order of preference*".

Daughters' preferences. Daughters were presented with the same list of topics and were asked '*Thinking about you, and how you feel about your body, which of these topics would you be most interested in talking to your Mum about? Please select two topics from the list below*'.

Procedure

Mothers and daughters attended a testing facility in their respective town and completed their paper-based questionnaire under standardised supervised conditions in

separate rooms from one another.

Results

Preferences for Body Image Intervention Topics

The frequency with which the overall sample of mothers and daughters selected each topic area as being within their top two preferences for intervention content is presented in Table 1. An inspection of the frequencies indicates that *'Respecting and looking after yourself'* (i.e., body acceptance and care) and *'Family, friends and relationships'* were the most preferred topics among mothers, in that order. Similarly, these topics were also the most preferred topics among daughters, with *'Families, friends and relationships'* rated most preferred, followed by *'Respecting and looking after yourself'*. Overall, daughters' topic choices were fairly evenly dispersed across the remaining three topics, whereas mothers largely preferred *'Teasing and bullying'*, and few selected *'Talking about appearance'* and *'Media and celebrities'*. *'Media and celebrities'* was the least preferred topic among both mothers and daughters.

Concordance within Mother-Daughter Dyads

To examine the extent to which mothers' preferences matched their own daughters' preferences (i.e., within dyad concordance), 2x2 Fisher's exact tests were used for each of the five topic areas. Within dyad concordance was poor. As can be seen in Table 1, there were no significant relationships between mothers' and their own daughters' preferences for topics, except for the topic *'Respecting and looking after yourself'*. Specifically, if a daughter selected *'Respecting and looking after yourself'* as a preferred topic to talk to their mother about, their mother was significantly *less* likely to report this as a preferred topic they would like to learn about to support their daughter.

Discussion

This study aimed to improve understanding of mothers' and daughters' preferences

for content in body image interventions designed to assist mothers to promote positive body image among their daughters. Encouragingly, when looking across the sample, mothers and daughters largely agree on the topics they would like to learn or talk about in body image interventions involving parents. Mothers and daughters most frequently preferred the topics of '*Family, friends and relationships*' and '*Respecting and looking after yourself*' (i.e., body acceptance and self-care). Interestingly, mothers' preferences tended to cluster predominantly around these two preferred topics, while daughters' responses were more evenly distributed across topics. Nevertheless, '*Media and celebrities*' was the least preferred topic by both groups.

It is surprising that '*Media and celebrities*' was the least preferred topic of both mothers and daughters. Exposure to the appearance ideals in media has consistently been found to increase body dissatisfaction among adolescent girls and women in experimental and qualitative research (Diedrichs, Lee, & Kelly, 2011; Grabe, Ward, & Hyde, 2008). Further, some of the most successful body image interventions delivered directly to adolescents have focused on promoting media literacy (Yager et al., 2013). It may be that parents already feel knowledgeable about this topic, or that this topic is already covered in schools given that the UK has a long standing history of teaching media literacy skills (Kubey, 2003). Similarly, girls may feel that they already get sufficient support on media literacy skills at school. Unfortunately, our data provide no explanation for the rationale behind mothers' and daughters' preferences, but they raise an interesting question for future research about how to incorporate end users' preferences into evidence-based interventions, when they are somewhat discordant with risk factor research.

Another interesting result was that despite preferences across the full sample of mothers and daughters being consistent, within-dyad agreement of preferences was low. Specifically, mothers and their own daughters reported the same preferences at chance or

below chance probability. This is similar to a prior study that found overall sample concordance between mothers' and their pre-adolescent daughters' opinions on factors that influence daughters' body image, but poor within-dyad agreement (McLaughlin et al., 2015). The incongruence within dyads suggests that body image interventionists and researchers looking to develop and/or improve parent-child interventions may need to consider prioritising mothers' and daughters' preferences at different stages of intervention development, evaluation, implementation, and dissemination, and strategies to increase communication between mothers and their daughters regarding body image prior to tailoring interventions.

For research recruitment and intervention dissemination phases, tailoring intervention content and marketing to suit the preferences of individual mothers will likely improve uptake and engagement of parent interventions. Behaviour change and prevention research demonstrates the benefit of tailoring interventions to individual users through, for example, assessing user preferences and characteristics, and computer-tailoring (e.g., Krebs, Prochaska, & Rossi, 2010). However, the intervention content preferred by mothers may not be meeting intervention preferences of their own daughters. This is likely to have implications for the effectiveness of the interventions delivered to parents on child outcomes. Indeed, a recent study by Diedrichs et al. (2016) found that tailoring intervention content to suit the preferences of individual mothers was effective in improving mothers' engagement with the intervention and maternal psychosocial outcomes, but had little impact on daughters' outcomes. Consequently, during the intervention development and implementation phase of child body image interventions delivered to parents, daughters' preferences are likely to require attention.

In addition to considering mothers' and daughters' preferences at different stages of intervention development, research and dissemination, increasing mother-daughter

communication regarding body image support is likely to be beneficial. Previous research suggests that daughters may be more aware of their bullying status than their mothers (Stockdale, Hangaduambo, Duys, Larson, & Sarvela, 2002), but they may be less aware than their mothers of the influence of broader societal influences, such as the media (McLaughlin et al., 2015). Consequently, encouraging mothers and daughters to discuss their preferences for support prior to tailoring intervention content to individual dyads is recommended. This might make the intervention more effective for child outcomes, and it may also increase mothers' engagement as they might feel reassured that they are learning helpful tools and techniques to support their daughter.

These results provide some valuable insights for body image researchers and organisations interested in improving the uptake and efficacy of body image interventions for children delivered to their parents. Furthermore, they are likely to be of interest to researchers and practitioners looking to take a participatory approach to the development of body image interventions more broadly, in order to improve intervention effectiveness. Nevertheless, several limitations of the current study should be noted. Firstly, we only assessed mother-daughter preferences for a select range of empirically supported influences on adolescent girls' body image. There are likely to be other influences that should also be addressed in interventions, and future research may benefit from using open-ended questioning to provide a more 'user-driven' perspective. Secondly, the wording of the question assessing preferences varied slightly between mothers and daughters, and participants were restricted to selecting two preferred topics. It would be informative for future research to explore alternative questions and response options to improve assessment of user preferences. Thirdly, we only included mothers in this study. It is important for future research to also consider fathers, as they too play a significant role in the development of their children's body image (Rodgers & Chabrol, 2009). Indeed, some studies have reported that engaging fathers in body image and

eating disorder prevention interventions has proven more difficult than involving mothers (Trost, 2006). Finally, it is important to note that this study only looked at participants' preferences for one aspect of interventions (i.e. the content areas covered). There are a number of other intervention factors (e.g., cost, length, delivery mode) that influence parents' uptake of psychosocial interventions (Ingoldsby, 2010). Future research investigating preferences for intervention format and mode will also be helpful to enhance parents' engagement in body image interventions for their children.

This study sought to understand the preferences of mothers and daughters regarding the content for body image interventions delivered to mothers in order to improve body image among their daughters. The findings suggest there are some key topic areas relating to friend and familial influences, and body acceptance that appeal to both mothers and daughters overall. They also highlight the incongruence between what individual dyads would like support with, suggesting that developing ways to improve understanding and increase communication between mothers and their daughters with regards to body image support requires further attention. It would be beneficial for interventionists and researchers to consider these preferences when developing, evaluating, and disseminating body image interventions involving parents, in order to increase intervention uptake and effectiveness, and to advance this field of research.

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Table 1

Frequency and within-dyad agreement of intervention topic preferences from mothers and daughters.

Content Topic Area	Frequency chosen by mother	Frequency chosen by daughter	Within dyad agreement	
			<i>p</i>	<i>phi</i>
Families, friends and relationships	112 (58.9%)	101 (53.2%)	.66	-.03
Teasing and bullying	95 (50%)	63 (33.7%)	.28	.09
Media and celebrities	14 (7.4%)	49 (25.8%)	.76	.02
Talking about appearance	22 (11.6%)	73 (38.4%)	.25	.09
Respecting and looking after yourself	134 (70.5%)	87 (45.8%)	.03	-.16

Note: Mothers and daughters were asked to select two topics they preferred, and as a result frequencies do not sum to 100%.